



## College of Engineering: general. 1991/2001

[Madison, Wisconsin]: [s.n.], 1991/2001

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## UNIVERSITY COMMUNICATIONS NEWS RELEASES

FOR IMMEDIATE RELEASE

11/26/01

CONTACT: Dolly Ledin, (608) 222-4865, [daledin@facstaff.wisc.edu](mailto:daledin@facstaff.wisc.edu)

### SCIENTISTS GO TO SCHOOL FOR FAMILY SCIENCE NIGHT

MADISON -- Representatives from the University of Wisconsin-Madison, Madison Gas & Electric Co. and Kraft/Oscar Mayer will share their expertise and excitement about science with students and families at Mendota Elementary, 4002 School Road, Tuesday, Nov. 27, from 6-8 p.m.

Family Science Night is part of the Adult Role Models in Science program, a partnership to enhance science education in Madison schools.

### Media Resources

The partnership involves the UW-Madison Center for Biology Education, the Madison Metropolitan School District, the Madison Children's Museum, Alliant Energy and Downtown Madison Kiwanis.

Highlights of Tuesday's program include: "Come Fly with Us: Aviation and Engineering" presented by the UW-Madison College of Engineering, "Cool Science Stuff with Lunchables" by Kraft/Oscar Mayer research scientists, "Exploring Energy with Toys" by MG&E and "Wisconsin Fossils" by the UW-Madison Geology Museum.

### Services

The program also serves Allis, Emerson, Hawthorne and Lakeview schools in Madison, and helps teachers throughout the year to make science meaningful through teacher training, funding for materials, arranging speakers and field trips, and finding classroom volunteers to help with hands-on science and science mentors for individual students.

Science-related businesses and organizations as well as individual scientists are invited to become partners in this program to help young people become interested and involved in science. For information, contact Dolly Ledin, (608) 222-4865, [daledin@facstaff.wisc.edu](mailto:daledin@facstaff.wisc.edu).

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NOTE TO EDITORS: Corrects contact phone number.

FOR IMMEDIATE RELEASE

8/30/01

CONTACT: Rebecca Smith, Engineering External Relations, (608) 265-8592, [rebeccas@engr.wisc.edu](mailto:rebeccas@engr.wisc.edu);  
Kathryn Grovergryf, Madison Children's Museum, (608) 661-4574, [kateg@kidskiosk.org](mailto:kateg@kidskiosk.org)

## CHILDREN'S MUSEUM TO HOST ENGINEERING ENERGY EXHIBIT

MADISON -- The University of Wisconsin-Madison College of Engineering has teamed up with the Madison Children's Museum to present "Making Electricity without Making Smoke," an exhibit to help children understand energy and energy sources.

Through interactive stations, children will be able to test a hand generator and a water wheel, review air quality samples from the museum and the engineering campus, and learn energy conservation tips.

"Projects like this exhibit help the College of Engineering improve science and engineering literacy, to engage and interest schoolchildren and their teachers, and to make science and technology fun," says College of Engineering lecturer Steve Zwickel. "It is one aspect of the Wisconsin Idea, meaning the boundaries of the university campus are the boundaries of the state. We're pleased to work with Madison Children's Museum to make that idea a reality."

The exhibit is part of Energy Week Sept. 8-16 at Madison Children's Museum, 100 State St. Contact the museum, (608) 256-6445 for a complete schedule of activities.

For more information on the exhibit, contact Zwickel, (608) 262-5172, [zwickel@engr.wisc.edu](mailto:zwickel@engr.wisc.edu), or John Robinson, (608) 661-4586, [robinson@kidskiosk.org](mailto:robinson@kidskiosk.org).

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On the Web:

Madison Children's Museum: <http://www.kidskiosk.org>

UW-Madison College of Engineering: <http://www.engr.wisc.edu>

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Entomology dept

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10/2/01

To: Editors/News Directors  
From: Terry Devitt (608) 262-8282, [trdevitt@facstaff.wisc.edu](mailto:trdevitt@facstaff.wisc.edu)

RE: All about insects

On Thursday, Oct. 4, get a glimpse of some of nature's most phenomenal creations as University of Wisconsin-Madison Entomology Museum curator Steven Krauth gives the public a peek at the university's collection of 2.5 million prepared and pinned insects.

The collection, which includes almost 15,000 species, is used primarily for research, but the butterflies, bees and beetles in the collection are also used to help inform the public about the contributions insects make to natural and urban environments.

On hand will be the museum's menagerie of hissing cockroaches, an exotic species from a family of insects that is both a household pest and one of nature's great recyclers, consuming debris that would otherwise provide food for biting flies and other even more undesirable insects.

Krauth's free public presentation is scheduled Thursday, 11:45 a.m.-12:45 p.m., 147 Russell Laboratories, 1630 Linden Drive. Depending on attendance, the event may include a walk through the museum on the third floor of Russell Laboratories.

For more information, contact Krauth, (608) 262-0056, [krauth@entomology.wisc.edu](mailto:krauth@entomology.wisc.edu)  
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EMBARGOED FOR RELEASE 5 P.M. CDT Thursday, Sept. 6

CONTACT: John Torphy, vice chancellor (608) 263-2509; Richard Folkers, U.S. News & World Report, (202) 955-2219, [rfolkers@usnews.com](mailto:rfolkers@usnews.com)

NOTE: John Torphy plans to attend the UW System Board of Regents meetings this afternoon, but will return reporters' calls after the meeting.

#### UW-MADISON RANKED EIGHTH BEST IN NATION

MADISON - The University of Wisconsin-Madison has been named the eighth-best public university in the 2002 "America's Best Colleges" guidebook published by U.S. News & World Report.

Other Big Ten universities in the top rankings this year are Michigan (third), Illinois (ninth), Penn State (14th), Minnesota (19th) and Ohio State (21st). The University of California-Berkeley ranked first and the University of Virginia ranked second. Those rankings are similar to rankings of the past several years.

Among 249 national universities, including private institutions, UW-Madison ranks 32nd. Princeton ranked first, and Harvard and Yale tied for second.

U.S. News uses seven indicators to try to assess quality: academic reputation, retention of students, faculty resources, student selectivity, financial resources, alumni giving, and, for national universities, graduation rate performance -- the difference between the proportion of students expected to graduate and the proportion of those who actually do. The indicators include input measures that reflect a school's student body, faculty and financial resources, and outcome measures that signal how well the institution does its job of educating students, U.S. News contends.

"As in past U.S. News rankings," says Vice Chancellor John Torphy, "UW-Madison continues to rank among the nation's top five public universities in terms of academic reputation."

"While the U.S. News rankings can be a starting point, it is important that prospective students consider a variety of factors, not just rankings, in selecting the program and the campus that best fits their goals," Torphy adds.

"UW-Madison is a great choice in terms of academic excellence and value," Torphy continues. "The number of applicants for admission increased substantially this year, and I hope that the applicants chose Madison because of those factors and not simply because of its high ranking."

The magazine says it has not changed its ranking formula but has recategorized many schools and added several institutions to the rankings.

U.S. News also published national rankings of some individual UW-Madison schools and specialty programs:

-- The School of Business ranked 12th in the nation, tied with the University of Southern California's Marshall School. The business school's insurance/risk management program ranked fourth.

-- The School of Engineering ranked 12th among engineering schools nationally that grant doctorates. The school's chemical engineering and nuclear engineering programs ranked fourth.

"America's Best Colleges" is slated to go on sale Monday, Sept. 10. Many rankings and some articles from the book will be in the Sept. 17 issue of U.S. News & World Report, which also goes on sale Sept. 10.

To view the rankings on the Web, visit: <http://www.usnews.com>.

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-- Tim Kelley, (608) 265-9870, [tpkelley@facstaff.wisc.edu](mailto:tpkelley@facstaff.wisc.edu)  
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5/16/01

CONTACT: Wayne Pferdehirt, (608) 265-2361, [pferdehi@epd.enr.wisc.edu](mailto:pferdehi@epd.enr.wisc.edu)

ENGINEERS TO GRADUATE FROM FIRST INTERNET-BASED PROGRAM

MADISON -- The University of Wisconsin-Madison College of Engineering this weekend will honor the first graduates of the only campus degree program delivered completely via Internet.

All 22 students, who are engineers with employers across the United States, will attend commencement this weekend as graduates of the Master of Engineering in Professional Practice program.

The two-year degree is designed for early to mid-career engineers who are planning to continue working in a technical capacity and want to improve their professional skills. MEPP provides an effective alternative to an MBA for engineers. The program's independent-learning format gives practicing engineers the freedom to access course information at their convenience and take classes while continuing to work full time.

"Location, job responsibilities, travel demands and family needs often stand in the way of pursuing graduate education," says Wayne Pferdehirt. Pferdehirt is a faculty associate in the college's Department of Engineering Professional Development and the program's director. "To overcome these barriers, the program is designed to allow students to earn a top-quality master's degree from their location using time available in their schedule."

Pferdehirt says the program curriculum is based on an extensive needs analysis survey of practicing engineers across the United States. MEPP is unique because its courses have been specially designed for Web-based distance delivery, as opposed to on campus lectures subsequently adapted for the Internet.

The collaborative and supportive nature of the program's design has enabled it to achieve a course completion rate of over 99

For more information, contact Pferdehirt, (608) 265-2361, [pferdehi@epd.enr.wisc.edu](mailto:pferdehi@epd.enr.wisc.edu). Or visit: <http://epdweb.enr.wisc.edu/mepp/>.

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-- Rebecca Smith, (608) 265-8592

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12/11/2000

CONTACT: Thomas Kuech, (608) 263-2922; Max Lagally, (608) 263-2078

## SEMICONDUCTOR WORK MAY SPUR NEW ELECTRONICS ADVANCES

MADISON - A new research project in the University of Wisconsin-Madison's College of Engineering to integrate semiconductor materials may lead to new applications in sensing, computing and wireless communication.

The three-year, \$1.8 million project, directed by engineering professors Thomas Kuech and Max Lagally, will investigate ways to integrate various compound semiconductor devices-multi-material devices that send, process and receive information-with silicon.

While semiconductor devices made from materials such as gallium arsenide are optically sensitive and operate faster, silicon's strength is computational power. "We hope to demonstrate that by combining the features of gallium arsenide with the features of silicon, we can get an advance over either material," says Lagally, a professor of materials science and engineering. "We call that increasing the functionality of silicon."

Funded by the Defense Advanced Research Projects Agency, the researchers will collaborate with electrical engineers from Georgia Technological Institute, who will grow and synthesize the compound semiconductors. They will also work with an expert on structural analysis from State University of New York-Albany. Lagally will examine the project's fundamental science issues, while Kuech, a chemical engineering professor, studies the interfacial chemistry associated with bonding compound semiconductors and silicon.

The project focuses on wireless communication-the cellular telephone-as a way of starting to investigate processes on an intimate microlevel, says Kuech. The results could have an immediate impact in defense agencies where battlefield communication increasingly relies on wireless technologies. But the research also could translate to computers that quickly send mountains of data using optics instead of cables, or chemical and biological sensors in which one component integrates the optical emitters, detectors, micropumps and processors.

"Materials integration is a huge area right now," says Kuech. "What people have done is tried to do it perhaps on a much smaller scale or just tried to put a single device somewhere, and have developed a lot of processes associated with that." He says one of the group's goals, which researchers have yet to accomplish, is to integrate materials on the system level.

Combining different materials with a variety of properties and structures is the real challenge, says Lagally. "The idea of integration is to say, 'Is there some way we can intimately put these materials together so that it almost looks like one material,'" he says.

And through this seamless transition between materials, even the bonds will be functional, enabling researchers to use the entire device, says Kuech. "Functionalizing the interfacial layers is something people haven't done before in this context," he says.

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-Renee Meiller, Engineering External Relations, (608) 262-2481

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Feb. 6, 2001

To: Editors, news directors  
From: Terry Devitt (608) 262-8282, [trdevitt@facstaff.wisc.edu](mailto:trdevitt@facstaff.wisc.edu)  
RE: DIGITAL MAP DETAILS UW-MADISON CAMPUS

Through a marriage of aerial photography and digital imaging, a group of faculty, staff and students has produced a striking new view of the University of Wisconsin-Madison campus: a 20-by-30-inch color photo image map that depicts the 900-acre campus in extraordinary detail.

The map, which covers a 2-by 3-mile expanse from Eagle Heights to the Kohl Center, is a poster made from a merged digital image of 79 aerial photographs that depict the campus, its buildings and other features.

The map uses orthophotography, a technique that removes distortions inherent in aerial photographs. For example, relief - the topography of the landscape due to changes in terrain - is smoothed out so the photograph takes on the geometric qualities of a conventional map. The technique results in an image that can be used to measure distances, directions and areas accurately.

Campus units participating in the Campus Map Project include the Division of Facilities, Planning and Management; the College of Engineering; and the Institute for Environmental Studies. The map was published with the help of the UW-Madison Cartography Laboratory and the State Cartographer's Office.

The map is available for \$14 plus tax, shipping and handling through the State Cartographer's Office. To see a low-resolution image of the map or place an order for the map, visit:  
<http://www.geography.wisc.edu/sco>

Forms can be obtained and credit card orders can be placed by calling (608) 262-3065. For more information, contact Bob Gurda, State Cartographer's Office, (608) 262-6850, [rfgurda@facstaff.wisc.edu](mailto:rfgurda@facstaff.wisc.edu).

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MADISON -- Ford Motor Company will grant nearly \$2.1 million over five years for education and research programs in the University of Wisconsin-Madison College of Engineering and School of Business.

The Ford Motor Company Fund contribution to the College of Engineering will provide funding for such activities as a student automotive center, automotive research, educational programs, scholarships, fellowships and student organizations.

The Ford grant to the School of Business will support undergraduate scholarships, graduate fellowships and student programs, such as "A Major Decision," an event that helps business students learn about business-major options.

"Today we are pleased to announce a new phase in Ford Motor Company's relationship with the University of Wisconsin-Madison," says Paula Winkler Doman, Ford Motor Company's executive sponsor for the university. "Over the years, we have enjoyed a working partnership of the truest sense. Through our strong working alliance with the university, we've focused on efforts that enhance educational opportunities and further research. We look forward to continue working with the university in the years ahead."

Michael Corradini, associate dean of academic affairs for the College of Engineering, says the college has enjoyed a productive research and recruiting relationship with Ford Motor Company. The grant is an example of a continuing collaboration that benefits many college activities.

"This generosity will allow the college to continue to pursue our important areas in undergraduate and graduate education," Corradini says. "These areas involve student activities within the classroom and the research laboratory as well as augmenting and enhancing our efforts in out-of-classroom experiences."

The contribution especially is important to diversity programs because it is an investment that will pay dividends through the students who will be leaders in the future, says Alem Asres, engineering assistant dean of diversity affairs.

"Ford Fund's ongoing support of diversity-focused programs and activities will help us attract students from groups that traditionally are underrepresented on engineering campuses, and enhance their educational and extracurricular opportunities," he says. "I appreciate the efforts of the Ford representatives who worked hard to strengthen the relationship between Ford and the College of Engineering and Diversity Affairs."

James Johannes, associate dean of undergraduate programs for the School of Business, says the Ford grant will significantly benefit both the business

school's undergraduate and graduate programs.

"On the undergraduate level, this gift is going to help us recruit and retain the very best undergraduate students, which is critical to being one of the best undergraduate programs in the country," says Johannes. "It also will help us to provide the highest quality service to our undergraduates, and inform them about options for business majors early in their undergraduate careers." The gift will greatly assist the School of Business in the highly competitive field of graduate business education by providing funding to attract outstanding graduate students, he says.

The partnership between Ford and UW-Madison spans nearly 50 years. Ford's support of the university includes hiring its graduates, sponsoring scholarships and internships and providing research funding. Ford Motor Company currently employs more than 300 Wisconsin graduates.

For more information, contact Ed Manuel, UW Foundation senior director of engineering development, at (608) 262-5251.

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## Fluno Center to open March 1

Stacey Grenzow

The new Fluno Center for Executive Education, opening Wednesday, March 1, will be one of the premier executive education centers in the nation.

The \$24 million, eight-floor Fluno Center combines state-of-the-art technology with the ambiance of a relaxed residential setting.

Although primarily created for Executive Education programs, the Fluno Center, any department can use the facilities for university-affiliated educational programs, board meetings and special events. The 100 guest rooms are available for special guests of the university such as speakers or recruiters, but not for public lodging.

The center is owned by the Center for Advanced Studies in Business, Inc., a non-profit corporation that supports the activities of the School of Business. The building includes more than 40,000 square feet of meeting space including classrooms, conference rooms, an auditorium, case study rooms, banquet and reception rooms, and a courtyard.

All classrooms are equipped with the latest technology such as high-speed Internet access, VCR and DVD/laser disc players, high-definition personal computers and Macintosh-compatible data/video projection systems. Videoconferencing is available upon request.

Guest rooms also are wired for the Internet, and the interior of the building features prairie-style furnishings and original lithographs of designs by Frank Lloyd Wright.

Fluno Center guests may enjoy gourmet cuisine in the Executive Dining Room, a study pub, fitness room, valet laundry service and 290 underground parking stalls. Parking is operated by the UW-Madison Transportation Services, and is available for use by Fluno Center guests and campus visitors.

Reservations for events and lodging at the Fluno Center can be made through the School of Business Conference Services Office, 265-4954. Those interested in getting a "sneak peek" of the facility can arrange a tour through Conference Services.

Fluno Center construction has been funded by \$18.4 million in bonds and private gifts including a \$3 million donation by Jere and Anne Fluno as well as donations from other distinguished alumni and friends. ■

## Experts share knowledge at "Whys and Wows!"

Brian Mattmiller

University experts will again team up this winter to bring learning alive for schoolchildren during "Whys and Wows!" at the Milwaukee Public Museum.

The event Monday, Feb. 21, is part of UW-Madison On The Road, a statewide series of events that continues the university's tradition of service to the state.

Faculty and staff have organized more than a dozen interactive talks and hands-on workshops that highlight the excitement of discovery.

Last year, more than 1,800 students and adults attended the first "Whys and Wows!" program by faculty and staff.

"We are thrilled to be a partner in 'Whys and Wows!' for a second year," says Jeffrey Wendorff, senior director of programs and outreach for the Wisconsin Alumni Association. "Bringing together university experts with the great exhibits at the museum has proven to be a great combination for learning."

Museum leaders enthusiastically support the event. "The Milwaukee Public Museum's walk-through exhibits and galleries provide a unique educational backdrop for UW-Madison faculty to share their research," says museum President William Moynihan. "This creative partnership offers parents and teachers an exciting environment to present interactive learning to children of all ages."

Among other presentations this year, visitors will get the chance to:

■ Learn about "memory metals" that bounce back after you bend them and other "materials of the future," from engineering graduate student Becky Torrisi.



- Get a map's-eye view of southeast Wisconsin from geographer Zoltan Grossman, who creates unique maps on state history.
- Extract DNA from a plant in a hands-on experiment led by Thomas Zinnen, biotechnology outreach coordinator. ■

School children extract a DNA sample from a vial of wheat germ at last year's "Whys and Wows" program organized by university researchers and others at the Milwaukee Public Museum. The outreach program planned Monday, Feb. 21, is part of UW-Madison On The Road, a statewide series of events. Photo: Jeff Miller

### Student inventors featured

The bright ideas of university student entrepreneurs will be showcased in Milwaukee Tuesday, Feb. 22, during a program on high-tech business growth in Wisconsin.

The free public presentation will be held at Milwaukee's Italian Community Center, 631 East Chicago St. A reception begins at 5:30 p.m. and the program starts at 6:15 p.m. John Bollinger, dean emeritus of the College of Engineering, will discuss how UW-Madison acts as a driving force in the technology-based economy in Wisconsin; through the transfer of research advances and creation of spinoff companies.

He will also introduce three successful student entrepreneurs who took their high-tech ideas from college to the marketplace. They include:

- Scott Westmont and Sean Smith, who started the company Beacon Systems LLC, to commercialize a safer type of binding for waveboards, a type of slalom water skis.
- Joe Saari, founder of the business Precision Information LLC, will describe his web-based software programs for the personal finance market. The company recently contracted with the online investment firm Ameritrade.

The students are past winners of the Technology Enterprise Competition, a program that provides awards of up to \$10,000 for creating technology-based business plans.

## University featured in leading publications

A new series of print advertisements about the university are beginning to appear in a variety of leading magazines and business newspapers, as part of the university's integrated marketing communications program.

Readers paging through Madison Magazine, Corporate Report Wisconsin, the Feb. 14 Milwaukee edition of Time or more than half a dozen other leading magazines and business publications will see one of four new ads spotlighting how UW-Madison serves the needs of people in Wisconsin.

Issues of these periodicals published through June will feature full-page institutional ads designed to showcase the value and benefit of UW-Madison to people throughout Wisconsin.

Developed by the Office of News and Public Affairs, the first series of such ads was launched in magazines statewide in 1998 as part of the sesquicentennial. The new round of print ads are part of the university's ongoing integrated communications program of media relations, advertising, special events, speakers presentations and use of the Internet.

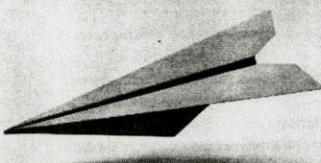
"These print ads are an excellent way for the university to communicate, in real terms, the benefits of UW-Madison to the people of Wisconsin," says Patrick Strickler, university communications director. "This is just one of the ways we have to create a better understanding among state citizens of the value of and major contributions from UW-Madison."

"We've been very pleased with the feedback and reception from these ads," he says. "In fact, in a survey of Corporate Report Wisconsin readers from last year, these ads were among the highest percentage of all ads recalled by their readers."

The full-page ads appear in Madison Magazine, Milwaukee Magazine, Midwest Express magazine, Wisconsin Trails, Business Journal-Milwaukee, Corporate Report Wisconsin, and UW-Madison's alumni magazine, On Wisconsin.

In addition, the ads will also run during February in the metro Milwaukee and

Fold it. Fly it.  
Land it in the job bin.



Think UW-Madison.

**E**ach year, Wisconsin produces a nation-leading 5 million tons of paper. Paper is used to satisfy the needs of people. But state mills must meet that demand while preserving natural resources, a challenge that they're meeting with help from UW-Madison. Researchers are using their expertise in paper and wood dual, a natural process that reduces much less energy while improving

paper quality. Their work could save millions of dollars and thousands of jobs, while giving our state's forests a way to teach, research and outreach. Improving paper quality is just one way we help make life a little better for Wisconsin citizens.

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southeast Wisconsin circulation areas of Time, Newsweek, U.S. News & World Report and Sports Illustrated. ■

## UW partnership to reinvigorate science and math education

Terry Devitt

**W**ith the help of the National Science Foundation (NSF), the university and four Wisconsin school districts have launched a comprehensive initiative to reinvigorate the way science and math are taught and learned at the primary, middle and high school levels.

The new initiative, known as the K-Through-Infinity Professional Development Partnership, is an ambitious effort that seeks to couple a broad array of science, math and science research and education programs with the expertise of K-12 teachers. A primary goal is to train a new generation of faculty, teachers, scientists and other professionals to effectively integrate the process and excitement of scientific discovery with teaching at all levels.

"The vision is to create a seamless learning network with research as the engine," says Terry Millar, a Graduate School associate dean and a professor of mathematics. "We want to better connect university scientific discovery, and the excitement of that discovery, with K-12 education. This is science education for the 21st century."

Participants in the project include the Madison Metropolitan School District, the Milwaukee Public Schools, the Verona Area School District and the Monona Grove School District.

The power of this initiative, according to Robert Gilpatrick, superintendent of the Verona Area School District, is the

creation of a mechanism through which expertise can flow through all levels of the educational system. Importantly, it emphasizes the expertise and experience of teachers at all levels to enhance opportunities for students to master critical bodies of knowledge.

"It gives us all the potential to grow and develop in ways that we couldn't alone," says Gilpatrick.

Lisa Wachtel, science coordinator for the Madison Metropolitan School District, says the promise of the new partnership is in its potential to harness scientific research directly to the K-12 classroom.

"This is an opportunity that gets at the heart of science education: learning science by doing real science," Wachtel says.

"Teachers are eager to collaborate with science researchers in ways that will enhance their students' abilities to view science as something real and vibrant, and possibly as a career choice."

The K-Through-Infinity initiative has four overarching goals:

- Increase the overall scientific literacy of K-12 teachers and students.
- Raise interest in science, math and engineering in K-12 schools, especially among groups underrepresented in science, such as women and minorities.
- Educate a cadre of graduate students and selected undergraduates about the process of learning and the needs of the K-12 system.

■ Shift the culture of the university to raise the status of education-based initiatives.

In an effort to leverage \$1 million in support from NSF, and more than \$600,000 in matching support from the UW-Madison Graduate School, the K-Through-Infinity project will draw on the expertise of more than a score of existing UW-Madison science research and education programs. Partners include the Institute for Chemical Education, the Center for Biology Education, the Engineering Learning Center, the Materials Research Science and Engineering Center, and the Pre-College Enrollment Opportunity Program for Learning Excellence, among others.

The basic working units of the K-Through-Infinity project, says Millar, will be teams made up of UW-Madison graduate students, science and engineering faculty, School of Education faculty, K-12 master teachers, and K-12 curriculum coordinators, administrators and guidance counselors.

Together, the cooperating teams will develop a series of projects aimed at solving problems or capitalizing on opportunities to enhance the teaching of science, math or engineering by better mining the scientific enterprise and other resources at UW-Madison. For example, web-based distance learning has the potential to transform the way science and math are taught

and to provide opportunities for teachers to access materials that might not otherwise be available. One K-Through-Infinity team will explore issues of developing learning tools and content for the Web that could enhance both the college and K-12 learning environments.

Key players in all of the teams and projects will be graduate and selected undergraduate students from many disciplines who will be awarded fellowships to apprentice with the teams. The fellows will not only have opportunities to help develop new methods for teaching science, but to apply those methods in the educational trenches — schools and other learning environments.

The fellowship aspect of the program, according to Millar, is to help create a cadre of individuals — whether they become university faculty, primary school teachers, scientists or pursue other careers — who have a better understanding not only of the learning process, but of how research can have a significant impact on education at all levels.

"The way that university researchers view and do science is the most important benefit we can share with students and teachers in the K-12 schools," Millar says. "The greatest promise of this initiative is the opportunity to provide K-12 students the chance to learn how to do science from the example of the researcher who probes the unknown every day." ■

### IAIMS project

*continued from page one*

and pharmacy) are involved, along with the Health Sciences Library, the School of Veterinary Medicine, UW Hospital and Clinics, and the UW Medical Foundation.

Principal investigator Patricia Flatley Brennan, professor of nursing and of industrial engineering, will direct the project with co-principal investigators David DeMets, professor and chair of biostatistics and medical informatics, and Karen Dahlen, director of the Health Sciences libraries.

"Our first goal for the IAIMS project is to bring people together and solicit their views on how health sciences information resources — which exist separately all over campus and, in fact, all over the state — can be connected and better coordinated," says Brennan. "This is not about developing and imposing a master plan from above. It is about identifying ways that all of us can benefit from a more coordinated approach to managing information."

The strong tradition of faculty governance at Wisconsin has resulted in, among other things, a large collection of independent health information systems that are inaccessible to faculty and others outside the particular unit. While the UW health sciences are rich in information technology, they are less so in coordination. While that may have been a minor inconvenience in the past, it looms as a major shortcoming in the future.

"This is the right time for this kind of project for many reasons, but the two most

significant are the opportunities we have in the new health facilities going up on campus and the growth of statewide training sites in all of the health sciences," Brennan points out. "Training sites for the School of Nursing alone range from Rhinelander to Platteville and many points in between. We can't realistically talk about the 'Wisconsin Idea' in the health sciences without better information bridges to our colleagues around the state."

Creating the organizational structure in which those bridges will be built is the first priority of the IAIMS project at UW. Six committees, with broad representation from the various health sciences units, are charged with identifying current and future problems related to information technology. These six problem and priorities assessment groups will set the specific agenda for further planning; solution modeling teams will be responsible for reviewing and modeling solutions to the high-priority problems identified by the PPA groups. The IAIMS Coordinating Council, chaired jointly by Brennan and preventive medicine professor David Kindig, is the point at which problem identification and solution design meet.

The project leaders invite all faculty and staff to provide comments on the IAIMS project; those comments will be most helpful if received by Saturday, Dec. 4. Those interested may comment via e-mail to Brennan, [pfbrenna@facstaff.wisc.edu](mailto:pfbrenna@facstaff.wisc.edu), or through the IAIMS web site, [www.medsch.wisc.edu/IAIMS](http://www.medsch.wisc.edu/IAIMS). The site also contains the full text of the grant proposal. ■

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If you don't need a class in Excel or Word, but would love to **"Ask An Expert"** specific questions which pertain to your job, then we have your expert. Greg Konop, a Microsoft Certified End User Trainer, will hold a **free** demonstration of the "Ask An Expert" group on Friday, December 3, 10:00 – 11:00 a.m., Helen C. White New Media Center, Corner of Park Street & Observatory Drive. For more details on the "Ask An Expert" group go to <http://pubs.doit.wisc.edu/f/pte/askanexpert/index.cfm>

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**DoIT**  
 UW-DIVISION OF INFORMATION TECHNOLOGY  
 1210 West Dayton Street

# While you were out

It was an eventful season for campus faculty and staff

Were you away this summer, or just on the Terrace a lot? Here's some of what you might have missed during the past few months at UW-Madison.

For more details on most of these news items, visit: <http://www.wisc.edu/news/thisweek/>.

## Scholarships to offset tuition increase

Tuition increases for the 1999-2000 academic year will be offset for students receiving federal or state financial aid as part of the Madison Initiative. About 4,200 undergraduates — those receiving a Pell grant or a Wisconsin Higher Education Grant — will receive \$300 scholarships from the Vilas Trust to offset a \$289 tuition increase on the Madison campus. The result: Resident undergraduates would pay \$11 less in tuition than last year. The UW System Board of Regents will adjust tuition rates in subsequent semesters after a state budget is finalized.

## Bascom elms get special treatment

A towering stand of American elm trees on Bascom Hill that has survived the ravages of development and Dutch Elm Disease received preventive medicine this summer. Where there were once more than 1,000 elms on campus, a new management plan focuses on keeping the remaining 68 survivors in the green for at least another century. Environmental managers administered a fungicide treatment that's directly injected at the root of trees.

## Students return after bus-train crash

University study tour participants returned to Madison after their 14-member group was involved in a minibus-train crash in Malawi. Funeral services were held July 13 for medical student Michele Tracy, 24, of Middleton, who along with Malawian bus driver Herbert Chissaka died in the crash near the village of Balaka. The group was on a month-long student-organized program in the central African nation. The crash took place as the group was heading for the airport to return home.

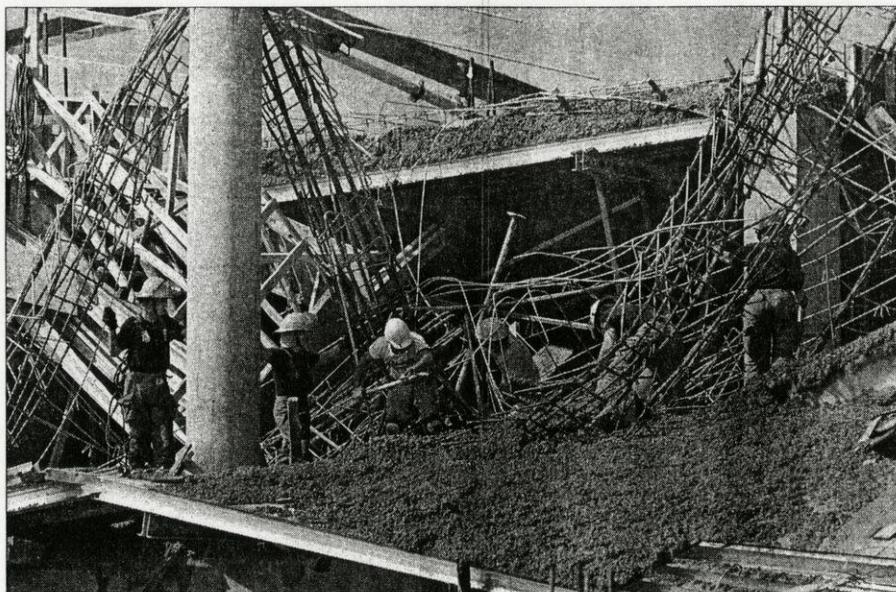
Also this summer, a multi-car accident in South Africa killed a family of four stationed in the region as part of a campus international program.

Scott Kloeck-Jenson, 34, a UW-Madison Ph.D. candidate and leader of a Land Tenure Center program in Mozambique, died along with his wife, Barbara, 34, their daughter Zoe, 5, and their son Noah, 2.

## 'Future Car' wins again

College of Engineering undergraduates logged another national victory this summer in the Future Car Challenge. Team Paradigm was the top performer in gas mileage, acceleration, workmanship, appearance and dynamic han-

By last spring, Patrick Dougherty's swirling twig sculpture was beginning to slouch toward the soil. After the decline accelerated in June, university grounds crew members fed the remains of the sculpture to a wood chipper. The sculpture, made mostly of local tree branches wrapped in swirling, intertwined patterns, had graced lower Bascom Hill since last October, when art students helped Dougherty create the work. Photo: Jeff Miller



Emergency workers dug through fresh concrete to rescue a construction worker trapped following the collapse of part of the fourth floor of Rennebohm Pharmacy Building in June. Ten employees from

Kraemer Brothers Construction were injured in the accident. They were treated at UW Hospital, across the street from the construction site, and work resumed after an OSHA review. Photo: Jeff Miller

dling, among others. The car achieved a fuel rating of 62.7 miles per gallon, which is a 142 percent improvement over the commercial version of the car—an aluminum body Mercury Sable. The team also tied for first place last year.

## Nursing lands big training grant

The School of Nursing will get just over \$1 million from the National Institutes of Health to develop a comprehensive training program in nursing research. The grant is one of fewer than a dozen grants of this type awarded this year to nursing schools nationwide. "This grant is significant because it signals a maturity in the school's research status," says retiring Nursing School Dean Vivian Littlefield.

## Online-only graduate study debuts

The Master of Engineering in Professional Practice program debuted, catering to the working professional by offering an entire advance degree via the World Wide Web. Classmates will share an electronic classroom for the next two years and pursue a master's degree without interrupting their careers. Karen Al-Ashkar, the program's adviser, says the program gives people who are juggling professional and personal lives new access to higher education. "These students need to be able to access courses on their time, not ours," Al-Ashkar says. Employers strongly supported the concept, she adds.

## Hospital ranks high in survey

UW Hospital and Clinics ranked among the top 2 percent of the nation's major medical centers in 10 of the 16 med-

ical specialties ranked in U.S. News and World Report's "America's Best Hospitals" guide. The guide assesses care in 16 specialties at 1,881 major medical centers. The hospital ranked among the top 2 percent in the following categories: ophthalmology, rheumatology, urology, endocrinology, geriatrics, otolaryngology, cardiology/heart surgery, orthopedics, cancer and gastroenterology. Most categories are assessed based on reputation, mortality rates and a mix of other data.

## Smoothie pies in national 'food fight'

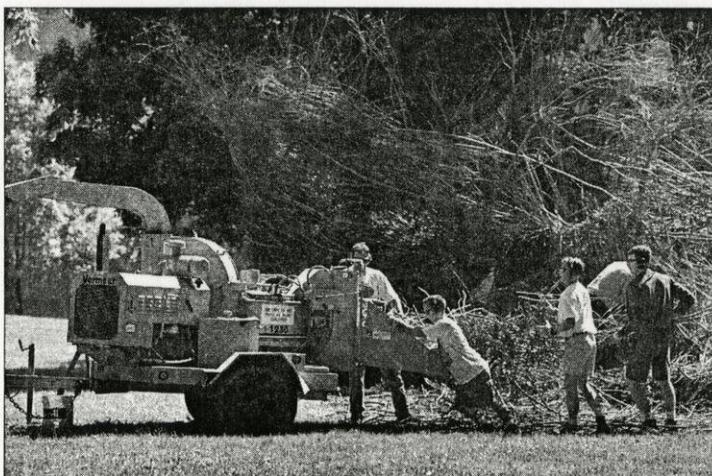
Food science students earned an honorable mention in a national competition by inventing a healthy taste treat, "smoothie pies." The students turned the traditional smoothie into a refrigerated treat made of a thick, creamy strawberry-and-yogurt filling cradled by a crunchy graham cracker pie crust. Six teams engaged in the "food fight" at the Institute of Food Technologists annual meeting in July.

## Plan outlines revitalized State Street

A new report outlines several recommendations to improve the business climate, enhance the physical appearance and streamline the management of one of Madison's greatest downtown assets: State Street. The State Street Strategic Plan is the culmination of a months-long community planning effort sponsored by Downtown Madison Inc., the City of Madison, the university and private contributors.

## \$6.75 million funds diet-aging study

A decade-long study of how diet affects the process of growing old will continue and be expanded at the university with the help of \$6.75 million from the National Institutes of Health. The Wisconsin Regional Primate Research Center study of rhesus macaques on controlled diets is one of only two such studies in the world. ■



## HONORED

**Tonya Brito**, an assistant professor of law, and **Dionne Espinoza**, assistant professor of women's studies and Chicana/o studies, each have received an \$8,000 Minority Faculty Research Award. The UW System Institute on Race and Ethnicity granted the awards, which are designed to release non-tenured faculty to conduct research for one semester. Brito's research is titled "Does Law Matter? A Preliminary Study of Negotiating and Disputing in the Context of Open Adoption." Espinoza's work is titled "Typologies, Topographies, or Trajectories: The Roots (and Routes) of Chicana Feminisms, 1965-1980."

**Vanessa Northington Gamble**, an associate professor of history of medicine, received a Category A Research Grant of \$2,000 from the institute for her research, "Black Women Physicians in Twentieth Century America."

The College of Engineering will honor four outstanding faculty and staff members during the 52nd annual Engineers' Day Friday, Oct. 15. **Raymond J. Fonck**, a professor of engineering physics, will be presented with the Byron Bird Award for Excellence in a Research Publication.

**Sindo Kou**, a professor of materials science and engineering, and **Wei-Yin Loh**, a statistics professor, each will receive the Benjamin Smith Reynolds Award for Excellence in Teaching. **Karen A. Walsh**, director of the Engineering Communications Office, will receive the Bollinger Academic Staff Distinguished Achievement Award.

**Kristin Kearns**, a research assistant in astronomy, and **Mary Lee**, a fellow in plant pathology, each received a 1999 Ruth Dickie Scholarship of \$3,000 from the Graduate Women in Science Beta Chapter of UW-Madison. **Cristina Lazaro-Perea**, a research assistant in psychology, and **Monica Remington**, a graduate student in medical microbiology and immunology, each received a \$500 Ruth Dickie Grant-in-Aid award.

**Larry Rittenberg**, professor and chair of the Business School's Department of Accounting and Information Systems, was named vice president-elect/finance of the American Accounting Association.

**Stephanie Robert**, assistant professor of social work, has been chosen to participate in the Hartford Geriatric Social Work Faculty Scholars Program of The Gerontological Society of America. She is one of 10 scholars nationally to receive a \$100,000 grant designed to develop outstanding social work scholars committed to teaching, research and leadership in geriatric care. Robert will examine aspects of "Family Care," Wisconsin's new long-term care redesign program.

**Gene Summers**, professor emeritus, received the Distinguished Rural Sociologist award during the Rural Sociological Society's 1999 annual meeting. The honor recognizes his career accomplishments in research, teaching, outreach and public policy. **Fred Buttel**, professor and chair of rural sociology, received an Award of Merit from the Society's Natural Resources Research Group for his contributions to the theory of environmental sociology.

## PUBLISHED

**Cynthia Miller**, assistant professor of Hebrew and Semitic studies, recently edited and wrote the introductory chapter to a book of essays by international scholars, entitled "The Verbless Clause in Biblical Hebrew: Linguistic Approaches" (Eisenbrauns, 1999).

**Steve Paddock**, associate scientist in molecular biology, edited the book "Confocal Microscopy Methods and Protocols" (Human Press, 1998).

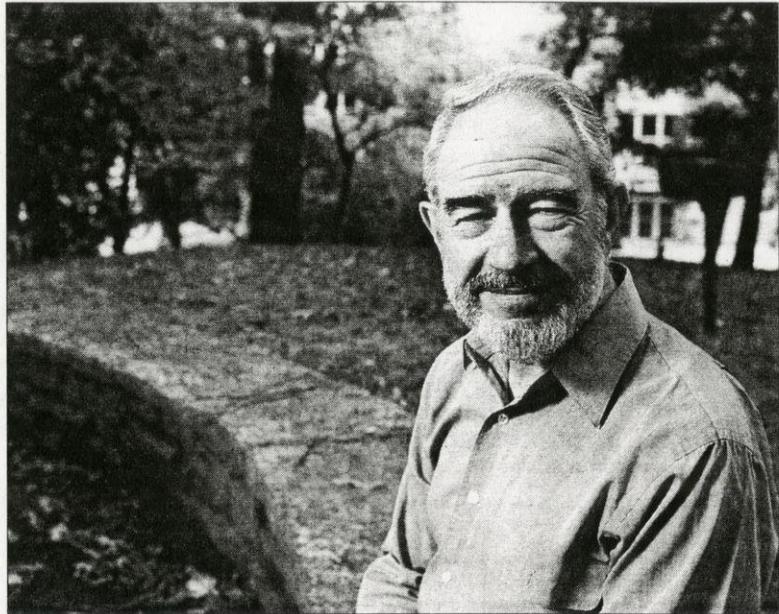


Photo: Brian Moore

## Emeritus status gives professor a portal to new worlds

### Jeff Iseminger

If the word "emeritus" evokes images of professional fade-out in your mind, then you need a bracing dose of Herbert Lewis, who's showing how magnificently manifold are the possibilities in the Land of Emeritus Living.

Lewis, 65, became an emeritus professor of anthropology in 1996 after serving on the UW-Madison faculty for 33 years. Since then he's managed to unearth a treasure-trove of long-lost documents on Oneida Indian life, write a major journal article that's stirred some controversy, begin work on a new book and attend lectures of all kinds.

What he's not attending is important, too. "I certainly don't miss faculty and committee meetings," says Lewis with a smile. Even more time was freed up when his 38-year teaching career came to a close in December 1998, time he's invested in research, writing and learning.

"I really want to learn," he says, "and I enjoy this feeling that I choose what I do." He has chosen, for instance, to attend a conference on the Iroquois this month in New York state, so he can learn more about the peoples of that ancient confederacy.

His interest in the Iroquois was piqued by his recent adventure involving the Oneida of Wisconsin, a branch of one of the five original Iroquois nations. Lewis uncovered a remarkable body of work written by members of the Oneida Nation in both English and the Oneida language.

A carton he discovered in the Department of Anthropology's storage contained 167 notebooks filled with descriptions of Oneida life from the 1880s to 1940. The accounts were produced by more than a dozen Wisconsin Oneida Indians who wrote them in 1940-41 as part of the Federal Writers Project, funded by the Works Progress Administration of the New Deal.

Lewis believes that the notebooks were forgotten when the anthropologist in charge of them, H. Scudder Meekel, died

suddenly of a heart attack in 1947. Lewis and other UW-Madison representatives presented a copy of all the notebooks to the Oneida Nation last spring, with the originals going to the State Historical Society.

"Because the notebooks were written by the Oneida themselves on so many aspects of their history and culture and involved so many voices, there is no parallel to it in American Indian collections," says Lewis.

Lewis did most of his own fieldwork in Ethiopia and Israel, but that doesn't dull his curiosity about the Oneida. On the contrary, he says, "An anthropologist should know about comparative cultures and be comfortable in moving from one to another."

The allure of other cultures took hold early in Lewis' life. His mother took him one fateful Saturday to a film program for young people at the Museum of Modern Art in New York. There he was entranced by the Robert Flaherty films "Nanook of the North" and "Moana of the South Seas."

"It seemed fascinating to me as a child — and it still seems fascinating — that there are so many different ways of being human," says Lewis. "I began to see not only the variety of cultures, but also the common humanity. People from other cultures were not strange, exotic creatures, but fellow humans with alternative ways of looking at things."

But it wasn't until his junior year at Brandeis University that Lewis discovered there was a discipline that studied comparative cultures. "The minute I opened up my textbook for an introductory course on cultural anthropology, I knew I wanted to become an anthropologist," he says.

He went on to earn his doctorate at Columbia University, a place of portentous intersections for Lewis and modern American anthropology. It was there that Franz Boas taught anthropology from 1896 until his death in 1942. Boas dominated American anthropology for decades

through his scholarship and teaching. Among his many doctoral students were Margaret Mead, Ruth Benedict and Edward Sapir.

And Boas still reverberates through Lewis' career. Boas is mentioned frequently in an article by Lewis published in September 1998 by the American Anthropologist, the journal of the American Anthropological Association. Titled "The Misrepresentation of Anthropology," the piece is a reasoned-but-passionate defense of earlier anthropologists such as Boas.

Lewis' broadside — which he plans to expand into a book — was prompted by 30 years of attacks on "traditional" anthropology from several perspectives, especially Marxist and postmodernist.

These critics said that anthropologists working before the 1970s "exoticized" other cultures and rendered them timeless by ignoring their histories and considering them in unrealistic isolation from each other.

These charges are not only untrue, says Lewis, they "delegitimize the field and discourage newcomers from benefiting from the many lessons it has to teach about the world."

His current projects include research on the work and personality of Boas, using the archives at the American Philosophical Society in Philadelphia. "I was reading history there," says Lewis. "When I found letters, lectures and unpublished papers by Boas that contradicted received opinion, it was wonderful — it was discovery."

"The greatness of the man is striking. If I were younger, I would try to write his biography."

Lewis has two more papers on Boas in process, plus a review article about dictionaries and encyclopedias of anthropology and cultural and critical studies soon to appear in the American Anthropologist.

Emeritus status also gives Lewis more time for island-hopping. He and his wife, Marcia Lewis, traveled recently to the U.S. Virgin Islands, where he did fieldwork as a graduate student, and they hope to visit Martinique, another site from his work in the '50s. And they have children to visit: Tamar, a lawyer and fundraiser for WGBH public television in Boston; Paula, a librarian in Silver Spring, Md.; and Josh, a comedian, actor and writer in New York City.

Lewis still sings in the UW-Madison Choral Union, loves the theatre (he's appeared in three University Theatre productions) and would play more racquetball if he could find a partner. He also attends meetings in the United States of expatriate Oromos, the people he studied in Ethiopia.

No matter the setting — Oromo or Oneida or some other way of looking at life — Lewis carries with him an unshakeable anthropological curiosity that still serves him well as an emeritus.

"Wherever I am," he says as he extends his arms palms-up, "I'm interested in the culture of the people who live there." ■

Engr-  
Jen



## Experiments in clothing

Artist-in-residence Nick Cave, right, works with graduate art student Yuyen Chang in an apparel-design class. Students are discovering just what goes into the production of a piece of tailored apparel, but

as the semester "wears" on, they will tackle more abstract issues. Cave asks his students: "Are we learning about clothing in this class, or are we learning about something else?" To find out, see page 7. Photo: Jeff Miller

## \$2.1 million grant supports engineering, business

Renee Meiller

Ford Motor Company will grant nearly \$2.1 million over five years for education and research programs in the College of Engineering and the School of Business.

The contribution to the College of Engineering will provide funding for such activities as a student automotive center, automotive research, educational programs, scholarships, fellowships and student organizations.

The grant to the School of Business will support undergraduate scholarships, graduate fellowships and student programs, such as "A Major Decision" — an event that helps business students learn about business-major options.

Michael Corradini, associate dean of academic affairs for the College of Engineering, says the college has enjoyed a productive

research and recruiting relationship with Ford Motor Company. The grant is an example of a continuing collaboration that benefits many college activities.

"This generosity will allow the college to continue to pursue our important areas in undergraduate and graduate education," Corradini says. "These areas involve student activities within the classroom and the research laboratory as well as augmenting and enhancing our efforts in out-of-classroom experiences."

The contribution is especially important to diversity programs because it is an investment that will pay dividends through the students who will be leaders in the future, says Alem Asres, engineering assistant dean of diversity affairs.

"Ford Fund's ongoing support of diversity-focused programs and activities will help us attract students from groups that traditionally

continued on page fourteen

## Study gives boost to not-for-profit journals

Don Johnson

A new study by the campus library system confirms earlier findings that not-for-profit journals prove more cost-effective than commercial publications for scholarly research.

The study results are likely to be controversial in the academic world. Ten years ago, a science journal publisher sued two nonprofit organizations for publicizing a UW-Madison professor's research that produced conclusions similar to this recent findings.

But the research is likely to aid librarians facing purchase decisions in an era of skyrocketing journal prices, says Kenneth Frazier, General Library System director.

Rising subscription rates have taken ever-larger chunks of library materials budgets over the past decade. At UW-Madison, for example, libraries worked with faculty last fall to cancel more than

500 journals. That brings the total number of cancellations to nearly 7,000 in the past 12 years.

Frazier says the university's libraries have been conducting cost studies of journals since the 1980s. "They are intended to serve the academic community by expanding our knowledge about the cost-effectiveness of scholarly communication," Frazier says.

There's more at stake than money. Faculty members rely heavily on scholarly publishing to get promoted, win grants and receive recognition for their research. Their careers are profoundly affected by library cutbacks in subscriptions.

The latest study began last year on the 10th anniversary of a landmark research report by the late UW-Madison physics professor Henry Barschall. The eminent nuclear physicist created a scale of cost-effectiveness by comparing the frequency

with which articles were cited against the price of the library subscription per printed character.

Barschall, who was a member of the University Library Committee, studied the cost-impact ratios of 200 physics journals. He found that journals from commercial publishers generally had the lowest cost-impact.

Gordon & Breach, whose journals scored consistently at the bottom of the scale, sued in Swiss, German, French and U.S. courts against two nonprofit publishers of the results, the American Institute of Physics and the American Physical Society. American, German and Swiss courts ruled in favor of AIP and APS; an appeal is pending in France.

The new research studied 293 journals spanning physics, economics and neuroscience. "By the measures employed here,

continued on page fourteen

## Software deal to save money

Brian Rust

A new agreement with Microsoft Corp. will enable university faculty and staff to use many Microsoft software products at a fraction of the normal academic price.

The university has joined other UW System campuses and the Wisconsin Technical College System in the Microsoft Custom Enterprise Agreement. Similar licenses with other popular software vendors are also being pursued.

Unlike individual licenses, the new Microsoft agreement enables all faculty and staff to use the products. Students will also be able to purchase a copy of the media under the program.

The agreements do not require faculty and staff to use any of the products.

The \$2.175-million-per-year license agreement covers the next three years, with an option to renew for a fourth year. Products will be distributed through a new service called the Wisconsin Integrated Software Catalog.

UW-Madison's portion of the annual license cost is \$250,000, compared to the \$571,000 spent campus-wide in the 1997-98 fiscal year on Microsoft products under what was called a "select agreement." If another select agreement had been negotiated for this fiscal year, Microsoft pricing changes would have increased UW-Madison's costs to \$771,000, triple the cost of the first year of the new agreement.

Microsoft products included in the agreement are Windows 98 upgrade, Office 2000 Premium Edition, Office 98 Macintosh Edition, FrontPage for the Macintosh, Windows NT 4 upgrade, Visual Studio Professional and a limited number of additional infrastructure licenses, including all upgrades during the life of the contract. Distribution of the products will begin in October. ■

### Planner's perch

Robert Hendricks profiled

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### Cancer imaging

New tool reveals the invisible

6

### Alcohol alternatives

Campus steps up efforts

15



Choose your mode

8

Even though PAs no longer receive a higher stipend for attending these sessions, they are welcome and encouraged to attend and participate.

Each session will be held seven times this fall, with a make-up session in January. Pre-registration is required; the form is available from your department secretary or supervisor, or at the Academic Personnel Office, 174 Bascom Hall.

All sessions will be in Memorial Union unless otherwise noted. The sessions will be held on the following dates and times.

#### Session one: Discrimination and Harassment on the Basis of Sex or Sexual Orientation

Tuesday, Oct. 12, 9 a.m.-12:30 p.m.; Thursday, Oct. 14, 4 p.m.-7:30 p.m.; Wednesday, Oct. 20, 4 p.m.-7:30 p.m.; Tuesday, Oct. 26, 1 p.m.-4:30 p.m.; Thursday, Oct. 28, 4 p.m.-7:30 p.m.; Saturday, Oct. 30, 9 a.m.-12:30 p.m. Union South; Saturday, Oct. 30, 1:30 p.m.-5 p.m., Union South.

#### Session two: Discrimination and Harassment on the Basis of Race, Disability or Other Categories

Tuesday, Nov. 9, 1 p.m.-4:30 p.m.; Thursday, Nov. 11, 4 p.m.-7:30 p.m.; Saturday, Nov. 13, 9 a.m.-12:30 p.m.; Saturday, Nov. 13, 1:30 p.m.-5 p.m.; Tuesday, Nov. 16, 1 p.m.-4:30 p.m.; Thursday, Nov. 18, 4 p.m.-7:30 p.m.; Tuesday, Nov. 23, 9 a.m.-12:30 p.m.

Make-up session, Friday, Jan. 14: Sexual Harassment, 9 a.m.-12:30 p.m.; Racial Discrimination, 1:30 p.m.-5 p.m.

Questions: Academic Personnel Office, 263-

#### GRANTS AND FELLOWSHIPS

#### Teaching and Learning Projects

The Teaching Academy is committed to the improvement of teaching and learning, both on campus and in the larger academic community. To this end, the academy plans to provide funds to support projects with the potential to advance teaching and learning. A total of \$5,000 is available to be divided between one and five awards. Deadline: Wednesday, Oct. 27. Faculty and academic staff, both members and non-members of the Teaching Academy, on the UW-Madison campus are eligible to apply. The proposal application is available by request, through the mail, or e-mail or it can be found at our Web site. Contact: Rosemary Griffith, 258-8817, or [griffith@mail.bascom.wisc.edu](mailto:griffith@mail.bascom.wisc.edu), or visit: <http://www.wisc.edu/teaching-academy>.

#### Annual Grant Programs

UW System Administration guidelines for 2000-2001 grants and programs available to faculty are available from the Office of Human Resources, 166 Bascom Hall, 263-2511, or online: <http://wiscinfo.doi.wisc.edu/ohr/hrd/hrdgrants.html>. A sample packet with applications and instructions will be sent to deans, directors and department chairs.

Faculty Development Grants: These grants give faculty members released time to add to their competencies. Department deadline: Oct. 18.

Undergraduate Teaching Improvement Grants: UTIG encourages projects aimed at improving undergraduate teaching and learning. Department deadline: Sept. 24.

#### Academic Staff Professional Development Grant Program

The Academic Staff Professional Development Grant program is being offered once again for UW-Madison academic staff. UW funds will match department funds for projects that begin on or after January 1,

2000, and end before July 1, 2001.

The primary focus of proposals should be on training and/or retraining to improve the effectiveness of academic staff members in their current roles. The program has these main objectives: Individual professional development, improved program quality, improved institutional effectiveness and/or design for diversity. Applications must be submitted to department chairs or directors by Oct. 29. If you have a split appointment and your proposal is related to all units for which you work, you must obtain the endorsement of each unit. If approved by your department(s), your application will be reviewed by the deans/director's office and a committee of academic staff. Recommendations will be made to the director of the Office of Human Resource Development for final selection. Approved proposals will receive funds from the UW System account on the basis of an equal match by college or department.

Application instructions can be found at:

<http://wiscinfo.doi.wisc.edu/ohr/hrd/hrdgrants.html>. Contact Marlene Vachina, Office of Human Resource Development, 263-2511, if you have questions. Submission deadline: Department Chair, Oct. 29; Dean/Director, Nov. 8; Human Resources, 166 Bascom, Nov. 22.

#### Administrative Associate Program

Nominations and applications are now being accepted for the position of Administrative Associate in the UW System Office of the Senior Vice President for Academic Affairs. The position provides faculty and academic staff from UW campuses an opportunity to learn about the operation of the Office of Academic Affairs by participation in its work. Two associates will be appointed, with the first associate serving during the Spring 2000 semester and another for Fall 2000. An applicant must have been in the UW System for at least three years, be a tenured faculty member or an academic staff member, have strong communication skills, and show evidence of potential for increased administrative responsibilities. The administrative associate will be assigned an office and provided clerical support. To apply, send an updated vita, names and telephone numbers of three references, and an essay up to two pages in length, telling why you want this experience, to your dean's office by March 1 for the Fall 2000 associate.

#### Morgridge Mini-Grants Available

The Morgridge Center for Public Service will make mini-grants available to students, student organizations and faculty to support co-curricular or course-related community service projects for the 1999-2000 academic year. Grants can be up to \$500. Grant applications are available now in Room 154 in the Morgridge Center, 716 Langdon St., in the renovated Red Gym. They are due Sept. 30; recipients will be notified by Oct. 29. Grant criteria include: Service projects must fall within the 1999-2000 academic year; the grant serves as seed money to start a project; a project must serve the local community; a project must meet an identified community need. There is no charge for participants.

#### Knapp Grant Proposals

The Kemper K. Knapp Bequest Committee is soliciting proposals for special projects taking place during the 2000-2001 academic year. Knapp grants are usually in the range of \$500 to \$5,000 for projects that cross departmental lines and have an impact on the educational and cultural life of the university community, particularly undergraduate students. Deadline: Oct. 25. Submit six copies of the applica-

tion to: Knapp Committee, 133 Bascom Hall. Questions: Leann Tigges, 262-4259, or [ltigges@facstaff.wisc.edu](mailto:ltigges@facstaff.wisc.edu); or Joe Farrenkopf, 262-3956, [farrenkopf@mail.bascom.wisc.edu](mailto:farrenkopf@mail.bascom.wisc.edu).

#### Instructional Technology Grants

A new grant called Web Works is available to faculty and instructional staff who wish to incorporate instructional technology more fully into their curriculum. The \$1,000 grants are intended to expand or improve instructional use of the web with WebCT software. Grant recipients will be offered customized WebCT training classes, as well as the option of hiring an assistant from a pool of 15 students training in instructional technology support. Any UW-Madison faculty or instructional staff member teaching courses is eligible to apply. Information: <http://www.wisc.edu/learntech/webworks>.

#### 2000-2001 Fulbright-Hays Faculty Research Abroad Program

The program, administered by the U.S. Department of Education, offers opportunity to faculty members of higher education for research abroad in modern foreign languages and area studies. Eligibility limited to U.S. citizens who are faculty at U.S. institutions of higher education. Applications that propose projects focused on Western Europe will not be funded. Deadline: 4 p.m., Oct. 8. Applications are available in 328 Ingram Hall. Information: Elena Hsu, 262-9632, or e-mail: [fellow@macc.wisc.edu](mailto:fellow@macc.wisc.edu).

#### International Research and Exchange Board

Academic exchange programs for U.S. scholars traveling to Central and Eastern Europe, Eurasia and Mongolia. Applicants must be U.S. citizens or permanent residents. Grant opportunities include:

A) Individual Advanced Research Program: Grants of 1 to 12 months to predoctoral and postdoctoral scholars for research at institutions in Central and Eastern Europe, Eurasia and Mongolia. American scholars in policy research and development, and cross-disciplinary studies are strongly urged to apply. Deadline: Nov. 1.

B) Short-Term Travel Grants: Grants for scholarly projects focusing on Central and Eastern Europe, Eurasia and limited opportunities for Mongolia. Deadlines are February 1, 2000, and June 1, 2000. Information: IREX-International Research and Exchange Board, 1616 H Street, NW, Washington, D.C., 20006; phone: (202) 628-8188; or visit: <http://www.irex.org/>.

#### Athletic Board Vacancies

The Academic Staff Nominating Committee is seeking candidates to fill two vacancies on the UW Athletic Board as a result of recent resignations. The initial appointments will be for the remainder of the incumbents' terms. Candidates should submit a resume with a one-page cover letter that states how your background has prepared you for the work of the committee and describes the philosophy or emphasis you would bring to your committee role. The Athletic Board requires a considerable time commitment from members, who are also expected to serve on two subcommittees. A description of Athletic Board functions is available from the Secretary of the Academic Staff, 263-2985, or e-mail: [cmccabe@bascom.wisc.edu](mailto:cmccabe@bascom.wisc.edu).

Deadline: Sept. 30. Send to Karen Carlson, 341 Goodnight Hall; [kcarlson2@facstaff.wisc.edu](mailto:kcarlson2@facstaff.wisc.edu).

## POSITION VACANCIES

#### Clinical / Health Sciences

030901: Clinical Asst Prof, Med School/Medicine (100%). Apply by November 30.

#### Computer / Information Processing

031581: Assoc Inf Proc Const, Med School/Health Sciences Library (100%). Apply by September 30.

#### Research

029879: Research Specialist/Sr Research Spec, Med School/Pediatrics (100%). Apply by October 11.

#### Administrative

035040: Associate Dean, Med Sc/Administration (25%-50%). Apply by November 1.

035082: Assistant Dean (L), Med Sc/Administration (100%). Apply by October 15.

035241: Dean, Nutr/Administration (100%). Apply by October 8.

035289: Outreach Specialist, Educ/Arts Institute (50%). Apply by September 30.

#### Instruction

035413: Asst Faculty Assoc, L&CS/School of Library & Information Studies (100%). Apply by October 1.

#### Research

035309: Assoc Research Spec/Research Specialist, Ag&Lsc/Bacteriology (100%). Apply by September 24.

035353: Research Specialist, Ag&Lsc/Forest Ecology And Management (100%). Apply by September 21.

#### Student Services

035240: Dean Of Students (L), DOS/Administration (100%). Apply by October 1.

035385: Student Sv Pr Mgr III, Ac Svc/Office of The Registrar (100%). Apply by October 15.

#### Non-academic staff positions

##### Special Assistant to the Chancellor

University of Wisconsin-Extension  
Contact Rita Sears, 608/262-3786  
e-mail: [sears@admin.uwex.edu](mailto:sears@admin.uwex.edu)  
527 Ext. Bldg., 432 N. Lake St.  
Madison, WI 53706-1498  
Apply by September 30.

Due to publication schedules, not all vacancies are listed in Wisconsin Week. Complete descriptions of all vacancies (including faculty) are available electronically through the Web at <http://www.wisc.edu/ohr/employ.html> [click on "Position Vacancy Listings (Faculty, Academic Staff, and Limited Positions)"] or at the Academic Personnel Office, 174 Bascom Hall (263-2511).

UW-Madison is an Equal Opportunity/Affirmative Action employer.

# Trading up: 'Future Truck' project rolls up to UW-Madison

It's time for a guilt-free SUV

Engineering students from UW-Madison will be in the thick of a national college competition to turn a sport utility vehicle into a leaner, "greener" machine.

Future Truck 2000, announced Sept. 20 by the U.S. Department of Energy and General Motors Corporation, will challenge student teams to convert a Chevrolet Suburban from gasoline power to an alternative propulsion system. The goal is to dramatically improve the fuel efficiency of the Suburban without compromising the features that make it popular.

Each of the 15 university teams received \$10,000 in seed money from General Motors. In November, each team will also receive a spanking new, model year 2000 Suburban, straight off the assembly line.

This competition is an extension of the popular Future Car competition, in which

university teams improved the fuel ratings of midsize sedans by experimenting with hybrid electric power and other features. UW-Madison's Future Car team left competitors in the dust, taking first place the past two years by achieving fuel ratings of well over 60 mpg.

As part of this four-year competition, students will be encouraged to pursue the gamut of new auto technologies, including hydrogen fuel cells, electric-combustion hybrid engines, lightweight materials and alternative fuels.

The teams will have six months to modify their machines before steering them to GM's Desert Proving Ground in Arizona in June 2000. In addition to fuel economy, the SUVs will be judged on acceleration, handling, emissions, off-road performance and other features. ■

## Ford

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are underrepresented on engineering campuses, and enhance their educational and extracurricular opportunities," Corradini says. "I appreciate the efforts of the Ford representatives who worked hard to strengthen the relationship between Ford and the College of Engineering and Diversity Affairs."

James Johannas, associate dean of undergraduate programs for the School of Business, says the Ford grant will significantly benefit both the business school's undergraduate and graduate programs.

"On the undergraduate level, this gift is

going to help us recruit and retain the very best undergraduate students, which is critical to being one of the best undergraduate programs in the country," says Johannas. "It also will help us to provide the highest quality service to our undergraduates and inform them about options for business majors early in their undergraduate careers."

Paula Winkler Doman, Ford Motor Company's executive sponsor for the university, says the university and Ford "have enjoyed a working partnership of the truest sense" for more than 50 years.

For more information, contact Ed Manuel, UW Foundation senior director of engineering development, 262-5251. ■

## Library Journals

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commercially published journals in all three fields are significantly less cost-effective than journals published by not-for-profit enterprises," the study says. In some cases, the difference is a factor of 910-to-one.

George Soete, a consultant with the

Association of Research Libraries in Washington, D.C., conducted the latest research with Athena Salaba, a doctoral candidate in the UW-Madison School of Library and Information Studies.

The complete report, "Measuring the Cost-Effectiveness of Journals: Ten Years after Barschall," is available by visiting: <http://www.library.wisc.edu/projects/glsd/cost.html>. ■

## ADVANCES

Advances gives a glimpse of the many significant research projects at the university. Tell us about your discoveries by e-mailing: [wisweek@news.wisc.edu](mailto:wisweek@news.wisc.edu).

## Nobel winner recalled

A university professor who was adviser to Nobel Prize-winning cell biologist

**Glünter Blobel** while he studied oncology here says he's not surprised the one-time doctoral candidate has received the international honor.

"This has been building for the last 10 years at least," says professor emeritus **Van R. Potter** of the McArde Lab for Cancer Research. "His name has come up before. It's not a surprise at all."

Blobel received a doctoral degree in oncology in 1967 from UW-Madison, where he worked with Potter in the McArde Lab. Blobel was in Madison from 1962-1967.

"I remark with a wink that he's the first of my students to get a Nobel prize, but there are several out there who deserve it," Potter says. "There have been some very outstanding people who have gone through here, and we're proud of Blobel because he came from here."

While in Madison, Blobel's research interest was in methods for separating cells into their different components. Today, Blobel, John D. Rockefeller Jr. Professor at The Rockefeller University and a Howard Hughes Medical Institute investigator, studies the process by which newly made proteins are transported across the membranes of cell structures called organelles. The research has an immediate bearing on many diseases, including cystic fibrosis, Alzheimer's and AIDS.

## Study looks at effects of laser eye treatment

The Medical School Department of Ophthalmology and Visual Sciences is recruiting patients to participate in a five-year clinical trial to determine whether laser treatment can decrease vision loss for older individuals at risk of developing severe age-related macular degeneration.

Age-related macular degeneration, or AMD, affects an estimated 1.7 million older Americans, and is the leading cause of severe visual impairment in individuals over 60. Over the last several years, the use of photodynamic therapy (lasers) to treat eye conditions has continued to gain attention in the medical community.

According to ophthalmologist **Suresh Chandra**, the study's principal investigator, the risk to the patient in this particular trial is minimal. But the results of the trial, if encouraging, could be highly significant.

"The long-term significance of this study could be tremendous," said Chandra. "If we find out that the use of mild laser is helpful, we can pick out patients in the early stages of AMD, apply the treatment and save them from blindness."

More information: 263-9035; [wwalker@hscstaff.wisc.edu](mailto:wwalker@hscstaff.wisc.edu).

## Nasal spray tested as common cold remedy

Medical School researchers are now testing a nasal spray that may suppress the common cold. The spray, which contains a protease inhibitor called AG7088, was developed by researchers who were looking for a treatment for HIV, the virus that leads to AIDS, says professor **James Gern**, who is directing the study.

The treatment — which has successfully fought rhinoviruses, the most frequent cause of the common cold, in test tubes — is being tried out on 900 people of 55 sites around the country. Gern says.

AG7088 has proven effective when taken within 30 hours of a cold's first symptoms. "What makes this new treatment so revolutionary is that it attacks the virus directly and in its infancy, potentially inhibiting its ability to ever cause a full-blown cold," Gern says.

## Biodiversity: Insurance in the face of change?

How species respond to change may be more crucial than diversity itself

## Terry Devitt

It has been a truism, long held by scientists, environmentalists and others, that biological diversity and the intricate, interdependent web of biological relationships it fosters is a must for maintaining the health and stability of any ecosystem.

But the argument has never been carefully honed, and there is no consensus among scientists regarding this central question of biology: Just why are diversity and competition so important to balancing the overall health of ecosystems?

Now, a group of university scientists, writing in the Oct. 15 edition of the journal *Science*, suggests that simple diversity may be less important than how individual animals, plants or microbes respond to environmental change.

"It's not the number of species per se. It's how they respond to the environment that's important," says Anthony Ives, an associate professor of zoology and the lead author of the study published in the nation's leading scientific journal.

The primary result of the study is that competition between animals, plants and other forms of life is a sideshow. Instead, the true measure of a community's biological health and stability is the whereabouts of just some species to withstand environmental changes such as a warmer climate, a chemical change in the atmosphere or changes in land use.

That is not to say, Ives stressed, that biodiversity has no practical importance. It does, especially in the face of unpredicted,

large-scale environmental shifts, he says.

"The more species you have, the greater the likelihood you'll have some (organisms) that are tolerant of environmental change. Biodiversity is an insurance policy against unknown environmental fluctuations and disturbances."

The idea, posited by Ives and co-authors Kevin Gross and Jennifer Klug, UW-Madison graduate students, suggests that ecologists should shift attention from the interactions among species, and instead focus on how different species react to different environmental assaults.

The basis of the report published in *Science* is a mathematical analysis of the ebb and flow — the variability — of populations of organisms encountering environmental stress. "It is explicitly modeling the variability, which hasn't been done before," says Ives.

According to Gross, the model, like an analysis of the stock market, looks at variability through time and identifies stability in an ecological community as a measure of how much populations of species fluctuate in the face of environmental change.

The hope, according to the Wisconsin scientists, is that the model will contribute to a better understanding of ecosystem dynamics, how ecosystems change along with the larger environment.

The work, says Ives, should not be considered an argument against the importance of biodiversity.

"What biodiversity gives you is a greater chance that there will be tolerant species present to help retain the function of the ecosystem," he says. ■

## Researchers to study summer power failures

## Brian Mattmiller

After a rash of power failures this summer caused headaches for millions of customers in some of the nation's major cities, two UW-Madison engineers at the Power Systems Research Engineering Center have joined a national effort to shed light on blackouts.

Electrical and computer engineering professors Fernando Alvarado and Christopher DeMarco are part of the PSERC team selected by the U.S. Department of Energy to investigate failures in those regions.

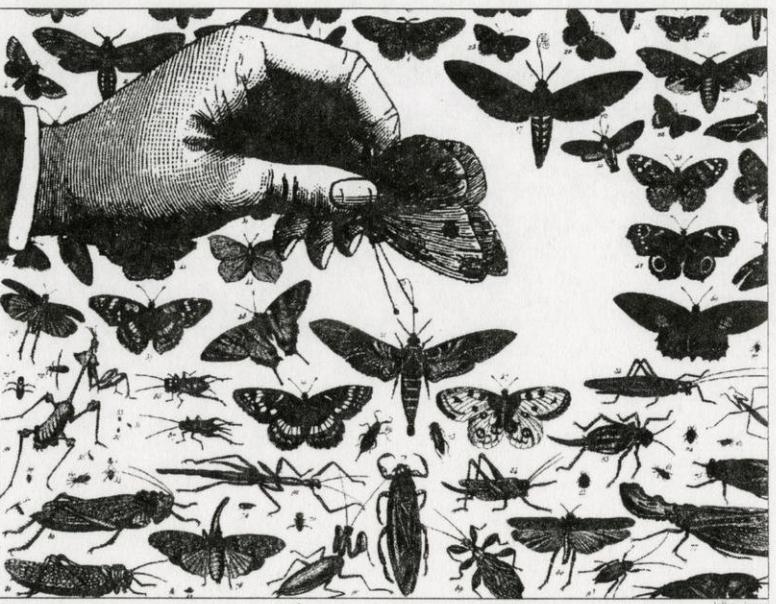
The goal is to discover any common threads in those outages that can help inform a national effort for blackout prevention. The 15-member team was assembled by Energy Secretary Bill Richardson after the summer's high-profile blackouts raised worries. Alvarado is working with leaders of utilities and regulatory agencies in New Orleans, while

DeMarco is studying the Chicago failures.

"There are many issues regarding electrical power that are national in character," says DeMarco. "This is an industry where a lot of the hardware has been taken for granted for a decade or more. And with a recently deregulated industry, there are many more energy players in the market and more impetus to share power over longer distances."

The end result may be new and underappreciated stresses on the nation's power grid, which increase the risk of failures during peak-use times like last summer's heat wave. DeMarco says the team's goal is to provide enough information for DOE to make national recommendations to prevent another wave of future blackouts.

Alvarado says the study teams should have their reports complete by November and a final report will be submitted to



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DOE in early December. Alvarado is part of the smaller group that will write the final report. In addition to probing the blackouts, Alvarado says his study team identified several near-misses that could have caused trouble in New Orleans.

They are investigating many areas of concern, including the age of the system, operating protocols, the impact of deregulation, emergency guidelines and inadequacies in the system design. Alvarado says they need to separate the larger system issues from local problems and plain bad luck.

PSERC is a six-university consortium headquartered at Cornell University. The UW-Madison effort, directed by electrical and computer engineer Robert Lasseter, specializes in studying the interface between the energy market and the physical systems that support it. ■

# Administrative posts change hands over summer

**Eric Hansen**, a former member of the U.S. National Team, is the new head coach for UW-Madison's men's and women's swimming teams. An assistant coach for the University of Arizona's swimming teams, he replaces his brother, Nick, who resigned in May.

Two librarians recently were promoted to the title of Distinguished Librarian, recognizing a professional reputation of expertise in one's field and influence that extends beyond the university. **Phyllis Holman Weisbard**, the women's studies librarian for the UW System since 1991, also was named 1999 Librarian-of-the-Year by her peers in the UW-Madison Librarians' Assembly. **Carol Mitchell**, senior librarian for South and Southeast Asia Collections since 1989, is cited for her collection development accomplishments and research services.

Based at UW-Manitowoc, **Philip B. Moy** has begun work as the new fisheries specialist for the University of Wisconsin Sea Grant Institute.

The School of Music appointed **Richard Mumford** as director of public relations and concert manager. Formerly performing arts coordinator at Strathmore Hall Arts Center in North Bethesda, Md., he will manage the faculty concert series and oversee the season brochures and calendars of events.

**Tammy Thayer-Ali** has been named vice president and director of marketing for the Center for Advanced Studies in Business, Inc. (CASB) at the School of Business.

The Board of Regents has approved the following appointments as named professors: **Inge Bretherton**, professor of education psychology, and human ecology to the Audrey Rothermel Bascom Professor I in Human Ecology; **Mary (Molly) L. Carnes**, professor of psychiatry and geriatrics, to the Jean Manchester Biddick Professorship in Women's Health Research; **Robin Douthitt**, professor of consumer science, to the Vaughan Bascom Professorship in Women and Philanthropy; **Donald A. Downs**, professor of political science, to the Glenn B. and Cleone Orr Hawkins Professorship; **Michael V. Fox**, professor of Hebrew and Semitic studies, as the Jay C. and Ruth Halls-Bascom Professorship; and **David Riley**, professor of human ecology, to the Audrey Rothermel Bascom Professor II in Human Ecology.

A number of administrative appointments were made over the summer. Here's a rundown of the changes in the ranks:



**Steven A. Ackerman** has been named director of the Cooperative Institute for Meteorological Satellite Studies. Ackerman is a scientist in the Space Science and Engineering Center and associate professor in the Department of Atmospheric and Oceanic Sciences.



**Paul W. Barrows**, associate vice chancellor for academic services and campus diversity, is the university's chief student affairs officer. The new position expands Barrows' responsibilities and carries the working title of vice chancellor for student affairs. Barrows will continue to supervise the Registrar's Office, the Office of Student Financial Services, Undergraduate Admissions and student diversity, and he will also oversee the Dean of Students Office and University Health Services.



**Mark D. Bugher**, secretary of the Wisconsin Department of Administration, has been appointed the new director of the University Research Park. Bugher, who will begin the job on or before Oct. 1, will be responsible for the overall management of the 300-acre west Madison development, which is home to 76 diverse companies employing more than 2,200 people.

**Linda Greene** has been appointed an associate vice chancellor concentrating on gender equity and faculty development. Greene's half-time appointment begins this week and she will continue to teach two classes at the law school. Specifically, Greene will function as the university's point person on issues involving women



faculty and she will lead the provost's work group on human resource issues such as workforce diversity, climate, professional development and quality.

**Ann Groves Lloyd** has been hired as director for Career Advising and Planning Services, marking the first step in a major expansion of the program. She had been senior director of campus outreach for the Wisconsin Alumni Association before taking the helm of CAPS in July.



**Harvey M. Jacobs**, a professor of urban and regional planning, has been named director of the Land Tenure Center. Established in 1962, the center focuses its research and training on the relationship land ownership has with social structure, economic development, political organization, and environmental sustainability. Jacobs has been a member of the UW-Madison faculty for 15 years. His work is required reading in urban planning programs throughout the country, and he has conducted research in Albania, France, Italy, Kenya, Poland and the United States.

**Judith Deutsch Kornblatt**, an expert on Russian religious philosophy and 19th and 20th century Russian literature, has been named associate dean for the humanities in the Graduate School. Kornblatt received interim appointment to the post last September following the death of Fannie LeMoine. Kornblatt says that along with developing research opportunities in the humanities, enhancing teaching and outreach will be a priority.

**Paul S. Peercy**, a leader in the nation's semiconductor industry, is the new dean of the College of Engineering. Peercy, who holds a doctorate in physics from UW-Madison, will start Sept. 1, on a part-time basis during a brief transition. Peercy is currently president of SEMI/SEMAT-ECH, a non-profit consortium that steers



technical issues for more than 130 of the nation's top suppliers to the semiconductor industry. **Luis A. Piñero**, associate director of the Equity and Diversity Resource Center, has been named the center's interim director. Piñero replaces Gregory J. Vincent, who has accepted a position as vice provost for campus diversity at Louisiana State University. Piñero will oversee the day-to-day operations of the EDRC and assume a leadership role on campus workforce diversity initiatives and issues, including faculty hiring.

**Noel Radomski**, a policy analyst in the Chancellor's Office who had been interim director of the Office of Visitor Services, has assumed the post permanently.

**Janice Sheppard**, who has served as interim assistant dean of students since 1997, has been named permanently to the post. As an assistant dean, Sheppard will manage the university's response to student academic and nonacademic misconduct issues, and supervise the new lesbian, gay, bisexual and transgender issues coordinator. She will share some general administrative responsibilities as well.

**Richard J. Straub**, chairman of the Department of Biological Systems Engineering in the College of Agricultural and Life Sciences, has been named director of Agricultural Research Stations. Straub replaces Dale Schlough, who retired in July after 30 years overseeing operations on 12 stations and other assorted parcels totaling about 6,100 acres — about two-thirds of the land used for all UW-Madison programs.

**Jane C. Tylus**, a specialist in Renaissance literature, has been named associate dean for the humanities in the College of Letters and Science. Tylus replaces Yvonne Ozello, who has retired. As associate dean for the humanities, Tylus will be the point person in the college for more than 20 humanities departments and programs. ■

## FACULTY, STAFF RETIREMENTS

The following faculty and academic staff have been granted emeritus status. Years of service are listed for each:

**Jaafar K. Al-Abdulla**, adjunct professor, Structural and Materials Testing, 27 years; **Louis C. Arrington**, professor, Animal Science, 32 years; **Robert Auerbach**, professor, Zoology, 41 years; **Robert F. Barreras**, associate professor, Medicine, 35 years; **Charles A. Baum**, administrative program manager III, Biotron, 35 years; **Carl Adam Baumann**, distinguished instrumentation technologist, Physical Science Lab, 30 years; **Donald A. Becker**, professor, German, Linguistics, 32 years; **Paul M. Berthouze**, professor, Civil and Environmental Engineering, 28 years; **Richard B. Bilder**, professor, Law, 33 years; **B. Dean Bowles**, professor, Educational Administration, 33 years; **Benito Branciforte**, professor, Spanish and Portuguese, 33 years; **Robert D. Bremel**, professor, Dairy Science, 24 years; **Robin S. Chapman**, professor, Communicative Disorders, 28 years; **Julius J. Chosy**, professor, Medicine, 34 years; **Allen W. Clark**, associate professor, Anatomy, 29 years; **David L. Clark**, professor, Geology and Geophysics, 36 years; **William H. Clune**, professor, Law, 27 years; **Bibhuti R. DasGupta**, senior scientist, Food Microbiology and Toxicology, 28 years; **James M. Dennis**, professor, Art History, 34 years; **Ana C. DeVaney**, professor, Curriculum and Instruction, 25 years; **Michael Dorf**, associate director, Administrative Computing Services, 32 years; **William C. Dries**, instrumentation special-

ist, Engineering Professional Development, 29 years; **R. Tass Duelund**, professor, Veterinary Medicine, 19 years; **Peter K. Eisinger**, professor, Political Science, 29 years; **Sue A. Frazier**, associate professor, Nursing Academic Affairs, 21 years; **Lloyd E. Frohreich**, professor, Educational Administration, 30 years; **Martin B. Garmeht**, associate research specialist, Entomology, 28 years; **Ronald L. Giese**, professor, Forest Ecology and Management, 23 years; **Mark Hanzen**, professor, French and Italian, 29 years; **Betty C. Hasselkus**, professor, Kinesiology, 12 years; **Sister Mary Francis Heimann**, outreach specialist, Plant Pathology, 22 years; **Standish Henning**, professor, English, 39 years; **Lowell E. Hokin**, professor, Pharmacology, 42 years; **Walter R. Holthaus**, senior administrative program specialist, Zoology, 41 years; **Stanley L. Inhorn**, professor, Pathology/Preventive Medicine, 45 years; **Frank A. Iwen**, senior academic curator, Zoology, 44 years; **Eulyn L. Jensen**, professor, Dairy Science, 31 years; **William R. Jordan III**, outreach program manager I, Arboretum, 22 years; **Neal A. Jorgensen**, dean and professor, Dairy Science, 31 years; **Richard E. Keesey**, professor, Psychology, 37 years; **F. Douglas Kelly**, professor, French and Italian, 35 years; **Miriam E. Kerndt**, senior academic librarian, General Library Service, 36 years; **Susan C. Kirkbride**, senior academic librarian, CHS Libraries, 25 years; **Jerome H. Klotz**, professor, Statistics, 34 years; **Steve E. Kornogut**, professor, Neurology/Biomolecular Chemistry, 35 years; **James H. Latimer**, professor, Music, 31 years;

**Richard A. Lazzaro**, professor, Art, 35 years; **Lawrence S. Levy**, professor, Mathematics, 38 years; **Robert H. March**, professor, Physics, 39 years; **A. Jeff Martin**, professor, Forest Ecology and Management, 15 years; **Warren W. May**, clinical instructor, Surgery, 10 years; **Wayne F. McGown**, director, University Research Park, 20 years; **Carole A. McGuire**, outreach program manager, Administration, 32 years; **L. Gordon Medaris Jr.**, professor, Geology and Geophysics, 32 years; **Durwood A. Meyer**, director, Administrative Computing Services, 37 years; **Gary L. Milhollin**, professor, Law, 22 years; **Richard A. Moll**, professor, Engineering Professional Development, 14 years; **Stephen A. Myrah**, Secretary of the Academic Staff, 34 years; **Yvonne A. Ozello**, professor, French and Italian, 25 years; **Daniel E. Peschel**, researcher, Lancaster Research Station, 33 years; **Mary Ellen Peters**, professor, Radiology, 26 years; **Henry C. Pitot**, professor, Oncology, Pathology and Laboratory Medicine, 39 years; **Ivan L. Preston**, professor, Journalism and Mass Communication, 31 years; **E. Arthur Prieve**, professor, Business, 33 years; **Charles Pulvino**, professor, Counseling Psychology, 28 years; **Rowland B. Randall**, senior instrumentation technologist, Biochemistry, 31 years; **Patrick C. Runde**, associate dean, Administration, 30 years; **Gloria E. Sarto**, professor, Medicine, 13 years; **Don S. Schalch**, professor, Medicine, Endocrinology, 17 years; **Dale A. Schlough**, director, Agricultural Research Stations, 30 years; **John W. Schmidt**, visiting professor,

Professional Development and Applied Studies, 4 years; **Dean R. Schneek**, clinical professor, Social Work, 28 years; **Maria Schneek**, senior scientist, Molecular Virology, 31 years; **Henry S. Schutte**, professor, Neurology, 18 years; **Grayson L. Scott**, senior scientist, Anatomy, Neuroscience, 36 years; **Lawrence D. Shribberg**, professor, Communicative Disorders, 28 years; **Andrew L. Sihler**, professor, Linguistics, 32 years; **B. Kay Simandl**, researcher, Anatomy, 27 years; **William L. Smith**, professor, Atmospheric and Oceanic Sciences, 16 years; **James A. Sorenson**, professor, Medical Physics, Radiology, 10 years; **Charles R. Stearns**, professor, Atmospheric and Oceanic Sciences, 34 years; **John D. Strasma**, professor, Agricultural and Applied Economics, 32 years; **David Sulman**, clinical associate professor, Medicine, 32 years; **Jon G. Udell**, professor, Business, 37 years; **Dolores K. Vetter**, professor, Communicative Disorders, 32 years; **Joachim H. von Elbe**, professor, Food Science, 34 years; **William F. Weerge**, professor, Art, 28 years; **Gary G. Wehlage**, professor, Curriculum and Instruction, 31 years; **Eugene M. Wengert**, professor, Forest Ecology and Management, 6 years; **Robert C. West**, professor, Chemistry, 42 years; **Thomas H. Williams**, professor, Business, 20 years; **Carolyn F. Wilson**, editor, General Library Services, 10 years; **George W. Wirtzman**, professor, Human Oncology, 28 years; **C. Allen Worthy**, professor, Engineering Professional Development, 14 years.



# NEWS

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UNIVERSITY OF WISCONSIN-MADISON

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FOR IMMEDIATE RELEASE 07/23/99

**CONTACT: To reach Provost John Wiley, call Brian Mattmiller, (608) 262-9772; Paul Peercy, (512) 632-2367**

**NOTE TO PHOTO EDITORS:** A high-resolution black-and-white image of Paul Peercy is available at: <http://www.news.wisc.edu/newsphotos/peercy.html>

## PEERCY NAMED DEAN OF UW COLLEGE OF ENGINEERING

MADISON — Chancellor David Ward announced today (July 23) his selection of Paul S. Peercy, a leader in the nation's semiconductor industry, as the new dean of the University of Wisconsin-Madison College of Engineering.

Peercy, a doctorate degree-holder in physics from UW-Madison, will begin his leadership of the college Sept. 1 on a part-time basis during a brief transition. Peercy is currently president of SEMI/SEMATECH, a non-profit consortium that steers technical issues for more than 130 of the nation's top suppliers to the semiconductor industry.

"I am delighted that someone with Paul's talent, experience and dedication will help us lead the college into a new century," Ward said. "The science and practice of engineering is changing rapidly, and Peercy provides an essential link between the academic and professional worlds."

Peercy will succeed John Bollinger, who steps down this year after serving as dean for 18 years. Peercy will guide a college with more than 3,000 undergraduates, 1,000 graduate students and an annual operating budget of approximately \$100 million.

"This is a special opportunity for me to lead a college with an extraordinary range of talent and potential," Peercy said. "These are very exciting times in engineering, and UW-Madison is leading the way in many new fields."

Peercy said that interdisciplinary fields such biomedical engineering, nanotechnology and atomic-level engineering will play a dramatic role in the

--more--

## Engineering dean/Add 1

future of medicine, genetic research, drug development and electronics. Today's advanced engineering tools and the new connections to the biological sciences have made engineering research more vital than ever, he said.

Private industry will be more reliant on the new knowledge and trained graduates coming from engineering colleges. Many industries are shifting more of their research and development needs to universities, he said. The semiconductor industry, for example, created a research program recently in semiconductor technology that will invest \$60 million annually into university research when it is fully funded.

Peercy said he would also like to see the entrepreneurial spirit of the college grow in its teaching and research pursuits, by encouraging the development of startup companies based on student and faculty innovations. The college has many innovative programs in this area, including competitions that encourage students to develop and commercialize inventions.

The college has strong programs in undergraduate and graduate education, and should continue using communication technology, especially the Internet, to meet the continuing education needs of professional engineers. "The mission of the college is to educate men and women who will implement change, but they'll also need a strong foundation so they come back and learn again and again," he said.

Peercy has been president of SEMI/SEMATECH since 1995. The Austin, Texas-based organization helps steer major new technology directions for companies that comprise the equipment and supplier infrastructure for the U.S. semiconductor industry.

Prior to that position, he was director of microelectronics and photonics at Sandia National Laboratories in Albuquerque, New Mexico. He received his masters in 1963 and Ph.D. in 1966 from the UW-Madison department of physics.

He is a fellow of the Institute for Electrical and Electronics Engineers, the American Association for the Advancement of Science and the American Physical Society. His research spans several areas of solid state and materials physics and engineering.

--more--

## Engineering dean/Add 2

The deanship attracted more than 150 candidates, according to search committee chairman W. Harmon Ray. The committee placed a priority on finding a proven leader who showed an ability to enhance the college's national reputation and has a knowledge of the emerging technologies shaping the field.

Research strengths at the UW-Madison college include engine research, biomedical engineering, space-related applications and nanotechnology. The college also has 15 industrial consortia that share applied research and expertise through formal partnerships with more than 100 private companies.

Other finalists were: Eduardo D. Glandt, interim dean of the University of Pennsylvania School of Engineering and Applied Science; and Julio Ottino, chair of the department of chemical engineering at Northwestern University.

Peercy's annual salary will be \$185,000. His appointment is contingent upon approval by the UW Board of Regents.

# # #

-- Brian Mattmiller, (608) 262-9772

## Community

## Education tutoring program expands in Madison

The SHAPE tutoring program in the School of Education has more than doubled its enrollment and expanded to an additional site in Madison's schools.

SHAPE, which stands for Students Helping in the Advancement of Public Education, combines an academic seminar with practical experience tutoring in Madison schools. Established in 1997 as a pilot effort, the program grew out of a suggestion by the Civil Rights Defense Coalition for increasing diversity on campus. The program attracts undergraduates from all over campus, many of whom do not plan careers in teaching.

Last fall SHAPE received a three-year grant from UW-Madison alumni Mary and Ted Kellner of Mequon. The gift allowed enrollment in the seminar to grow from 20 to almost 50, and expanded the program from Lincoln and Midvale elementary schools to a third site, Cherokee Heights Middle School.

At Cherokee, the tutors are divided into three squadrons. One group serves as "reading buddies" to sixth-graders; another provides math tutoring in eighth grade; and a third offers homework help after school.

"I couldn't be more pleased to have them here," says Jessica Doyle, the learning coordinator at Cherokee. "I think it's a wonderful example of how the university and public schools can cooperate."

The Kellner gift also will fund a systematic evaluation of the tutoring program to be conducted by Marianne (Mimi) Bloch, the professor of curriculum and instruction who teaches the SHAPE seminar, and a graduate student. ■

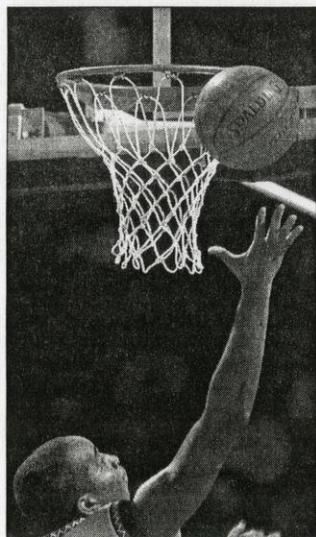


Photo by Jeff Miller

The Wisconsin men's basketball game against Michigan will be played in the Kohl Center Saturday, Feb. 27, starting at 11:17 a.m. The date of the game had been in question until recently. The game will be televised live on cable television by ESPN Regional. The Wisconsin men's basketball team (21-6, 9-5 Big Ten) fell to Michigan State last week, but the team's 21 wins this season are the most of any UW men's team in school history. Only two previous teams in UW-Madison history have won 20 games, in 1915-16 and 1940-41, according to the Athletic Department.

## On Campus

## Shalala to be keynote speaker on ethics of managed health care



Donna Shalala

Donna E. Shalala, secretary of the U.S. Department of Health and Human Services, will be the keynote speaker at a symposium on ethical issues involved in managed health care to be held on campus Thursday, March 25.

The Grainger Business Ethics Symposium, sponsored by the School of Business, is titled, "The Ethics of Managed Care: Balancing Patients' Health and Corporate Profits." The event will be held at the business school's Grainger Hall, from 5-7:15 p.m.

Shalala, former chancellor of UW-Madison, will speak on "Putting People First: Patient Care in the Age of Corporate Medicine." She will also take part in panel discussions of the proposed Patients' Bill of Rights, which has been considered by Congress, and on ethical decisions facing physicians, who must balance best

care for their patients with the corporate bottom line.

Other participants include: Timothy Flaherty, secretary-treasurer, American Medical Association; John M. Wray, senior vice president, managed care Catholic Healthcare West Medical Foundation; R. Alta Charo, professor of law and medical ethics, UW-Madison; and Christopher Queram, CEO, the Employer Health Care Alliance Cooperative. The business school's Laura Hartman, visiting associate professor of business ethics, will moderate the discussion.

Since 1993, the Grainger Business Ethics Symposium has examined several aspects of business ethics, including ethical dilemmas in reducing the federal deficit, the genetic revolution and international business. The series is funded by The Grainger Foundation.

The event is free, but seating is limited. Faculty and staff interested in attending are asked to e-mail the business school's Aimee Hambleton at: [ahambleton@bus.wisc.edu](mailto:ahambleton@bus.wisc.edu). ■

## Scientist, author Steven Pinker to lecture on how the mind works



Steven Pinker

Scientist and author Steven Pinker will present a free public lecture on how the mind works as the second speaker in a lecture series presented by the neuroscience training program.

The acclaimed author wrote the 1997 bestseller "How the Mind Works," a book that examines topics ranging from why people believe in ghosts and spirits to what makes us laugh.

Pinker, director of the Center for Cognitive Neuroscience at Massachusetts Institute of Technology, will speak Friday, Feb. 26, at 4 p.m. in Room 1100 Grainger Hall. The lecture is co-sponsored by the University Lectures Committee and the neuroscience training program.

Pinker's latest book has attracted widespread attention and generated controversy. In it he focuses on evolutionary psychology, suggesting new insights into how people make decisions, why they take risks, what makes people lose their tempers or fall in love. His 1994 book, "The Language Instinct," was also a bestseller and presented theories related to how humans acquire language.

Pinker, who received his doctorate in experimental psychology from Harvard and then studied linguistics with Noam Chomsky, joined the MIT faculty as an assistant professor in 1982. He was appointed professor and director of the center in 1989. ■

## Notable

## UW students among best at repaying Perkins loans

The 1997-98 Perkins Loan default rate at UW-Madison was 2.61 percent, second lowest in the Big Ten, according to the university's financial aid office.

Steve Van Ess, director of the Office of Student Financial Services, credits the low rate to diligent repayment of loans by current and former students. He also credits the billing work of the Bursar's Office and the collection effort of his Student Loan Servicing unit for the stellar rate.

"The repayment of these funds by students is especially important as the funds go into a revolving fund to be loaned out again to current students," Van Ess says.

Northwestern University had the Big Ten's lowest rate, at 0.86 percent. The next closest to UW-Madison was the University of Illinois, at 4.9 percent. The Ohio State University had the highest default rate at 12.7 percent.

The Perkins Loan, previously called the National Defense Student Loan and the National Direct Student Loan, is a financial aid program administered by the U.S. Department of Education. Along with Work Study and Supplemental Educational Opportunity Grants, it is one of three campus-based federal financial aid programs.

UW-Madison loans Perkins money directly to students and collects the repayments. If students have trouble repaying or if they default, counselors with the Student Loan Servicing unit help them establish repayment plans. While the university rarely receives any new loan money from the federal government, the annual collection of \$9 million from prior Perkins Loan borrowers is available for current UW-Madison students.

"Our students really do repay their loans," Van Ess says. ■

## Coalition seeks to prepare a new generation of engineers

The university has joined six other academic institutions in the National Science Foundation Coalition, a program designed to better prepare future engineers.

"The main thrust of the coalition is developing a responsive curriculum," says John Mitchell, mechanical engineering professor and UW-Madison's representative to the national organization's management team.

"We must continually respond to constituents' needs — assessing the engineering curriculum and making it more effective," Mitchell says. "We need to link and integrate all parts of the curriculum. The idea is to get as many faculty as possible involved in making these changes."

Since joining the coalition in October, the Madison group has held workshops on learning communities and faculty development. It will host another Madison workshop April 7-8, for faculty at other coalition schools who are interested in learning more about the techniques, tools and plans of assessment and evaluation.

Serving with Mitchell on the College of Engineering's executive committee for this program are associate dean Michael Corradini, assistant dean Donald Woolston, adjunct assistant professor Sandra Courter and Sarah Pfatteicher, the college's assessment director.

Additionally, a UW-Madison inter-departmental team is developing a curriculum to more effectively link courses. The group includes professors Art Ellis (chemistry), Pat Farrell (mechanical engineering), Wesley Smith (physics), John Strikwerda (computer sciences) and Robert Wilson (mathematics), associate professors Teresa Adams (civil engineering) and Jake Blanchard (engineering physics), lecturer Laura Grossenbacher (engineering professional development) and teaching assistant Kris Cummings (engineering physics).

For more information about the Foundation Coalition, visit: <http://foundation.ua.edu>. ■

## NEWSMAKERS

## CANCER SPECIALISTS GET GOOD HOUSEKEEPING SEAL

Two doctors with the Comprehensive Cancer Center are listed among the nation's top cancer specialists for women in the March 1999 edition of Good Housekeeping magazine. John Niederhuber, the UWCCC director, was listed among outstanding breast cancer surgeons and Joan Schiller, professor of clinical oncology, was included for her work in lung cancer therapy.

Niederhuber, a surgeon and scientist who has directed the center since July 1997, specializes in breast, pancreatic and liver cancer and tumors of the bone, muscle or other connective tissue. Niederhuber also has been named one of the "Best Doctors in America" by American Health, Town and Country and Good Housekeeping magazine.

Schiller is active in the development of new therapies for lung cancer and other malignancies. She also has twice been named to U.S. News & World Report's list of the Best Doctors in America.

The physicians included on the list were those most often cited by department chair and section chiefs in surgical, medical and radiation oncology at major U.S. medical centers.

## GRANDPARENTS SPOTLIGHTED

The Christian Science Monitor (Wednesday, Jan. 20) drew attention to the efforts of Mary Brintnall-Peterson, a family specialist at UW Extension in Madison who co-chaired the first "Grandparents Raising Grandchildren" national satellite video conference Tuesday, Jan. 12, that involved thousands of participants at 286 sites nationwide.

As more and more grandparents have to raise grandchildren, they face ground-breaking legal and financial issues. "Our hope for the conference was to plant seeds in the minds of professionals in communities," says Brintnall-Peterson. "A lot of states have laws that are barriers to grandparents. My hope is that the conference will help change the laws, and states will be more responsive."

## IMPEACHING FAMILY VALUES?

Whether the impeachment scandal will have lasting effects on families is uncertain, but it definitely was another, perhaps the most extreme, example of how families are increasingly unable to protect their children from an onslaught of adult material through the news media.

"You can't say, 'This house is an oral sex-free zone,'" communication arts professor Joanne Cantor, author of "Mommy, I'm Scared: How TV and Movies Frighten Children and What We Can Do to Protect Them," told Newhouse News Service (Sunday, Feb. 14). Cantor joked that her next book should be "Mom, He Said She Did What to the President?"

## BUILDING BINGE

Law professor Walter Dickey, a former Wisconsin corrections chief who headed the 1996 Thompson commission on prison overcrowding, says the state needs to try new approaches such as the "work house" plan to help convicts avoid returning to a life of crime. Gov. Tommy Thompson's proposals include creating two 150-bed inmate "work houses."

"Unless we've got the ability to break the cycle, I don't see us on anything but an unending upward surge of prison building," Dickey told the Associated Press last week.

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# NEWS

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UNIVERSITY OF WISCONSIN-MADISON

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June 15, 1999

TO: Editors, news directors  
FROM: Brian Mattmiller, (608) 262-9772  
RE: A New Online Engineering Degree

Two dozen engineers begin a new degree program this week, and their classrooms could be an office cafeteria, a basement den or even an airport lobby.

The Masters of Engineering in Professional Practice (MEPP) program is an innovative effort to bring instruction to the working professional, by offering an entire advance degree via the World Wide Web.

The classmates will share an electronic classroom for the next two years and pursue a masters degree without interrupting their careers. Karen Al-Ashkar, the program's adviser, said the program is giving people who are juggling professional and personal lives new access to higher education.

"These students need to be able to access courses on their time, not ours," Al-Ashkar said. "The curriculum is specially designed for adult learners who have a wealth of experience in industry, and for independent learning in the online world."

Employers strongly supported the concept, Al-Ashkar said. Most enrolled students have all or most of their tuition covered by the company, and some are getting work time to devote to coursework.

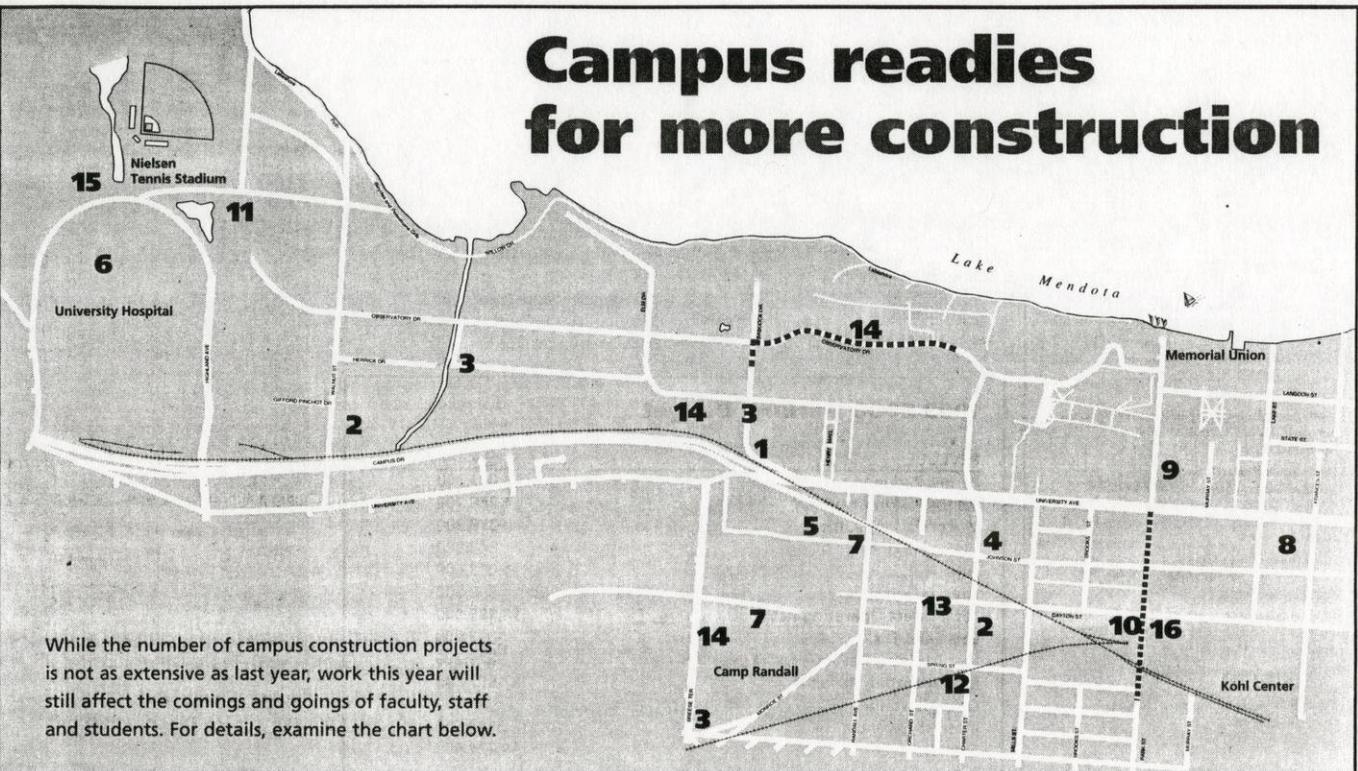
Companies that have employees enrolled in MEPP include Mercury Marine, Trane, Kohler, John Deere, GE Medical Systems, Hewlett-Packard and the National Guard.

More than half of the courses in the two-year degree are not covered anywhere else, including problem solving with computers, technical communication and virtual engineering offices. The program focuses on the types of skills engineers report are in demand in the field.

Instruction will have a real-time, interactive quality, and include collaborative projects with teams of students. Students provide their own computer equipment and can connect with the class on their own schedules.

For more information, contact Al-Ashkar, (608) 262-0133; karena@epd.enr.wisc.edu. She can also provide names of students and company representatives for interviews.

# Campus readies for more construction



While the number of campus construction projects is not as extensive as last year, work this year will still affect the comings and goings of faculty, staff and students. For details, examine the chart below.

## 1999 CONSTRUCTION PROJECTS

PROJECT	STATUS	IMPACT
<b>1 Babcock Drive/Campus Drive intersection</b>	Under way. Completion: August.	Babcock Drive will be closed from University Avenue to Linden Drive July 1-Aug. 1.
<b>2 Boiler/Chiller additions, Walnut and Charter physical plants</b>	Start: June. Completion: April 2000.	Charter Street sidewalk closed. Some parking disruption at Walnut Street plant.
<b>3 Campus Utility Projects</b>	Under way. Completion: July.	Babcock Drive will be closed May 17-July 1 for sanitary sewer lift station construction. Water meter pit construction in Lot 19 (Camp Randall) will disrupt parking from late spring to mid-summer.
<b>4 Chemistry Addition</b>	Under way. Completion: July 2000	Lane closure continues to narrow Charter Street.
<b>5 Chilled water extension, Henry Mall to Engineering Drive</b>	Start: June. Completion: July 2000.	Engineering Drive will be closed sporadically beginning May 15.
<b>6 Clinical Science Center 3 Module Addition</b>	Under way. Completion: May 2000.	Driveway reconfiguration will cause rerouting of buses. Dropoff circle will be closed.
<b>7 Engineering Ramp (Lot 17)</b>	Start: May. Completion: May 2000.	Loss of 350 spaces during construction. Ramp will have 800 spaces when completed. From May 1-July 1, Randall Avenue will be closed from Dayton Street north to the railroad tracks for sewer construction. Engineering Drive will have occasional closings. From July 1-Aug. 9, the intersection at Randall Avenue and Engineering Drive will be closed to add turn lanes and pedestrian islands.
<b>8 Fluno Center for Executive Education</b>	Under way. Completion: December.	Underground ramp will add 300 visitor spaces when completed.
<b>9 Humanities Exterior Stucco Repair</b>	Start: Spring. Completion: Fall.	Pedestrian access below work areas will be restricted starting in June.
<b>10 Park Street Underpass Renovation (City of Madison project)</b>	Under way. Completion: September.	Spring Street and Dayton Street west of Park Street are closed until May 17. Park Street will be closed May 17-Aug. 13 from University Avenue to Dayton Street, with traffic on West Johnson Street restricted to two lanes. Access to loading docks at Vilas and Grainger halls will be open during the project.
<b>11 Pharmacy Building</b>	Under way. Completion: September 2000.	From May 17 through the end of June, there will be lane closures on Highland Avenue.
<b>12 Primate Center Addition</b>	Under way. Completion: December.	Sidewalk closed from Capital Court to Spring Street. Part of Lot 51 remains out of service.
<b>13 Tower construction, Meteorology Building</b>	Start: Fall. Completion: Fall.	Lane closures on Dayton Street in early fall for one or two days.
<b>14 Utility Distribution Systems Upgrade</b>	Start: June. Completion: September.	Sanitary sewer construction will disrupt parking in lots along the railroad from the Stock Pavilion to Babcock Drive from mid-June to Oct. 1. Water main construction will cause phased road closures along Observatory Drive from Elizabeth Waters Hall to Babcock Drive and along Babcock Drive for one-half block south from Observatory Drive. One lane of Breese Terrace will be closed for three weeks between mid-June and mid-August.
<b>15 Waisman Center Addition and Lot 82 expansion</b>	Under way. Completion: September 2000.	Construction will occasionally disrupt parking.
<b>16 Southeast Recreational Facility Fields</b>	Start: April. Completion: September.	This project should have little effect on traffic.

The construction project most likely to affect campus commuters this spring and summer is not sponsored by the university.

Construction on the Park Street underpass, a City of Madison project, continues this spring and summer and should be completed by the end of September. Lane closures will be staggered to minimize traffic impact.

Other projects also will affect traffic.

■ The Lot 17 ramp on the engineering

campus. Road and utility work will begin in May, which will close Randall Avenue from Dayton Street north to the railroad tracks from May 1-July 1. The Randall Avenue-Engineering Drive intersection will also be closed from July 1-Aug. 9. When completed, the ramp will hold 800 vehicles.

■ Closer to the central part of campus, work will continue this summer on the Babcock Drive / Campus Drive intersection. The construction will close

Babcock Drive from University Avenue to Linden Drive during July.

- On the southeast part of campus, the renovation of the Southeast Recreational Facility fields should have little to no effect on traffic, says Bruce Braun, assistant vice chancellor for facilities planning and management. Soccer fields and sand volleyball courts will be installed.
- Utility work will have some impact on the campus as well. The Utility Distribution Systems Upgrade will close

portions of Babcock Drive, Observatory Drive and Breese Terrace at various times during the summer. Other campus utility projects will close Babcock Drive and Lot 19 near Camp Randall Stadium.

And more projects are on the drawing boards. Additions to SERF and the Clinical Sciences Center parking ramp are in the design stage. ■

Research by Erik Christianson

# BRIEFS

## HERE'S THE SCOOP...

The winning flavor in the statewide contest to create an ice cream honoring the sesquicentennial will go on sale this week. "Praise to Thee, Our Almond Mocha" will be available at the Babcock Dairy Store, 1605 Linden Drive, beginning Saturday, May 1. The mocha-flavored vanilla ice cream with almonds was suggested by Allen Ruplinger of Waukesha, Wis. His flavor bested nearly 800 others in the contest.

## WORK REPORT ON WEB

A summary report and recommendations from the Sesquicentennial campus celebration week program series, "The Future of Work: Your Job in the Next Decade" is available by visiting: <http://www.uw150.wisc.edu/future/fow/report.msql>. To get a printed copy, contact the Office of Quality Improvement, 199 Bascom Hall, 262-6843.

## GEOLIST CAMERON DIES

Funeral services were held Saturday, April 24, for Eugene N. Cameron, an authority on economic geology and a pioneer of optical methods for the study of minerals, including those returned to Earth from the moon by the Apollo astronauts.

Cameron died Wednesday, April 21, at a Madison hospital. He was 88. A member of the geology and geophysics faculty for 34 years, Cameron devoted much of his research at Wisconsin to problems of metallic ore deposits, and was an early authority on the use of microscopy for the study of minerals.

In 1968, at the apex of the Apollo program, Cameron was asked to study lunar rocks and dust, identifying a new mineral. He retired in 1981. In a 1994 interview, Cameron reflected on his work with the Apollo program: "What it did, I think, is it brought home to all of us, in a way that we didn't appreciate before, how clearly unique the Earth is," he said. "You became aware you were working on something that ... is one of the greatest achievements of mankind. And I was very happy and honored to be a part of it."

Cameron is survived by his wife, the former Adrienne Macksoud, a daughter and two sons.



## Wisconsin Week

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## MILESTONES

### Littlefield to retire as School of Nursing dean



Vivian Littlefield

A national search soon will begin for a successor to Vivian Littlefield, one of the university's longest-serving administrators, who will retire Dec. 31 after 16 years as dean of the School of Nursing.

"Dean Littlefield has been a dedicated leader of the nursing school and a strong national advocate for the nursing profession," says Chancellor David Ward. "We are grateful for her many years of work at UW-Madison."

Says Littlefield: "Serving as dean of this school, under a time of enormous change in the field of nursing, has been a very satisfying and challenging role. But I think it is time for new leadership and time for me to focus on other things in my life."

Littlefield's husband, Gregory Reuter, has faced a seven-year battle with early onset Alzheimer's disease, and continuing responsibilities for his care influenced her decision to retire, she says.

As dean since 1984, Littlefield led the school through a time of progress in academics and research. She says the biggest change for the school was attaining a doctoral program. That degree began in 1984 as a joint program between nursing and psychology, but since 1991 has been exclusively a nursing doctorate.

The school was one of the first to offer off-campus study through the use of technology, and today has an established World Wide Web-based distance education program with other UW System schools. Littlefield says the program helps keep professionals working in under-served areas such as northern Wisconsin and inner-city Milwaukee.

During the same time, the school's research expanded, reflecting a national need to bolster nursing with more scientific study. The school has steadily increased its federal funding and has private support from groups such as the Robert Wood Johnson Foundation and the American Heart Association. The school increased its doctoral students from five to 30 and now has a growing number of postdoctoral fellows doing research.

### Three finalists named for engineering dean post

A search committee has recommended to Chancellor David Ward three finalists for dean of the College of Engineering.

The finalists are: Eduardo D. Glandt, interim dean of the University of Pennsylvania School of Engineering and Applied Science; Julio M. Ottino, chair of the department of chemical engineering at Northwestern University; and Paul S. Peery, president of SEMI/SEMA TECH, an Austin, Texas-based technical consortium for the U.S. semiconductor industry.

"The finalists emerged from a very impressive, international pool of candidates, and we had many quality people to choose from," says W. Harmon Ray, chair of the 18-member search committee assigned to find a successor to Dean John Bollinger. On Thursday, July 1, Bollinger will step down after 18 years as dean of the college.

A pool of more than 150 candidates either applied or were nominated for the position. The new dean will oversee a college with roughly 3,200 undergraduates, 1,000 graduate students and annual instructional and research expenditures of \$100 million.

Ward will invite the candidates back to campus for interviews with top-level administrators and make a final decision in the near future.

Glandt has been interim dean of the University of Pennsylvania engineering school since 1998. He is a professor and past chair of the school's chemical engineering department. Prior to joining Penn in 1975, Glandt was a researcher with the National Institute for

Industrial Technology in Buenos Aires, Argentina, and an adjunct professor with the University of Buenos Aires.

Ottino has been chair of Northwestern's chemical engineering department since 1992 and is also the department's Walter P. Murphy Professor of Chemical Engineering. Prior to joining Northwestern, Ottino held faculty and research positions with the University of Massachusetts-Amherst, Stanford University and the University of Minnesota.

Peery has been president of SEMI/SEMA TECH since 1995. The not-for-profit consortium includes more than 160 U.S. companies that are part of the semiconductor industry. Prior to that position, Peery was director of microelectronics and photonics at Sandia National Laboratories in Albuquerque, N.M.

## Academic staff secretary hired

A publishing manager in the Division of Information Technology has been hired as the new secretary of the academic staff.

Colleen McCabe will begin her new position Thursday, July 1. Her salary has not yet been determined. McCabe will replace Steve Myrah, who will stay on staff part time to archive academic staff governance documents.

McCabe has worked for the Division of Information Technology since 1984, first as a project leader in publications and then as a project leader in training. She has been a publishing manager since 1993. Before joining DoIT, she worked for cooperative extension and engineering extension.

McCabe has served on academic staff committees since 1988 and was a member of the Academic Staff Executive Committee during the 1992-93 academic year.

In her new role, McCabe will provide staff support for ASEC, the Academic Staff Assembly and its standing committees. She will also oversee academic staff elections.

Chemical, Charles G. Hill Jr.; Electrical and Computer, John Booske; Materials Science and Engineering, Fred Bradley; Nuclear, Gil Emmert; Civil and Environmental, Jeffrey Russell; Industrial, Michael Smith; Engineering Mechanics, Michael Plesha; Engineering Professional Development, Laura Grossenbacher; Mechanical, Jaal Ghandhi.

The teaching assistant winners, listed by discipline, are: Biomedical, Glenn Walker; Chemical, Andy Horvath; Electrical and Computer, Mark McNeely; Materials Science and Engineering, Oscar Marcelo Suarez; Civil and Environmental, Marty Christman; Industrial, Karwan Soputradjo; Engineering Mechanics, Adam Steltzner; Engineering Professional Development, Rosa Marina Sama Bilbao; Mechanical, Justin Borgstadt.

## COMMUNITY

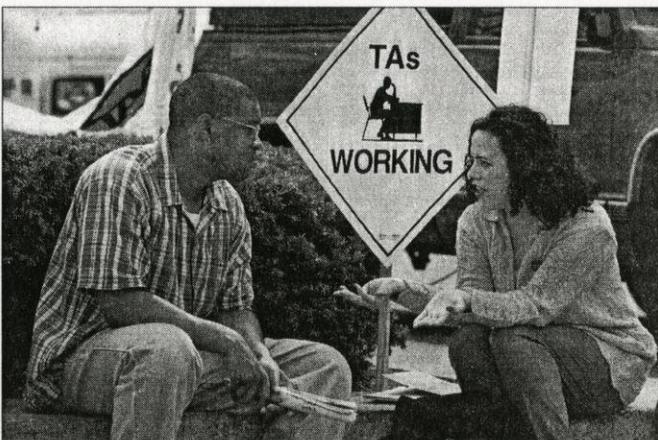
### Law school partners with Russian university

The UW Law School is partnering with a Russian university to strengthen international legal education.

The three-year partnership with Far Eastern State University includes the exchange of faculty and students, research and library support for FESU's Institute of Law, and possible opportunities for distance education.

FESU is located in Vladivostok, situated near China and North Korea on the Sea of Japan. The city was a closed military zone until 1991, when Russian President Boris Yeltsin opened it to international commerce and travel.

"We will improve the quality of education delivered here and at Far Eastern State," says Charles R. Irish, Volkman-Bascom professor of law and director of the UW Law School's East Asian Legal Studies Center. "With the globalization of the economy and social activity, education was bound to follow."



History teaching assistant Ileana Rodriguez-Silva, right, holds office hours with senior Dahshi Marshall during a "work-in" held outside of Bascom Hall Thursday, April 15. Teaching assistants consulted with undergraduates, graded papers, and chatted with campus passersby at the event staged by members of the Teaching Assistants' Association union. The TAA has entered contract negotiations with the state. Program assistant pay and domestic partner benefits are among the issues.

## DoIT director search begins

Provost John Wiley has appointed the search and screen committee for the job of director of the Division of Information Technology. The job, which is posted at [www.wisc.edu/provost/](http://www.wisc.edu/provost/), will be available after Thursday, July 1. Applications and nominations must be received by Friday, May 21. Send to Professor Gregory Moses, Chair, DoIT Search Committee, 133 Bascom Hall.

## Polygon makes teaching awards

Polygon Engineering Council, the engineering college council of student organizations, announced their annual teaching excellence award winners. Undergraduates vote to determine the awards. The faculty winners, listed by discipline, are: Biomedical, John Webster;

The partnership began last fall with a three-year, \$149,210 grant from the United States Information Agency. The Law School is providing \$50,000 in support, mostly in staff time and travel expenses, and FESU is providing \$25,000 in staff and travel support.

The educational exchange has already begun between the two legal institutions. Natalya G. Prisekina, assistant director for international affairs at FESU's law institute is developing the Russian component of a joint course in international commercial transactions. The course's American component will be taught at FESU by UW Law School faculty.

Prisekina, a senior instructor at FESU and practicing attorney, also has lectured in some classes and conducted research on curriculum and the law school library. She returned to Vladivostok Tuesday, April 27. "My time here

## Community

## Demand increasing for pharmacy graduates

America's burgeoning elderly population, which is using sophisticated drug therapies in record quantities, has helped make highly educated pharmacists one of the hottest commodities in health care, School of Pharmacy researchers say.

Pharmacy schools are responding by re-engineering themselves, and their graduates, but demand is outpacing supply and there's no quick cure in sight, according to David Mott, a UW-Madison assistant professor of pharmacy studying workforce and policy issues.

"There is a concern that there are not enough pharmacists to fill traditional roles such as staffing pharmacies and dispensing patient prescriptions," he says. The rising demand may, however, be just the right medicine for people preparing to launch or change careers, Mott says. Pharmacy students are spending longer than ever — at least six years — in school, but upon graduation they are finding a healthy job outlook, above-average salaries, and a larger role in drug therapy decision-making and patient counseling, he says.

Several concurrent developments have boosted the demand for pharmacists:

- A growing population of older Americans who require more drug therapy.
- A sharp rise in the number and complexity of therapeutic drugs.
- Expansion of services requiring pharmacists' knowledge and skills.
- More health professionals approved to prescribe drugs including some advanced practice nurses, physician's assistants and optometrists.

To prepare pharmacists for expanded roles as "drug therapy managers," most of the nation's 79 pharmacy schools — including Wisconsin — now offer an advanced degree or "PharmD" degree requiring one or two additional years of education, Mott says.

The extra training better prepares graduates for direct patient contact, consultation with other health care providers, and work within the managed care setting. ■

## UW gets two-year probation for self-reported NCAA violations

The National Collegiate Athletic Association (NCAA) has placed UW-Madison on a two-year probation because of self-reported inadvertent NCAA violations.

That action was announced last week by the NCAA for infractions involving the administration and control of athletically related income and supplemental pay from sources outside the university. In addition to being placed on probation, UW-Madison must develop a comprehensive athletics compliance education program.

"We are gratified," said Chancellor David Ward, "that NCAA found that virtually all of the expenditures we reported would be considered proper" had the requisite prior written approval been obtained, that no competitive advantage was gained and that none of the funds accrued to the benefit of enrolled or prospective student-athletes.

"We will readily comply with their penalties; indeed, we already have developed procedures to ensure that such violations will not occur again."

During a teleconference announcing the penalties, the chair of the NCAA Division I Infractions Committee, David Swank, said he considered the penalties "quite light." That was in part because UW-Madison self-reported the violations, he said, and because "most of the expenditures would have been completely legal had permission been requested" ■

## Graduate programs ranked by national magazine

The university received several high rankings in the 1999 rating of graduate programs released Friday, March 19, by U.S. News & World Report.

In library science UW-Madison ranked 8th, placing high in several specialties: 4th in services for children and youth, 5th in school library media and 8th in archives and preservation.

The School of Education ranked 9th, placing 2nd in curriculum/instruction, 2nd in administration/supervision, 2nd in educational psychology, 2nd in secondary teacher, 3rd in social/philosophical foundations, 4th in counseling/personnel services, 4th in elementary teacher, 7th in special education, 7th in vocational/technical and 10th in higher education administration.

The College of Engineering placed 12th, with these specialty ratings: 4th in nuclear, 5th in chemical and 8th in industrial/manufacturing.

UW-Madison's Medical School finished 18th among schools teaching primary care and ranked 10th in the specialty of family medicine.

The Law School placed 29th, and the Business School was 36th.

In doctoral programs in the sciences, UW-Madison ranked:

- 9th in computer science with specialty ratings of 3rd in databases, 6th in hardware and 7th in software.
- 10th in chemistry, including 5th in analytical, 7th in physical, 9th in inorganic, 9th in bio-organic/biophysical and 10th in organic.
- 12th in biological sciences, including 3rd in microbiology, 10th in biochemistry/molecular and 10th in genetics.
- 14th in mathematics, with specialty ratings of 2nd in logic, 3rd in mathematical statistics and 8th in algebra.
- 17th in geology, including 3rd in hydrogeology and 6th in sedimentology/stratigraphy.
- 18th in physics.

"These national rankings can be helpful in some ways," says John Torphy, vice chancellor for administration at UW-Madison, "but students should pick the programs that fit their needs the best, not necessarily the ones that rank highest." ■

## Program seeks more Milwaukee students of color

The university is stepping up recruitment of students of color in the state's largest city — with assistance from their school district and potential future employers.

A new university initiative — the Pre-College Enrollment Opportunity Program for Learning Excellence, or PEOPLE — will enroll 100 Milwaukee ninth graders beginning this summer. Through classes held in Milwaukee and time spent on the UW-Madison campus, the program will acquaint the students with and prepare them for admission to Wisconsin's flagship university.

PEOPLE is recruiting African-American, American Indian, Asian American, Hispanic/Latino and low-income students. Those who complete the program and enroll at UW-Madison will receive full scholarships, if successful fund-raising objectives are met. UW-Madison is partnering with Milwaukee public schools and the Milwaukee business community to create the program.

"The PEOPLE program is a comprehensive and creative partnership to increase the number of students prepared to go to college and be successful," says Chancellor David Ward. "We must work hard together to help provide opportunity to young people in Milwaukee, and we are committed for the long haul."

Program costs are \$200,000 for the first year — half of which Milwaukee businesses are being asked to contribute. The university and the state will pick up the other half.

By 2002, PEOPLE will provide pre-college training for 400 Milwaukee high school students of color and scholarships for up to 450 undergraduates each year. The pre-college program alone will cost \$2.2 million.

Students who complete the program and go on to graduate from UW-Madison will be prepared to fill management and technical positions with Milwaukee businesses, enter graduate school or assume leadership positions with Milwaukee social, economic and community organizations.

Milwaukee was the logical location to start the program, Ward says, because of its sizable minority population and UW-Madison's modest success in enrolling its students of color. Eventually, Ward hopes to replicate the program in other Wisconsin cities.

The PEOPLE program follows a long line of UW-Madison diversity efforts. The Madison Plan in 1988 included programs aimed at improving student access and graduation. The Madison Commitment in 1993 updated the Madison Plan by emphasizing broader application and accountability in campus diversity programs. In 1995, the university adopted nine priorities for the future, one of which was "maximizing human resources." This priority is designed to strengthen the campus through greater inclusion of viewpoints, backgrounds and gender and ethnic differences.

On Thursday, April 15, the university will finalize its next 10-year diversity blueprint as part of Plan 2008, the UW System Board of Regents' initiative to increase the number of students, faculty and staff of color on all UW System campuses. ■

## U.S. Supreme Court plans to decide student fee case

The future of UW-Madison's student fee system now rests with the nation's top court.

The U.S. Supreme Court agreed Monday, March 29, to decide whether the mandatory fees violate students' free-speech rights. Their decision will affect student fee systems at all public universities.

"It's a close legal question that the Supreme Court needs to decide," says Assistant Attorney General Susan Ullman, who will argue the case for the UW System.

Three UW law students sued the university in 1996, objecting to the use of student fees to finance campus groups they disagree with on ideological, political or religious grounds. After a federal judge ruled in their favor and the 7th U.S. Circuit Court of Appeals upheld the decision, the Board of Regents in October asked the Supreme Court to hear the case.

The university and its student government leaders say that student groups supported by the fees are a necessary part of the education experience and are constitutional because they support free speech for students.

The case will be watched closely on other campuses where students have lodged similar objections to using fees to fund certain groups. At UW-Madison, student fees are collected along with tuition for a wide variety of activities. Health services and the Wisconsin Union, for example, are supported through student fees, as are a range of student organizations.

The Supreme Court will take up the case in October when it begins its new term. ■

## NEWSMAKERS

Eugene

## UW LIBRARIES HIGHLIGHTED

The Library Technology Group of the General Library System is featured in the current issue of Library HI Tech with a study about the UW-Madison Electronic Library.

**Charles Dean** edited the study titled, "Shaping the Electronic Library — The UW-Madison Approach." Articles by members of the LTG and GLS staff detail developments in digital libraries from UW-Madison's experience. Other contributors include **Ken Frazier, Nolan Pope, Peter Gorman, Sue Dentinger, Jeanne Boston, Hugh Phillips, Steven Daggett, Mitch Lundquist, Mark McLung, Curran Riley, Craig Allan** and **David Waugh**.

## PESTICIDE HARM REPORTED

Children exposed to pesticides in the womb or at an early age may suffer permanent brain defects that could change their lives by altering their behavior and their ability to do everything from drawing a picture to catching a ball, according to new research.

Widely used pest-killing chemicals, in amounts routinely found in the environment in farm areas, seem to be capable of skewing thyroid hormones, which control how the brain of a fetus or young child develops, according to a published study. Scientists say the study and other recent research support an emerging theory that pesticides may exact a toll on the intelligence, motor skills and personalities of infants, toddlers and preschoolers.

"Data suggest that we may be raising a generation of children with learning disabilities and hyper-aggression," **Wayne Porter**, a UW-Madison professor of zoology and environmental toxicology, told the Los Angeles Times (March 15).

Porter's study shows that a common mix of chemicals altered the thyroid hormones of young mice. It also suppressed their immune systems.

## FIGHTING BUGS, NATURALLY

A humbling chapter in crop science is the one now being written as pesticide companies try to mimic nature. The bug-fighting business is coming full circle to the strategies of the early 1900s when entomologists searched for natural predators to help control crop pests. **David Bowen**, a scientist at UW-Madison, tells the Star Tribune of Minneapolis (March 17).

For example, genes from *Photorhabdus luminescens*, a bacterium Bowen and his colleagues are studying, could be used to guard crops against borers and beetles. The Wisconsin Alumni Research Foundation has obtained patents on discoveries so far, and the scientists are working with companies to translate their findings into products for field and home.

## ROTC NEGOTIATION DETAILED

University Wire (March 24) highlighted recent negotiations between UW-Madison administrators and the Associated Students of Madison's Equal Rights Initiative. The groups agreed to fight against an alleged ROTC anti-gay discrimination policy.

The student group suggested ways to ensure that gay students receive scholarship money and leadership training similar to what the ROTC provides. Provost **John Wiley**, who called the meeting, says he was impressed with how much work went into the report. "[The meeting] was really to congratulate them on a good job and say that we agree with them and want to work with them," Wiley explains.

Eng Gen

## NEWS BRIEFS FROM THE UNIVERSITY OF WISCONSIN-MADISON

- o Health of aging women explored at April 22-23 colloquium
- o Expo '99: A bridge to the new millennium
- o Journalism school to honor distinguished alumni
- o Parking, traffic flow change during forensics meet
- o 'Out and About' events scheduled on campus

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**HEALTH OF AGING WOMEN EXPLORED AT APRIL 22-23 COLLOQUIUM****CONTACT:** Carol Ryff, (608) 262-1818

MADISON - Health issues for aging women will be explored in a colloquium April 22-23 sponsored by the University of Wisconsin-Madison Institute on Aging.

The event will begin with a dinner lecture at 6 p.m. Thursday, April 22, by Linda George, a professor of sociology and psychiatry at Duke University. George is associate director of Duke's Center for the Study of Aging and Human Development, and is best known for her work in social factors and chronic disease.

George's talk and all other colloquium events will be held at the Pyle Center, 702 Langdon Street.

At noon Friday, April 23, Gloria Sarto, a UW-Madison emeritus professor of obstetrics and gynecology, will present the institute's annual emeritus lecture on "Women's Health: Past, Present and Future." Sarto performed influential genetic research during her career and was influential in the training and career development of women physicians.

During the April 23 morning colloquium, with presentations beginning at 9 a.m., UW-Madison scientists will explore a variety of topics related to the health of aging women, including sensory impairments, bone loss and menopause.

For more information on the colloquium, contact the Institute on Aging at (608) 262-1818. Advance registration is required for the April 22 dinner and April 23 box lunch, but not for the emeritus lecture or other events.

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**EXPO '99: A BRIDGE TO THE NEW MILLENNIUM**

MADISON -- From rampaging robots to high-tech racing machines, EXPO '99 on the College of Engineering campus April 16-18 will showcase the creativity

and innovation of students and industry.

Once again, EXPO will highlight engineering advances from companies like GM, Ford and others. Friday is K-12 students' day with many hands-on activities for the young.

EXPO will be held Friday, April 16 from 9 a.m. to 6 p.m., Saturday, April 17 from 9 a.m. to 5 p.m. and Sunday, April 18 from 10 a.m. to 5 p.m. The cost is \$4.00 for adults and \$3.00 for students and seniors. Children ages four and under attend free.

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## JOURNALISM SCHOOL TO HONOR DISTINGUISHED ALUMNI

CONTACT: Sharon Dunwoody, (608) 263-4080

MADISON -- Journalists at the forefront of print and broadcast media, public information and mass communications education will be honored Friday, April 23 by the University of Wisconsin-Madison School of Journalism and Mass Communication

All are either alumni of the school or attended it. Receiving the school's award for distinguished service are Owen Ullmann (MA '73), senior news editor for the Washington bureau of Business Week magazine; David Maraniss, a UW student in the late 1960s, now a Pulitzer Prize-winner and reporter for the Washington Post; Jim Mott (BA '56), former sports information director for the UW-Madison Athletic Department; and J. Paul Van Nevel (BS '61), National Cancer Institute associate director for cancer communications.

In addition, Cynthia Goldberg (BA '89) will receive the Ralph O. Nafziger Award for outstanding achievement within 10 years of graduation. She currently is producer for ABC-TV's "Good Morning America."

Terry Hynes (MA '71, Ph.D. '75), dean of the College of Journalism and Communications at the University of Florida, will be awarded the Harold L. Nelson Award for outstanding contributions to journalism education.

According to Sharon Dunwoody, Evjue-Bascom Professor and director of the school, the annual awards are a way to recognize excellence in professions that are becoming increasingly important to society.

"Media messages form a surrogate reality for what we can't experience personally," she says. "While we can -- and often do -- complain when that surrogate reality seems flawed, it's probably a lot more useful to praise good work than to denigrate bad."

The 1999 awards banquet will begin with a social hour at 6 p.m. in Tripp Commons, Memorial Union. Dinner will follow at 7 p.m. Tickets, \$25, may be reserved through the school, (608) 263-4080.

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#### PARKING, TRAFFIC FLOW CHANGE DURING FORENSICS MEET

**MADISON** -- The annual Wisconsin High School Forensic Association State Speech Festival is being held at the University of Wisconsin-Madison this weekend.

About 6,000 students from nearly 400 high schools, along with 600 judges, are expected to attend. Competition will be taking place in some 200 rooms in 15 buildings on or near Bascom Hill.

Because of the large numbers of visitors and school buses in that area, Observatory Drive traffic will be limited to one way westbound from Park Street to Charter Street between mid-afternoon and 10 p.m. on Friday, April 16, and all day on Saturday, April 17.

During the affected time period, permit holders or others using Bascom Hill parking lots 9, 10 and 11 will only be able to access those lots by entering Observatory Drive from Park Street. When leaving the lots, they will have to turn left toward Charter Street.

The state forensic meet has been held on the Madison campus for more than 100 years. When it began, fewer than 10 students took part in the competition, according to the association.

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#### 'OUT AND ABOUT' EVENTS SCHEDULED ON CAMPUS

CONTACT: Dave O'Brien, (608) 265-3344

**MADISON** -- Several student groups at the University of Wisconsin-Madison are busily preparing for more than a week of events celebrating the lesbian, gay, bisexual and transsexual community.

"Out & About," scheduled April 15-23, features lectures by Shane Windmeyer, co-editor of "Out on Fraternity Row," and Riki Anne Wilchins, co-founder of the Transexual Menace and executive director of GenderPAC, two dances and other events.

Sponsors of the "Out & About" series include the Ten Percent Society, Associated Students of Madison, Dean of Students Office, Sex Out Loud, University Health Services, and the Panhellenic Council.

"Our goal has been to provide a balance between fun and education," says Dave O'Brien, LGBT campus center director.

Here are some highlights:

- \* Saturday, April 17, 9-12:30 p.m. "Dyke," a dance event for all genders. 109 Union South. Proceeds support the Lesbian Rights Summit. \$3 in advance, \$4 at the door.
- \* Sunday, April 18, 7:30 p.m., 3650 Humanities Building. Lecture by Shane Windmeyer, co-editor of "Out on Fraternity Row: Personal Accounts of Being Gay in a College Fraternity." Windmeyer will talk about his experience coming out to his fraternity and how homophobia hurts everyone in the college Greek system.
- \* Wednesday, April 21, 8 p.m., Straight Allies Social, LGBT Campus Center, 2nd Floor, Memorial Union. Discussion of what straight students can do to make UW-Madison a safer environment for LGBT students.
- \* Thursday, April 22, 7 p.m. Lecture by Riki Anne Wilchins, cofounder of the Transexual Menace and executive director of GenderPAC, an organization devoted to gender, affectional, and racial equality. She is author of "Read My Lips: Sexual Subversion and the End of Gender."
- \* Friday, April 23, 8-12:45 a.m., Ten Percent Society Out & About Dance. Memorial Union, Great Hall. \$3.

For information, visit: <http://lgbcc.studentorg.wisc.edu/frames.html>  
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FOR IMMEDIATE RELEASE 4/23/99

CONTACT: W. Harmon Ray, (608) 263-4732; ray@engr.wisc.edu

### THREE FINALISTS NAMED FOR UW ENGINEERING DEAN POST

MADISON - A search committee recommended to Chancellor David Ward on Friday (April 23) three finalists for dean of the University of Wisconsin-Madison College of Engineering.

Finalists are:

\* Eduardo D. Glandt, interim dean of the University of Pennsylvania School of Engineering and Applied Science;

\* Julio M. Ottino, chair of the department of chemical engineering at Northwestern University;

\* Paul S. Peercy, president of SEMI/SEMATECH, an Austin, Tex.-based technical consortium for the U.S. semiconductor industry.

"The finalists emerged from a very impressive, international pool of candidates, and we had many quality people to choose from," said W. Harmon Ray, chair of the 18-member search committee assigned to find a successor to Dean John Bollinger. On July 1, Bollinger will step down after 18 years as dean of the college.

A pool of more than 150 candidates either applied or were nominated for the position. The new dean will oversee a college with roughly 3,200 undergraduates, 1,000 graduate students and annual instructional and research expenditures of \$100 million.

Ray said the search committee focused on finding a proven leader capable of promoting the college's diverse goals of teaching, research, technology transfer and outreach. The top candidates also needed to show an ability to enhance the college's national reputation and a knowledge of emerging technologies shaping the field.

Ward will invite the candidates back to campus for interviews with top-level administrators and make a final decision in the near future.

Glandt has been interim dean of the University of Pennsylvania engineering school since 1998. He is a professor and past chair of the school's chemical engineering department. Prior to joining Penn in 1975, Glandt was a researcher with the National Institute for Industrial Technology in Buenos Aires, Argentina and an adjunct professor with the University of Buenos Aires.

He received his masters and Ph.D. in chemical engineering from the University of Pennsylvania, in 1975 and 1977 respectively. Elected to the National Academy of Engineering in 1996, Gland's research interests include classical and statistical thermodynamics, and theories of liquids and liquid mixtures.

Ottino has been chair of Northwestern's chemical engineering department since 1992, and is also the department's Walter P. Murphy Professor of Chemical Engineering. Prior to joining Northwestern, Ottino held faculty and research positions with the University of Massachusetts-Amherst, Stanford University and the University of Minnesota.

Ottino received his Ph.D. in chemical engineering in 1979 from the University of Minnesota. He is a 1997 member of the National Academy of Engineering and 1996 fellow of the American Association for the Advancement of Science (AAAS). His research areas include fluid mechanics of mixing, granular materials and flow and materials processing.

Peercy has been president of SEMI/SEMATECH since 1995. The not-for-profit consortium includes more than 160 U.S. companies that are part of the semiconductor industry. Prior to that position, Peercy was director of microelectronics and photonics at Sandia National Laboratories in Albuquerque, N.M.

Peercy received his masters in physics in 1963 and Ph.D. in physics in 1966 from UW-Madison. He is a fellow of AAAS and the American Physical Society. His research spans several areas of solid state and materials physics and engineering, including ferroelectricity, microelectronics and photonics. He is author or co-author of more than 175 papers and holds two patents.

# # #

-- Brian Mattmiller, (608) 262-9772

*Eug. gen*  
FOR IMMEDIATE RELEASE 4/29/99  
CONTACT: John Torphy, (608) 262-3509

## STOCK MARKET ENLARGES VILAS TRUST FUNDS FOR 1999-2000

MADISON-Due to the healthy economy and a one-time capital gains increase, the Vilas Trust funds available for 1999-2000 will be about three times larger than normal, University of Wisconsin-Madison officials say.

Annual income from the trust - established in the will of UW alumnus William F. Vilas - usually totals \$7 million each year. But the one-time infusion in the trust from its investment gains has made possible this year's request of \$20,075,232.

Under the rules of the trust, if the money were not spent this year, it would be returned to the endowment and could not be spent in the future.

"This extra income allows us to expand some of the ongoing fellowship, scholarship and research support programs specified in the trust," says John Torphy, UW-Madison vice chancellor for administration. "It also provides us with some one-time private-sector support, which we will use to match funding that we hope to receive in the state budget."

"I want to make clear that none of this one-time funding replaces state monies, and it's only available for one year," Torphy adds.

Vilas, a former U.S. senator and presidential cabinet member, died in 1908 and bequeathed his estate to the university. Most of the income is directed to UW-Madison, although a small amount goes to UW-Milwaukee.

As dictated in the trust, the UW System Board of Regents must submit a formal request for the income to the trustees of the William F. Vilas Estate each year. That request is scheduled to be acted on at the board's May 6-7 meeting at UW-Parkside.

Besides supporting and expanding existing scholarships and professorships, income from the Vilas Trust this year will be used to further enhance the university's public-private partnerships, Torphy says.

As permitted by the trust, the university plans to allocate \$11.45 million to help pay for the \$52 million Engineering Centers project. The funds will go towards construction of the project's research center, which will include needed lab and classroom space.

Torphy says the additional private money will ensure the availability of gift funds to match \$22 million in state support for the project through

the Wisconsin Initiative for State Technology and Applied Research (WISTAR) program.

Another \$1 million in Vilas Trust income will be used to provide promised private-sector support consistent with Chancellor David Ward's Madison Initiative that is part of the state budget. The four-year public-private partnership will recruit and retain key faculty; increase financial aid; strengthen instructional and research programs; maintain and renovate buildings; and support general academic needs, such as advising and libraries.

Of that \$1 million, \$750,000 will be used to create 10 Vilas young investigator awards for newly hired assistant professors. Renewable for five years, these awards initially will target new faculty in the humanities and social sciences - especially those in departments or programs with heavy teaching loads. The \$75,000 award will cover salaries up to \$50,000, fringe benefits and an annual \$10,000 research allowance.

Another \$247,175 will fund the creation of 12 additional Vilas Associates. These two-year professorships and research awards will target untenured faculty and those conducting interdisciplinary research. Currently, there are 74 Vilas Associates receiving research support in the arts and humanities; biological sciences; physical sciences; and social sciences.

Other one-time expenditures include \$2.55 million to create 170 research investigator awards for graduate students and \$1.275 million to create 4,250 scholarships for undergraduates eligible for need-based financial aid related to the Madison Initiative.

# # #

-Erik Christianson, (608) 262-0930; echristi@facstaff.wisc.edu.

# BRIEFS

## GETTING AROUND

For the next couple of months, motorists will not be able to reach the west side of the campus by turning off University Avenue onto Babcock Drive. The segment of Babcock between University and Linden Drive was closed to traffic Monday, March 29, so that crews can complete utility work in the area. The street will be closed to vehicles until mid-June, but bicyclists and pedestrians will be allowed through the area. The only entrance to Lot 40 will be the one located between the Stock Pavilion and Babcock Hall.

## AUTISM STUDY SEEKS HELP

A new study at the Waisman Center focusing on autism and family life is recruiting Wisconsin participants.

Marsha Seltzer, a UW-Madison Waisman Center researcher and social work professor, is director of the study. According to Seltzer, "the medical and genetic aspects of autism have been well-studied, but very little is known about family experiences and problems."

"A critical time is when autistic children approach adulthood," she adds. "Families will begin to face questions about their son or daughter's long-term future and independence."

This study will include 200 Wisconsin families who have a son or daughter with autism. To participate, families must be caring for a son or daughter 14 years of age or older. All information shared is confidential.

Results of the study are intended to better inform policy-makers, practitioners, families and the general public of the needs of these families, and to advocate for better services.

For more information, contact Project Manager Renee Makuch at 262-4717, or e-mail at [makuch@waisman.wisc.edu](mailto:makuch@waisman.wisc.edu).

## EASTER BREAKFAST PLANNED

Memorial Union's Lakefront Cafe once again will host an annual Easter Sunday Breakfast. Breakfast items will be available from 8 a.m.-1:30 p.m. The union, 800 Langdon St., opens Sunday, April 14, at 8 a.m. Information: Mike Hirsch, 262-7429.

## Wisconsin Week

Vol. XIV, No. 6, March 31, 1999  
Wisconsin Week is the official newspaper of record for the University of Wisconsin-Madison, carries legally required notices for faculty and staff.

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## On campus

### Conference focuses on break-up of multi-ethnic federations

About 100 prominent Central and East European scholars and writers plan to gather on campus for a groundbreaking workshop examining the disintegration of multi-ethnic federations associated with the break-up of the former communist states.

The conference Friday, April 16, sponsored by the International Institute, its member programs, and the Department of Slavic Languages, is entitled "Brothers No More."

Tomislav Longinovic, associate chair of Slavic Languages, says political scientists and historians usually dominate discussion of this topic.

"This is a unique opportunity to hear the point of view of those who participated in the social and cultural movements as practitioners" who experienced events firsthand, he says.

The conference comes at an important time. With the outbreak of war over the future of Kosovo and renewed debate over the question of America's role in the region, there is, more than ever, a need for background and perspective.

The workshop will address cultural issues related to the identities of Bosnians, Serbs, Jews and Russians in the context of new nationalism. The event brings together a panel of exceptionally distinguished writers, journalists and translators. Among them:

■ David Albahari was president of the Jewish community of Yugoslavia when civil war broke out in that country several years ago. He is the author of more than a dozen books, including "Words are Something Else." Albahari will speak about the position of Jews in new state entities that have emerged since the break-up of the former Yugoslavia.

■ Aleksandar Hemon, a fiction writer and journalist, is the author of a collection of short stories and numerous articles in the Sarajevo (Bosnia-Herzegovina) press. Hemon, who currently lives in Chicago, will speak about the complexities of Bosnian identity.

■ Dragan Kujundzic, a professor of Russian at Memphis University in Tennessee, is the author of numerous theoretical studies on Russian literature and identity.

■ Zoran Multinovic, visiting professor of comparative literature at Wesleyan University in Connecticut, is one of the most promising young scholars from East Central Europe. He was fired from the University of Belgrade, along with five other colleagues, when he refused to sign a loyalty oath.

The conference is sponsored by the International Institute; the Center for Russian, East European and Central Asian Studies (CRECA); the Global Studies Program; two research circles of the International Institute; the Slavic Languages department; and the Wisconsin Union Directorate.

The free event, to be held in Memorial Union, is open to the public. Information: Tomislav Longinovic, associate professor, Slavic Languages, 262-4311. ■

### UW leads national clinical trial of cancer drug

The Comprehensive Cancer Center has been chosen as one of two sites in the nation to conduct human tests of endostatin, a promising potential cancer treatment that seems to work in part by disrupting the growth of blood vessels that nourish tumor cells.

"We are honored and very excited to be taking part in these trials," says center director John Niederhuber. "This is an important opportunity to answer some key questions about a very interesting compound."

Endostatin's potential value as a cancer treatment received worldwide attention after a May 1998 New York Times article described early results in mice at Harvard Medical School. In May 1998, the National Cancer Institute called animal studies on the compound "encouraging" and later announced it would accept applications from research organizations to conduct tests in humans.

In animal studies, endostatin inhibited the growth of already existing tumors and caused some to shrink to microscopic lesions. When researchers examined those tiny lesions, they found the endostatin had blocked the growth of blood vessels that nourished the tumors.

The UW-Madison trials will be "Phase 1" tests in which researchers will try to discover the maximum dose patients can tolerate without undue toxicity. Joan Schiller, UW Medical School professor of medicine, and James Thomas, assistant professor of medicine, will co-chair the study. The study will need to go through several review processes. Information: 262-5223. ■



Photo by Jeff Miller

UW-Madison Chancellor David Ward, right, was among the panelists who picked "Praise to Thee, Our Almond Mocha" as the winner Monday, March 29, in a taste test of 10 flavors vying for the ice cream that will help mark the university's 150th anniversary. The winning flavor was proposed by Allen Ruplinger of Waukesha. He is a 1993 alumnus who works as a manufacturing engineer for Harley Davidson in Milwaukee. Ruplinger's entry was one of nearly 800 in a statewide contest to create a new sesquicentennial flavor. His entry will now be produced by the Babcock Dairy Plant on campus for serving at sesquicentennial events and through Babcock outlets. The name is a play on "Varsity," a traditional UW-Madison song that includes the words, "Praise to thee, our Alma Mater." The ice cream is a mocha-flavored vanilla with almonds. Runner-up honors went to "Sesquiberry," a strawberry ripple suggested by Frank Cook a UW-Madison archivist.

### Expert to speak on euro

Wolfgang Munchau, international journalist and expert on the European Economic and Monetary Union, will discuss the European economy and its new currency, the euro, from 8:30 a.m. Friday, April 9, at 4151 Grainger Hall, 975 University Ave.

Munchau is senior correspondent for The Financial Times and author of the recently published book, "Birth of the Euro." His talk, "The Euro: Political and Economic Consequences for Europe and the Implications for the U.S.," will include insights and predictions on Europe's economy.

His two-day visit to the UW campus is part of a series on the changing European economic scene and includes classroom discussions with journalism and business students. Information: Helen Capellaro, 262-9213. ■

### Second Thursday gives sneak peek of engineering exploits

Get a peek at plans for the Engineering Expo, see a display of student-built concrete canoes and take a look at a variety of automotive technologies at the next Second Thursday, April 8.

A variety of student projects will be on display at the Second Thursday hosted by the College of Engineering, Physical Sciences Lab (PSL) and Synchrotron Radiation Center (SRC).

Second Thursday is a chance to meet colleagues and enjoy refreshments. The event runs from 4:30-6:30 p.m. at Engineering Mall. ■

### William Bowen to lecture on race-sensitive admissions

William G. Bowen, co-author of the new book "The Shape of the River: Long-Term Consequences of Considering Race in College and University Admissions," will speak at UW-Madison Wednesday, April 7, at 7:30 p.m.

Bowen is a former president of Princeton University and now president of The Andrew W. Mellon Foundation, which focuses much of its work on higher education. He wrote "The Shape of the River" with Derek Bok, a former president of Harvard University.

Bowen will speak on the effects of race-sensitive admissions policies April 7 in the Memorial Union Theater. Free tickets will become available at the Union box office on March 29 to faculty, staff, students and Union members (one ticket per person) and on Monday to the public if tickets remain.

Union box office hours are 11:30 a.m.-5:30 p.m. weekdays and noon-5 p.m. Saturday. After 7:20 p.m., people unable to get tickets will be allowed to take remaining seats.

"The Shape of the River" is the first large-scale study to examine the actual effects of race-sensitive admissions on the lives of students both during and after college. Bowen and Bok drew on a database of 45,000 students of all races who entered 28 selective colleges and universities in 1976 and 1989.

"Overall," Bowen and Bok write, "we conclude that academically selective colleges and universities have been highly successful in using race-sensitive admission policies to advance educational goals important to them and societal goals important to everyone."

It is only by examining the college careers and the subsequent lives of students — or, to use the Mark Twain metaphor, by learning the shape of the entire river — that we can make an informed judgment of university admissions policies, they say.

Sponsoring Bowen's visit to UW-Madison are the Chancellor's Office, the School of Education, the Wisconsin Union Directorate and The Andrew W. Mellon Foundation. ■

## Eng-Gen

Allen Ruplinger

William Bowen

Photo by Jeff Miller

EMBARGOED FOR A.M. RELEASE MARCH 19

CONTACT: John Torphy, (608) 263-2509

## U.S. NEWS RANKS GRADUATE PROGRAMS AT UW-MADISON

MADISON - The University of Wisconsin-Madison received several high rankings in the 1999 rating of graduate programs released today (March 19) by U.S. News & World Report.

In library science UW-Madison ranked 8th, placing high in several specialties: 4th in services for children and youth, 5th in school library media and 8th in archives and preservation.

The UW-Madison School of Education ranked 9th, placing 2nd in curriculum/instruction, 2nd in administration/supervision, 2nd in educational psychology, 2nd in secondary teacher, 3rd in social/philosophical foundations, 4th in counseling/personnel services, 4th in elementary teacher, 7th in special education, 7th in vocational/technical and 10th in higher education administration.

The College of Engineering placed 12th, with these specialty ratings: 4th in nuclear, 5th in chemical and 8th industrial/manufacturing.

UW-Madison's Medical School finished 18th among schools teaching primary care and ranked 10th in the specialty of family medicine.

The Law School placed 29th, and the Business School was 36th.

In doctoral programs in the sciences, UW-Madison ranked:

\* 9th in computer science with specialty ratings of 3rd in databases, 6th in hardware and 7th in software.

• 10th in chemistry, including 5th in analytical, 7th in physical, 9th in inorganic, 9th in bio-organic/biophysical and 10th in organic.

\* 12th in biological sciences, including 3rd in microbiology, 10th in biochemistry/molecular and 10th in genetics.

\* 14th in mathematics, with specialty ratings of 2nd in logic, 3rd in mathematical statistics and 8th in algebra.

\* 17th in geology, including 3rd in hydrogeology and 6th in sedimentology/stratigraphy.

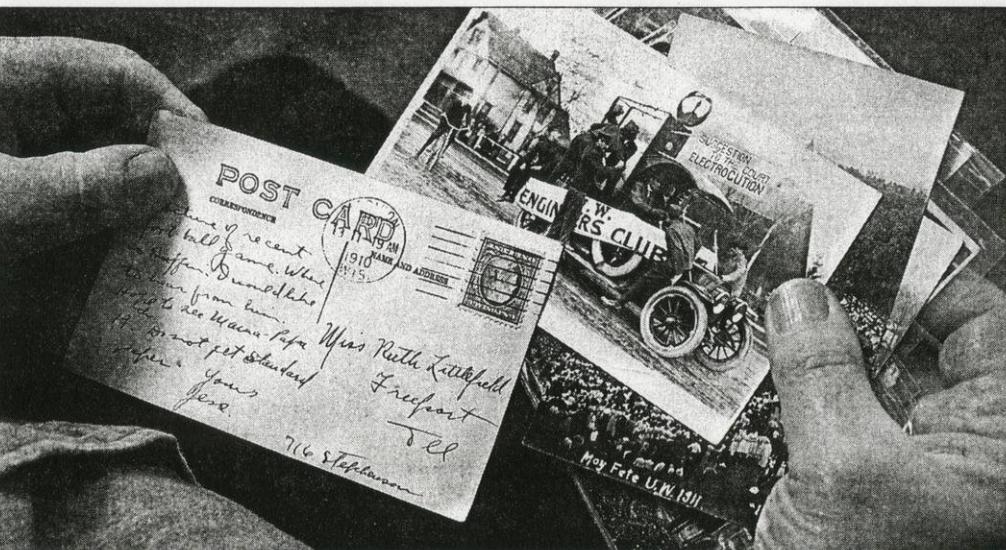
\* 18th in physics.

Engen

"These national rankings can be helpful in some ways," says John Torphy, vice chancellor for administration at UW-Madison, "but students should pick the programs that fit their needs the best, not necessarily the ones that rank highest."

# # #

- Jeff Iseminger, (608) 262-8287



## FLASHBACK

## HISTORICAL HIGHLIGHTS

A song surfaced in 1909 that took the college fight-song circuit by storm: "On, Wisconsin," composed by Chicago musician William Purdy with UW alumnus Carl Beck, who wrote the words. The story goes that Purdy planned to submit the song for a contest at the University of Minnesota until Beck persuaded him to offer it to Wisconsin instead. "On, Wisconsin!" which became the official state song in 1959, has been adapted by more than 2,500 schools and universities nationwide.

The popular UW song "Varsity," with its well-known words of "Praise to thee our alma mater," comes from European stock. In 1898, a young UW music instructor, Henry Dyke Sleeper, transformed a 19th-century Latin hymn written by French operatic composer Charles Gounod into what was then called "Varsity Toast." The traditional right-arm swing above the head was added to the singing in 1934 by UW Band Director Ray Dvorak.

## PEOPLE IN OUR PAST

In 1914, biochemist E.V. McCollum introduced vitamin A to the world, discovering the first of the vitamins during a simple dietary experiment on rats. Two years later, the vitamin alpha-grew when McCollum and colleague Margaret Davis discovered vitamin B, which helps prevent beriberi. In 1937, another of the B vitamins, niacin, was discovered by scientist Conrad Elvehjem to cure pellagra. With the revelation of the role vitamins play in human and animal health, those chronic and debilitating ailments — affecting tens of millions of people — were erased in an instant.

The 1925 founding of the Wisconsin Alumni Research Foundation by Harry Steenbock and his colleagues birthed the granddaddy of university intellectual-property management organizations. Beginning with Steenbock's own vitamin D patents, the not-for-profit corporation established a portfolio of inventions and investments whose income has benefited UW research for 70 years. WARF has returned more than \$420 million to the university, a figure that easily places WARF at the head of the intellectual-property class.

## TO GET INVOLVED

The Wisconsin Alumni Association is working with UW-Madison Archives to collect campus memorabilia of historical interest and value. If you have something of interest, please contact WAA, 650 North Lake St., Madison, WI 53706-1476; or 262-2551, [waa@badger.alumni.wisc.edu](mailto:waa@badger.alumni.wisc.edu)

## RESOURCES

Check out the campus sesquicentennial Web site, listing activities and other information about UW-Madison programs and history. Look for the latest updates at: [www.uw150.wisc.edu](http://www.uw150.wisc.edu)

## FOR MORE INFORMATION

If you have any questions regarding sesquicentennial planning, you may direct them to a member of the sesquicentennial staff: Peyton Smith, sesquicentennial coordinator, 265-3044, [psmith@mail.bascom.wisc.edu](mailto:psmith@mail.bascom.wisc.edu); or Cathy Davis Gray, sesquicentennial program assistant, 262-4315, [cdgray@mail.bascom.wisc.edu](mailto:cdgray@mail.bascom.wisc.edu). Both are located in 96 Bascom Hall.

## Postcards from the past

Professor emeritus collects images of university history

Jeff Iseminger

Here are sheep grazing about 100 yards from Agricultural Hall, and there are young elm trees in front of what is now Old Education, and, oh, here is the original — and very beautiful — law school building on Bascom Hill.



Herbert Kliebard

You can take quite a trip through UW history by looking at the postcard collection of Herbert Kliebard, professor emeritus in the School of Education. Since the 1960s, he's been collecting historical postcards of Madison and the university, most of them dating between 1905 and the 1920s.

"Around 1905, Congress passed a law permitting the mailing of picture postcards by individuals," says Kliebard, and that law

unleashed a postal torrent that continues today. (The only postcards legal before that year were advertisements.)

Many of Kliebard's postcards were produced by Madison photographer William J. Meuer. They were either lithographs (some of them hand-colored) or what Kliebard and other collectors call "real photos," printed directly on postcard stock.

You've probably never seen some of Kliebard's scenes, such as the Lincoln statue in front of Bascom Hall when Abe was looking quite uncorroded as a bronze; women wearing brush-the-ground dresses crossing a "rustic bridge" on University Drive that has graceful bent-wood railings; freshmen barking at the moon and pushing peanuts on the ground with their noses as hazing rituals; and an aerial view of old Camp Randall shot soon after aerials became possible.

Kliebard started collecting by looking for

"ephemera" dealers at antique shows who sell paper items. "But now, the Internet has revolutionized collecting," he says. "I can go to the ebay site ([www.ebay.com](http://www.ebay.com)) and do a search through a million collectibles on any given day."

"I've collected these postcards because it's fun," he says, "and in the process I learn more about the university's history." His joy in photography has been lifelong: As a child he would blacken his home's bathroom window so he could develop his own film.

And he puts his photographic passion into play today as an author. For his new book on the history of vocational education, for example, he supplied all of the photos. Kliebard found many of them in the Library of Congress and the State Historical Society of Wisconsin by using — no surprise — the sharp-eyed instincts of a collector. ■

## Sesquicentennial events continue this spring

## MARCH

**2 Tuesday**

## LANDSCAPE FOR LEARNING

"The Land, the Lake, Campus Life and Lore." Frank Cook, UW Archives; Arthur Hove, Chancellor's Office (Emeritus) and Barry Teicher, UW Oral History Project. Union South (TTTU), noon.

**23 Tuesday**

## LANDSCAPE FOR LEARNING

"The Campus as Classroom and Laboratory." David Eagan, Institute for Environmental Studies; Evelyn Howell, Department of Landscape Architecture and Ann McLain, Center for Limnology. Union South (TTTU), noon.

**27 Saturday**

## HEBREW AND SEMITIC STUDIES

"The Formation of Jewish National Identity: The Role of Hebrew Literature." Also March 28. Pyle Center. For a complete schedule, call 262-3204.

## APRIL

**6 Tuesday**

## LANDSCAPE FOR LEARNING

"Campus Management and the Environment." David Drummond, Safety Department, and Daniel Einstein, Environmental Management Program. Union South (TTTU), noon.

**10 Saturday**

## FRENCH AND ITALIAN PRESENCE IN WISCONSIN

A conference focusing on French and Italian culture in the history of Wisconsin and the University of Wisconsin. State Historical Society. For information, call 262-3941.

**13 Tuesday**

## LANDSCAPE FOR LEARNING

"Visions of the Built Campus." Bruce Braun, Facilities Planning and Management; John Harrod, Physical Plant; and Lori Kay, Transportation Services. Union South (TTTU), noon.

**20 Tuesday**

## LANDSCAPE FOR LEARNING

"Visions of the Natural Campus." Greg Armstrong, Arboretum; Cathie Bruner, Campus Natural Areas; Robert Hendricks, Campus Planning; and Robert Ray, Campus Natural Areas Subcommittee. Union South (TTTU), noon.

## LANDSCAPE FOR LEARNING

"The Campus as a Learning Environment." Daniel Einstein, Environmental Management Program; Evelyn Howell, Department of Landscape Architecture; and Thomas Yuill, Institute for Environmental Studies. Union South (TTTU), noon.

**24 Saturday**

## ADVERSITY IN TEACHING LAW

A symposium celebrating the 25th anniversary of the William H. Hastie Program. Information: 265-2804 or e-mail [pshollen@facstaff.wisc.edu](mailto:pshollen@facstaff.wisc.edu)

## EXHIBITS

## ENGINEERING PHOTO EXHIBIT

"Engineering Time." Scenes from the college's rich history; 23 images span 1881-1998. East wall, 1610 Engineering Hall. Exhibit runs through the year. ■

## BRIEFS

BUSINESS SCHOLARSHIP  
EARMARKED FOR STAFF

The School of Business has earmarked a partial scholarship for the fall 1999 Executive MBA program for a UW-Madison employee, says Andrew J. Pollicino, business school dean.

Any interested UW-Madison employee, with department approval, may apply for the 75% scholarship. The Executive MBA program is a rigorous two-year program, designed for mid- and upper-level managers. It meets Fridays and Saturdays every other weekend for two school years. The program admits 30-35 students each fall.

The deadline for applications is June 1. For information, contact Constance Rieben, associate director, 265-2034; [criben@bus.wisc.edu](mailto:criben@bus.wisc.edu).

## VOLUNTEER FAIR SCHEDULED

Volunteering isn't just for students. While most of them are away on spring break, others can check out community service opportunities at the Faculty/Staff/Retiree Volunteer Fair, Tuesday, March 9, Tripp Commons in the Memorial Union, 10 a.m.-3 p.m.

The fair, sponsored by the Morgridge Center for Public Service, is a chance for faculty, staff or retirees to meet with representatives of more than 50 local volunteer agencies, and to get involved with community service projects that suit their interests and needs.

For information, contact Morgridge Center director Susan Dibbell, 263-4009; [smvandeh@factstaff.wisc.edu](mailto:smvandeh@factstaff.wisc.edu).

## WIAA TOURNEY RETURNS

The campus area will be experiencing a large influx of sports fans this week when the Wisconsin Interscholastic Athletic Association (WIAA) hosts its annual high school wrestling tournament at the Kohl Center.

The wrestling tournament, already underway, runs through this Friday. The girls basketball tournament takes place March 11-13, and the boys tournament is March 18-20.

Because daytime parking is very limited in the vicinity of the Kohl Center, fans attending the tournaments are being urged to park at the Dane County Coliseum and ride a Madison Metro shuttle to the Kohl Center.



## Wisconsin Week

Vol. XIV, No. 4, February 24, 1999

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## Milestones

## Nine faculty receive mid-career awards

Nine professors have received prestigious Mid-Career Awards designed to provide a financial boost to faculty during what is often the most productive phase of their careers.

The awards are funded by the Wisconsin Alumni Research Foundation and the Graduate School research committee selects winners. Faculty who are between five and 20 years past tenure, and are nominated by their colleagues, are eligible for the \$60,000 awards.

The 1999 winners are:

■ **Lyn Abramson**, professor of psychology. Abramson has made contributions to the understanding of vulnerability and invulnerability to depression. Her pioneering work on optimistic cognitive illusions illuminates how people are protected from depression and challenges the long-held assumption that cognitive distortion always is a hallmark of psychopathology.

■ **Stephen R. Carpenter**, professor of zoology. Carpenter studies the processes that control productivity of lakes. Carpenter has manipulated food chains of whole lakes in large-scale experiments that test the effects of top predators, like bass and walleye, on lake productivity.

■ **David Loewenstein**, professor of English.

Loewenstein is a past winner of several prestigious national fellowships, including the John Simon Guggenheim Fellowship and a National Endowment for the Humanities Fellowship. His first book, *Milton and the Drama of History* (Cambridge, 1990) won the James Holly Hanford Award for Distinguished Book.

■ **Thomas F. J. Martin**, professor of biochemistry. Martin studies the fundamental process regulating the secretion of neurotransmitters and hormones from cells of the nervous and endocrine systems. He is recognized for developing novel techniques for the biochemical analysis of the process and for the discovery of proteins and other factors that are essential for its operation.

■ **Frances Myers**, professor of art. Myers is a widely exhibited and influential artist in the arena of printmaking. She is noted for her use of non-conventional materials and formats, and for extending the notion of the print — using it as wall installation, and incorporating non-traditional and three-dimensional processes.

■ **Craig A. Olson**, professor of business. Olson has been on the faculty in the business school and in the UW Industrial Relations Research

Institute since 1986. He is currently director of the Industrial Relations Research Institute. Olson has written numerous articles on labor relations and labor market issues.

■ **Lloyd M. Smith**, professor of chemistry. Smith is a leading figure in bioanalytical chemistry. He is credited with developing the first fluorescent-based automated DNA sequencing instrument, the most widely accepted tool in use today for sequencing the human genome.

■ **Wesley H. Smith**, professor of physics. Smith has led a UW group to international recognition in the continuing effort to understand the structure of matter and energy at a fundamental level. He has designed and constructed innovative massively parallel electronic apparatus to trigger the recording of interesting data.

■ **Bernard Yack**, professor of political science. Yack is an internationally recognized specialist in political theory who continues the kind of classical philosophical thinking that lies at the basis of modern political science. His work uses classical thought to address specific problems of governance today, influencing both political theorists and scholars of politics and government. ■

## UW staff honored for disabled access technology

The National Partnership for Reinventing Government recently presented the coveted Hammer Award to a team led by the Department of Education, including three UW-Madison staff.

Following closely on President Clinton's commitment to make the federal government "a model user of assistive technology," the award recognizes the team's effort to produce comprehensive requirements for accessible software design.

Members of the team included individuals from UW-Madison's Trace Research and Development Center, Microsoft, and IBM. Professor **Gregg C. Vanderheiden**, Trace Center director, and Trace staff members **Mark Novak** and **Neal Ewers**, were honored with individual Hammer Awards at a ceremony in Washington, D.C.

Vice President Al Gore introduced the Hammer Award in 1993 to recognize teams of federal employees, state and local employees, and citizens, who are making government work better and cost less. Created as a direct response to the \$400 hammers uncovered in government budgets by federal auditors, the Hammer Award consists of a \$6 carpenter's hammer, a ribbon, and a note from the Vice President, all in an aluminum frame.

The Department of Education's Assistive Technology Team established the requirements for accessibility software design to ensure the accessibility of its programs and activities to individuals with disabilities. The guidelines also are used widely by federal agencies. For more information, contact Vanderheiden, 263-5788. ■

## Two professors receive Presidential Science Awards

Two faculty are among 60 scientists nationwide who recently received Presidential Early Career Awards for Scientists and Engineers.

The awards, which vary from \$200,000 to \$500,000 over a period of four to five years, were given by President Clinton during a White House ceremony Wednesday, Feb. 10. They are the highest honors bestowed by the U.S. government upon outstanding new scientists and engineers. UW-Madison winners are:

■ **Pei Cao**, an assistant professor of computer science. Cao, on the UW-Madison faculty since 1996, was honored for outstanding innovations in cache methods to improve World Wide Web servers and global Internet efficiency. She was also cited for developing new tools for realistic Internet simulators for student use.

■ **Julie Anne Jacko**, an assistant professor of industrial engineering at UW-Madison since summer 1998. Jacko received the award for innovations in matching partially sighted computer users with hardware/software combinations, allowing them to use graphical interfaces. She also developed graduate courses on related technologies.

The federal awards program, now in its third year, recognizes scientists who are in the early stages of their careers and need help establishing independent research. Grants are supported by all of the major federal science agencies, including the National Science Foundation, the National Institutes of Health and the Department of Energy. The two UW-Madison winners are sponsored by NSF. ■

## Undergraduates honored for research projects

Ten university seniors have received awards for the most creative and futuristic undergraduate research projects featured during the Sesquicentennial Undergraduate Research Symposium.

The symposium, held Wednesday, Feb. 10, as part of UW-Madison's sesquicentennial celebration, showcased original work by 44 undergraduates in the sciences, humanities and social studies. Students worked independently on the projects but received mentoring from faculty and staff.

Chancellor David Ward presented each of the following award winners with a \$100 gift certificate for The University Book Store:

**Laura Croal**, bacteriology, for looking at ways to justify the use of bacitracin as a way

to identify additional products involved in gene synthesis; **Sarah Gruenwald**, Spanish and zoology, for her proposal to compile a handbook for Spanish/English medical interpreters in clinical settings; **Michele Hardesty**, English, for seeking to describe how 'zines — underground magazines produced by individuals and small publishers distributed mostly via the Internet and e-mail — create a noncommercial culture against the growing array of mass media; **Casey Klostad**, political science, for her analysis on the relationship between partisan and interest group support and possible implications for the future of democracy in the United States; **Amy Lillich**, zoology, for research on the identification of certain genes in mice that may prevent colon and rectal cancer in humans; **Jeremiah Miller**, chemistry and philosophy, for research into how rhenium acetylenic ketone complexes may be combined into a catalytic metal, such as platinum, which could be used to construct a simple method of isomerizing acetylenic ketones; **Quy Ai Ngo**, molecular biology and botany, for research into genome organization and transcription pattern of the mitochondrial locus in male fertile and petaloid male sterile carrots; **Timothy A. Nichols**, psychology and sociology, for experiments on how the human visual system recognizes faces; **Jonathan Nix**, physics, for his research on strange star binary coalescence; **Mark Putzer**, zoology, for studies on a possible relationship between the activity of ships and other sea vessels and the behavior of killer whales. ■

## Improved solar energy system wins top honor in annual student contest

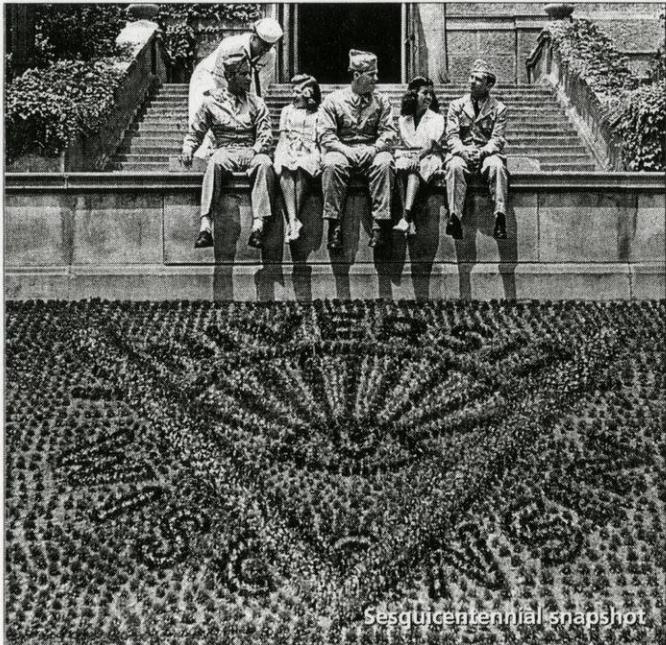
A proposal for an improved solar energy system made a freshman \$10,000 richer at the Schoofs Prize for Creativity competition.

**Mete Kural**, an electrical engineering major from Turkey, was the winner of UW-Madison's fifth annual invention contest. Made possible by Engineering alumnus Richard J. Schoofs, 'Brainstorm' awards cash prizes each year to undergraduates whose inventions are judged most creative, novel, innovative, patentable and likely to succeed in the marketplace. The contest is sponsored by the UW Technology Enterprise Cooperative, with support from the College of Engineering and the School of Business.

Kural's entry was titled "Concentrating Solar Photovoltaic System Using Plastic-Injection Molded Spectrum-Splitting Concentrator."

Kural said his proposal will significantly reduce the cost and increase the efficiency of this type of energy system. Rural regions would be one area that could benefit from his system.

The \$7,000 second place award went to **Jake Myre**, a senior majoring in mechanical engineering, for his invention, "Snap-In Joist Stiffener." Third Place (\$4,000) went to **Eric Wobig**, a senior in mechanical engineering, for his invention "Air Lift." Two other students received \$1,000 each. ■

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Sesquicentennial snapshot

Photo courtesy UW-Madison Archives

World War II GIs and their female friends relaxed in front of Lathrop Hall. At home, the war touched nearly 13,000 UW alumni and students who donned uniforms to fight, causing enrollment to drop by half, and at least 150 faculty who worked on problems of national defense. Three UW-Madison scientists worked in a secret effort to build the atomic bomb. And when World War II brought an acute need for antibiotics and blood plasma, a team from the UW botany, bacteriology and biochemistry departments raced to assist. The team found a strain of penicillin culture that would permit the mass production of antibiotics — although the discovery came too late for the war. But, by 1946, the cultures discovered here were saving lives around the world. At the same time, chemist J.W. Williams used a high-powered ultracentrifuge to separate proteins from blood plasma, a technology that is still used today to produce life-saving plasma. Two campus buildings — Memorial Library, dedicated to those who served in World War II and the wars that followed, and Memorial Union, to those who served in World War I — stand as enduring landmarks.

After World War II, enrollment and the UW operating budget tripled, the size of the faculty nearly doubled, and the biggest building boom in campus history to that point kicked in. On Wednesday, Feb. 10, E. David Cronon, professor emeritus of history and former dean of College of Letters and Science, will describe the post-war years in a lecture, "The University's Finest Hour: Handling the GI Invasion after World War II," at 7:30 p.m., Music Hall Theater.

## FLASHBACK

### HISTORICAL HIGHLIGHT

If you had been a cutting-edge scientist in the latter days of the 19th century, you were probably a geologist. The study of the Earth's formations consumed universities, and in this university's case, helped shape a legacy. Geology explained the unique physical makeup of our state, and it produced two scientists who would become UW presidents: **Thomas C. Chamberlin**, former head of Wisconsin's geological survey and UW president from 1887 to 1892, and **Charles R. Van Hise** who graduated from the department and served on its faculty before becoming president in 1903. The two helped bring university research to the public's benefit.

### PEOPLE IN OUR PAST

In 1889, when civil engineer **C.D. Marx** took to the road to teach Racine factory workers the finer points of mechanics, a UW tradition of exporting training to the workplace began. UW engineers left the classroom in the early 1900s to help factories clean the smoke-filled Lake Michigan shoreline air, and thousands of GIs took advantage of UW correspondence courses during the two world wars. Today, UW offers about 400 professionally focused courses in engineering alone, and similar training in fields such as agriculture and education enriches the careers of thousands.

In 1890, **Stephen Babcock** devised a simple, foolproof method to test the butterfat content of milk. The test allowed merchants to pay farmers based on butterfat rather than weight, ending the days of watered-down milk. Accomplished at a time when farmers were adopting dairy as a "cash crop," Babcock's invention, according to former Gov. W.D. Hoard, "made more dairymen honest than the Bible."

### CAMPUS MEMORIES

"Professor **Dan Wikler** in the philosophy department was such a great lecturer! I signed up for his class, 'Contemporary Moral Issues', not having any idea what to expect. We spent the semester covering all facets of 'hot' issues like abortion, living wills, and terrorism. The genius of his teaching was that never once could we discern on what side of an issue professor Wikler stood. He was so adept at presenting all arguments that his personal beliefs were always a mystery. His lectures were so interesting that the class was always full, despite the fact that it was an early morning extended lecture. He was fabulous at getting students to think for themselves."

"Also impressive was professor **(Richard) Sewell**, who taught my Civil War class. He's probably retired by now, but he had more incredible stories and anecdotes about the Civil War ... you were convinced that he was actually there! History lectures can be incredibly dry, but his were just fascinating."

— Karyn Roelke, BA '90

To offer your own memory, visit: <http://www.uw150.wisc.edu/memories/>

### TO GET INVOLVED

The Wisconsin Alumni Association is working with UW-Madison Archives to collect campus memorabilia of historical interest and value. If you have something of interest, please contact WAA, 650 North Lake St., Madison, WI 53706-1476; call 262-2551; or e-mail: [waa@badger.alumni.wisc.edu](mailto:waa@badger.alumni.wisc.edu)

## From Edison to the environment

Sesquicentennial events and exhibits continue through February and March

### February

#### 11 Thursday

##### EDISON DAY

A full-day celebration of student creativity and inventions, including the Scholastic Prize for Creativity Competition. The historic Edison Generator will be fired up in the afternoon with a reception following. 1600 Engineering Hall, 9 a.m.-1 p.m.

##### FUTURE OF JOURNALISM SYMPOSIUM

Moderated by American Journalism Review editor Rem Rieder. Wisconsin Union Theater, 10 a.m.-noon; 1-3 p.m.

#### 12 Friday

##### THE STUDENT ATHLETE IN THE 21ST CENTURY

Panel discussion of issues facing student athletes in the future. Featuring current coaches and student athletes. Audience participation welcomed. Check TTU, Union South, 11:30 a.m.-1 p.m.

##### THE FUTURE OF STORYTELLING

Harold Scheub, African Languages and Literature. State Historical Society Theater, 1:30-2:30 p.m.

#### 15 Monday

##### 25TH ANNIVERSARY

##### NEUROSCIENCE SEMINAR

"From Retina to Cortex: Exploring the Neural Architecture of Vision." Torsten Wiesel, Nobel

laureate and past president of The Rockefeller University. Genetics/Biotechnology Auditorium, 4 p.m. A reception follows in the Genetics/Bio-technology Atrium.

#### 16 Tuesday

##### WHYS AND WOVS

UW-Madison faculty and staff give talks about their research at the Milwaukee Public Museum, 10 a.m.-2 p.m. For groups that pre-register, \$2 students; free for teachers, aides. At the door: \$3.50 children, \$4.50 seniors, \$5.50 adults. To register, call (414) 278-2714.

##### LANDSCAPE FOR LEARNING DISCUSSION SERIES

"Cultures of the Past." Robert Birmingham and Jack Holzheuer, State Historical Society of Wisconsin. Union South (TTTU), noon.

#### 23 Tuesday

##### ROUNDTABLE

"The Biennial Budget." Mark Bugher, state administration secretary. Tripp Commons, Memorial Union, 11:45 a.m.

##### LANDSCAPE FOR LEARNING DISCUSSION SERIES

"Origins and Growth of the Campus." Arnold Alanen, landscape architecture, Eric Olmanson, geography; Michael Rawson, history and Philip Wand, State Laboratory of Hygiene. Union South (TTTU), noon.

### March

#### 2 Tuesday

##### LANDSCAPE FOR LEARNING DISCUSSION SERIES

"The Land, the Lake, Campus Life and Lore." Frank Cook, UW Archives; Arthur Howe, Chancellor's Office (Emeritus) and Barry Teicher, UW Oral History Project. Union South (TTTU), noon.

##### LANDSCAPE FOR LEARNING DISCUSSION SERIES

"The Campus as Classroom and Laboratory." David Eagan, Institute for Environmental Studies; Evelyn Howell, Department of Landscape Architecture and Ann McLain, Center for Limnology. Union South (TTTU), noon.

#### 27 Saturday

##### DEPARTMENT OF HEBREW AND SEMITIC STUDIES SEMINAR

"The Formation of Jewish National Identity: The Role of Hebrew Literature." Also on March 28.

##### Exhibits

##### ART FACULTY EXHIBITION

Elvehjem Museum of Art. Through March 21.

##### GALLERY OF DESIGN

"State of the Art: Works by UW Textile Faculty." Works exemplify energy and diversity of textile faculty within the UW System. Gallery of Design, 1300 Linden Drive. Through Feb. 25. ■

## Web site is guide to sesquicentennial

The university's sesquicentennial web site — [www.uw150.wisc.edu](http://www.uw150.wisc.edu) — will keep you in touch with all the hoopla of the sesquicentennial.

The site is a one-stop shop for everything sesquicentennial, from details about major events to the entry form for the Babcock Hall invent-a-sesquicentennial ice-cream flavor contest.

The site is continuously changing. Every time a user comes back to the main page, he or she is greeted with a randomly selected archival photo and piece of campus trivia.

The site's resources include:

#### ■ Sesquicentennial events calendar

A log of sesquicentennial events.

#### ■ Photo gallery

A series of photos from UW Archives depicting scenes of student life, the evolution of the physical campus and prominent individuals who have left their mark on the university.

#### ■ 150 Ways

Brief examples of 150 ways the university has made its impact on Wisconsin and the world.

#### ■ Share the Memories

Anecdotes from alumni about faculty. Visitors can submit a memory of their own.

#### ■ Digital Postcards

Users can choose from a collection of campus scenes and compose an electronic postcard to send to a friend. Include an audio track for one of the UW Marching Band's popular tunes.

For more information about the site, contact Nick Weaver at 263-9141 or by e-mail: [jnweaver@facstaff.wisc.edu](mailto:jnweaver@facstaff.wisc.edu). ■

From the University of Wisconsin-Madison / News Service, Bascom Hall, 500 Lincoln Drive, Madison 53706 / Telephone: 608/262-3571

Release: **Immediately**

7/29/81 jhs

## BACK-TO-SCHOOL

### MINORITY STUDENTS GET FIRST TASTE OF COLLEGE

MADISON--About 60 high school pupils got their first taste of college this summer in a nine-year-old program that teaches minority students the tools they need to conquer the rigorous discipline of engineering.

For eight weeks each year, the Engineering Summer Program at University of Wisconsin-Madison exposes bright minority high school students to classes in math, science, communication arts and computer science. It tests them, orients them and even gives final exams. It shows them how to use a university library and how to study. It takes them on tours of several area industries.

The object, said Naomi Walton-Winfield, assistant director of UW-Madison's Minorities Engineering Program, is to make up for deficiencies that many minority grade and high schools have in science and math, and to show the students the kind of grit it takes to succeed in engineering. Along the way the instructors also talk about discipline, personal identity and the survival skills needed by minority students at a large university in a field heretofore dominated by whites.

It's not all a grind, though, noted Walton-Winfield. There are a couple of picnics and skating parties sprinkled through the eight weeks, and there is an awards banquet at the end which marks the students' success with graduation certificates.

Back-to-School  
Add one--minority students

Most of the students come from the Midwest, she said, with the largest contingent from Wisconsin. There are students from as far away as New Orleans, Denver, Miami and Florence, S.C., however. The students range in age from ninth graders to seniors, but most are between their junior and senior years in high school.

The summer program is funded by the College of Engineering, student contributions and private gifts, mostly from major corporations which hire large numbers of engineers.

Walton-Winfield said the program is the largest of its kind at UW-Madison.

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From the University of Wisconsin-Madison / News Service, Bascom Hall, 500 Lincoln Drive, Madison 53706 / Telephone: 608/262-3571

Release: Immediately

7/31/81 jhs

CONTACT: Naomi Walton-Winfield (608) 262-7764

### MINORITY HIGH SCHOOLERS TO GET FIRST COLLEGE 'DIPLOMA'

MADISON--Fifty-nine minority high school students will step up Friday (Aug. 7) to get their first college "diploma"--a certificate of completion for an eight-week session to learn the rigorous discipline of engineering.

For nine years, the Engineering Summer Program at University of Wisconsin-Madison has exposed bright minority high school pupils to classes in math, science, communications arts and, this year, computer science. It has administered placement tests, provided orientation sessions and even given final exams. The training also has included tips on using a giant university library and on how to study.

The 1981 group, which began on June 14 a schedule that most days runs from 8 a.m. to 9 p.m., will cap the experience Friday with a luncheon and certificate presentation.

(Naomi Walton-Winfield,) assistant director of UW-Madison's Minorities Engineering Program, said the object of the summer program is to make up for deficiencies that minority schools may display in science and math, and to show what kind of grit it takes to succeed in engineering.

Along the way, she said, the volunteer instructors, drawn from University professors and staff members, also talk about need for discipline, personal identity and a variety of "survival skills" helpful to minority students who find themselves at a large university in a field heretofore dominated by whites.

Add one--minority programs

It's not all a grind, though, said Walton-Winfield. This year's schedule included two picnics, two skating parties, several visits to area industries and Friday's planned luncheon and "graduation" ceremony at the Howard Johnson Downtown Motor Lodge.

The noon event Friday will have its fun side, she said, with a student emcee and student skit. It also will have its more formal aspects: the certificate presentations, a talk by former College of Engineering Dean W. Robert Marshall, and the presence of new engineering Dean John G. Bollinger.

The summer tutoring program, which Walton-Winfield said is the largest of its kind at UW-Madison, is funded by the College of Engineering, student contributions and private gifts, mostly from major corporations that hire large numbers of engineers.

Most of the summer students come from the Midwest, said Walton-Winfield with the largest contingent this year from Wisconsin. This summer's group also includes students from as far away as New Orleans, Denver, Miami and Florence, S.C. Most are between their junior and senior years in high school, although some are as young as ninth-graders and some are graduated seniors awaiting the start of their freshman year in college.

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(NOTE TO EDITORS AND NEWS DIRECTORS: Coverage of the luncheon and awards ceremony is welcome. Further information on the schedule is available from Mrs. Walton-Winfield, (608) 262-7764. The luncheon-ceremony is scheduled from noon-3 p.m. Friday, Aug. 7, in University Rooms A and B of Howard Johnson's Downtown Motor Lodge, 525 W. Johnson St.)

FOR IMMEDIATE RELEASE

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CONTACT: Jim Beal at (608) 263-0611, e-mail Jbeal@engr.wisc.edu; or Karen Walsh, (608) 263-2982, e-mail walsh@engr.wisc.edu.

NOTE: For a list of previous winners and additional information, visit:  
<http://www.engr.wisc.edu/students/brainstorm/brainstorm.html>

### STUDENT INVENTORS PREPARE FOR BRAINSTORM COMPETITION

From inventions to keep hands clean to ideas even James Bond could appreciate, a contest for campus inventors has inspired undergraduates across the University of Wisconsin-Madison campus.

Now in its fifth year and open to all undergraduates, the "Brainstorm: Schoofs Prize for Creativity" contest awards cash prizes to student ideas judged most creative, novel, innovative, patentable and likely to succeed in the marketplace.

Winners will be announced on Edison Day, Thursday, Feb. 11. Edison Day is the College of Engineering's annual celebration of inventor Thomas Edison's birthday. Students will present their work from 8 a.m. to 12:30 p.m., 1610 Engineering.

Student projects will be on display in the Engineering Hall lobby throughout the day.

Jan Ver Hagen, senior vice president of corporate projects for Emerson Electric, will deliver a keynote at 1:15 p.m. in room 1610 Engineering Hall. Ver Hagen is a 1961 graduate of UW-Madison in mechanical engineering and a former member of the college's Industrial Liaison Council. Judges will announce the winners at 3:30 p.m.

Here are some of this year's entries in the "Brainstorm: Schoofs Prize for Creativity" and their inventors:

-- A Process of Ensuring Hand Sanitation for employees using the restroom. Nate Sellin, (608)233-0282

-- No More Slips: A device that drops sand in front of tires thereby improving traction. Timin Musallam, (608) 264-1670.

-- A Hollow Shoe Heel that can hold personal items. Dorene Kent, (608) 256-4057.

-- A Human-Powered Seaweed Cutting and retrieval apparatus. Justin Rohde, (608) 280-8315.

-- A Concentrating Solar Photovoltaic System, using plastic-injection molded spectrum-splitting concentrator. Mete Kural, (608) 661-5330.

-- The Pocket Memory Card: A device to carry electronic cash and coupons. David Overbo, (608) 238-8841.

Engineering  
Jan

-- Pressure Washer Power Jet Pump: A jet pump with a high flow rate and low to moderate pumping head capabilities. Clayton Shakal, (608) 258-8613.

-- The Safety Range Project: A system to reduce the risk of fires involving kitchen ranges. Erik Burgardt, (608) 236-0526.

-- An Airlift Device to give wheelchair-bound persons the advantage of six additional inches in height. Eric Wobig, (608) 238-4120.

-- Snap-In Joist Stiffener : A device to stiffen horizontal wooden floor joists. Jake Myre, (608) 294-0265.

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**UW-MADISON TEACHING, LEARNING, RESEARCH HIGHLIGHTED**

MADISON -- The University of Wisconsin-Madison will display an array of teaching and learning initiatives and highlight undergraduate research Wednesday, Feb. 10 during the campus sesquicentennial celebration.

The Teaching and Learning Showcase and the Undergraduate Research Symposium will be held concurrently in Memorial Union's Great Hall from 10 a.m.-3 p.m. The events, which are open to the public, will highlight advancements in the core missions of the university and possible future directions. Chancellor David Ward begins the events with a 10 a.m. address.

"The university is doing fabulous things for the enhancement and encouragement of undergraduate education," says Robert Skloot, associate vice chancellor for academic affairs, and professor of theatre and drama and Jewish studies. "The evidence will be on show during these events."

Skloot is organizing the day's events, which are sponsored by the Office of the Provost.

The Teaching and Learning Showcase will display more than 40 campus teaching and learning efforts, from the Business Learning Center and Council on Academic Advising to the Teaching Academy and Writing Fellows. Organizers will discuss their programs in adjoining rooms to the Great Hall, and faculty winners of campus instructional technology grants will present their projects.

"This event will highlight the progress the university has made so far in fulfilling Chancellor Ward's 'Vision for the Future,'" says Kathy Sanders, showcase coordinator and director of Creating a Collaborative Academic Environment. Ward's vision, introduced in 1995 after extensive campus input, outlines several campus priorities through 2005, including reconceptualizing undergraduate education.

The Undergraduate Research Symposium will feature the research projects of close to 40 students representing numerous academic areas. A sampling of topics includes biological and physical science research, projects in the arts and humanities, and social studies research. Students will be on hand to explain their work.

"Our undergraduates are doing very creative research, often independently or collaboratively with faculty and graduate students," says A. Margaret Elowson, one of the symposium's coordinators and director of UW-Madison's Undergraduate Research Program. "They are not just sitting in classrooms receiving information as passive learners. They are working in labs, art studios and other places creating new knowledge."

That knowledge will be on display not only inside but also outside Memorial Union. Parked next to the building during the symposium will be an automobile designed by UW-Madison student engineers. Dubbed "Aluminum Cow," the vehicle can drive 75 miles per gallon of gasoline, which earned it a tie for first place in the national FutureCar Challenge last year.

Elowson says another research symposium is planned for 2000. Helping coordinate this year's symposium are Jane Cramer, associate director of the Center for Biology Education, and Laurie Mayberry, director of the Ronald E. McNair Scholars Program.

Following the showcase and symposium, faculty, staff and students will gather for a reception and dinner at Chadbourne Residential College to examine the future of teaching and learning. Ideas on improving education, specifically those solicited from the campus community through newspaper coupons, will be discussed. The day's events will conclude with the showing of a futuristic movie starting at 6:45 p.m. at Chadbourne Hall.

"It's clear that faculty want to listen to students and their good ideas; it's just that they don't have access to students in this manner," Sanders says.

The reception will include awards for the most creative and futuristic undergraduate research projects displayed at the symposium. Ward will present the awards; winners will receive gift certificates to The University Book Store.

"The sesquicentennial is a great opportunity to celebrate the cross-college approach to undergraduate research at UW-Madison," Cramer says. "The symposium shows the commitment that faculty and academic staff have to it. It's what this university is all about."

# # #

-- Erik Christianson, (608) 262-0930

FOR IMMEDIATE RELEASE 1/28/99

**REPORT SHOWCASES TEACHING, LEARNING**

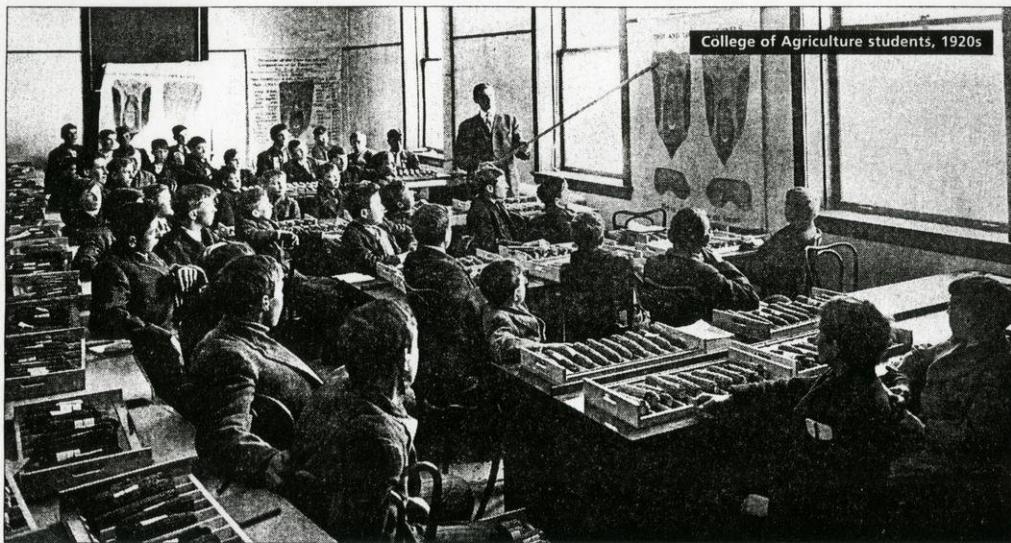
**MADISON** -- A report from the University of Wisconsin-Madison Office of the Provost documents the many ways that education is being enhanced at UW-Madison.

Teaching & Learning Initiatives chronicles the efforts to reconceptualize undergraduate education, one of the university's top future priorities. Produced last year, the report also describes programs aimed at improving graduate education.

The university's residential and non-residential learning communities are highlighted in the report, as are 23 other programs spanning a number of academic disciplines. Contact names, telephone numbers and email addresses are listed for each program. The report also contains listings of web sites for the campus learning communities and the initiatives listed in the document.

For copies of the report or for more information call (608) 262-5246 or visit: <http://www.wisc.edu/provost>.

# # #



## SEQUICENTENNIAL EVENTS

### February

#### 5 Friday

##### POSTAL CARD CEREMONY

Ceremony recognizes the first-day issue of a commemorative stamped card. Nicholas Johnson Pavilion, Kohl Center, 6:15 p.m.

#### 6 Saturday

##### GALA SCHOLARSHIP DINNER

Proceeds benefit scholarships. Monona Terrace, 6 p.m. For information, call 265-3044.

#### 7 Sunday

##### 150TH ANNIVERSARY CONCERT

See story, page 2. Kohl Center, 1-3 p.m. Tickets at the Kohl Center box office or call Tickermaster, 255-4646.

#### 8 Monday

##### FUTURE OF EMBRYO RESEARCH

"Embryonic Stem Cell Research of the Future." James Thomson, developmental biologist, Wisconsin Regional Primate Center, and Alta Charo, Law and Medical Schools, 4151 Grainger Hall, 3 p.m.

##### FUTURE OF POPULAR CULTURE

Henry Jenkins, professor of literature and director of the Comparative Media Studies program at MIT. Elvehjem Museum, 3:30 p.m.

##### FUTURE OF WORK

"Your Job in the Next Decade." Program starts today 3-5 p.m., at the Wisconsin Union Theater. Four issue sessions will be offered at Memorial Union and Union South this week.

#### 9 Tuesday

##### ROUNDTABLE

"The Future of State-University Relations: Charting a Course for UW-Madison in a New Century." Donald Kettl, director, La Follette Institute of Public Affairs, Tripp Commons, Memorial Union, 11:45 a.m.

##### THE CAMPUS LANDSCAPE

"Terrestrial Ecology and Limnology." Evelyn Howell, landscape architecture/environmental studies, and John Magnuson, zoology/environmental studies and director of the Center for Limnology. Check TITU, Union South, noon.

##### A FASTER FUTURE

"Connecting Faster and Faster in the Future." Larry Landweber, computer science, 4151 Grainger Hall, 3:30 p.m.

#### 10 Wednesday

##### FUTURECAR DISPLAY

The car will be in front of Memorial Union.

##### DISCUSSION OF OUR FUTURE

Reception, awards ceremony, discussion of future. Chadbourne Hall, 4-5:30 p.m.

##### TEACHING, LEARNING SHOWCASE

See story on this page. Great Hall, Memorial Union, 10 a.m.-3 p.m.

#### 11 Thursday

##### EDISON DAY

A full-day celebration of student creativity and inventions. The historic Edison Generator will be fired up in the afternoon with a reception following. 1600 Engineering Hall, 9 a.m.-1 p.m.

##### FUTURE OF JOURNALISM

See story, page 2. Wisconsin Union Theater, 10 a.m.-noon; 1-3 p.m.

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##### THE STUDENT ATHLETE IN THE 21ST CENTURY

Panel discussion of issues facing student athletes in the future. Featuring coaches and student athletes. Check TITU, Union South, 11:30 a.m.-1 p.m.

##### THE FUTURE OF STORYTELLING

Harold Scheub, African languages and literature. State Historical Society Theater, 1:30-2:30 p.m.

For more information, visit: [www.uw150.wisc.edu/](http://www.uw150.wisc.edu/)

## Teaching, learning, research highlighted

Erik Christianson

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Writing Fellows. Organizers will discuss their programs in adjoining rooms to the Great Hall, and faculty winners of campus instructional technology grants will present their projects.

"This event will highlight the progress the university has made so far in fulfilling Chancellor Ward's 'Vision for the Future,'" says Kathy Sanders, showcase coordinator and director of Creating a Collaborative Academic Environment. Ward's vision, introduced in 1995 after extensive campus input, outlines several campus priorities through 2005, including reconceptualizing undergraduate education. (See pages 7-8.)

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Following the showcase and symposium, faculty, staff and students will gather for a reception and dinner at Chadbourne

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"The sesquicentennial is a great opportunity to celebrate the cross-college approach to undergraduate research at UW-Madison," Cramer says. "The symposium shows the commitment that faculty and academic staff have to it. It's what this university is all about."

### Discussion ideas sought

As part of the sesquicentennial week celebration, two groups — Creating a Collaborative Academic Environment (CCAE) and Pathways to Excellence Student Organization (PSO) — would like to bring students and faculty together to discuss current and future teaching and learning issues.

The groups have organized a dinner conversation for students and faculty the evening of Wednesday, Feb. 10, in the Chadbourne Residential College. The dinner is open to all UW-Madison students and faculty.

You can submit your ideas for discussion by visiting:

[www.uw150.wisc.edu/future/](http://www.uw150.wisc.edu/future/)

For more information, please call CCAE, 262-1784, or email Chris Schaub at [chschaub@factstaff.wisc.edu](mailto:chschaub@factstaff.wisc.edu).

## Sesquicentennial week looks to UW's future

Clear your calendars for Feb. 8-12. It's UW-Madison's 150th birthday, and you're invited to the party!

Be sure to check the next issue of *Wisconsin Week*, published Wednesday, Jan. 27, which will feature detailed information about the week of sesquicentennial events by and for faculty, staff and students. The week is organized around the theme, "Building on Excellence: Creating Our Future."

You'll be able to join the campus community in marking the week the first classes were held 150 years ago. Events during this week are designed specifically for the campus community to learn and celebrate together.

Events will honor our 150 years, explore new developments and contribute to shaping our future. Among other topics, lectures and other events will look at the future of

work, technology, popular culture, journalism and other communication. Teaching, learning and research advances will be highlighted. Awards and other events also are planned.

Kicking off the week, a Scholarship Gala Feb. 6 will benefit the Sesquicentennial Undergraduate Scholarship Fund. And the Sesquicentennial Anniversary Concert at the Kohl Center Feb. 7, featuring more than 500 musicians and singers, will be one of the largest performances ever by the School of Music.

The special edition of *Wisconsin Week* Jan. 27 also will commemorate the university sesquicentennial with stories and photos. To find out more about activities throughout this year, visit the university's sesquicentennial Web site: [www.uw150.wisc.edu](http://www.uw150.wisc.edu).

**More sesquicentennial news, page 5. ■**



Thousands of Wisconsin residents fled their sub-zero homeland for the sun and postcard fun of southern California on New Year's Day as the Badgers defeated the UCLA Bruins. For an account of the heady atmosphere in Wisconsin West in the days leading up to the bowl, see page 12.

## Chancellor approves plan to add 32 faculty

Erik Christianson

Twelve faculty hiring proposals spanning the biological, physical and social sciences and humanities have been approved by Chancellor David Ward in the first round of the Sesquicentennial Hires program.

Provost John Wiley says the proposals were chosen from 147 applications that were all worthy of consideration. The proposals will add 32 new faculty members, and 16 to 25 of them should be at work by the fall semester, Wiley says.

The Sesquicentennial Hires program is part of Ward's budget initiative, which the chancellor says gives concrete meaning to the concept of "public-private partnership." Under Ward's proposal, the state would provide enough funding to bring UW-Madison to the median of its peer group in terms of state support. In turn, the campus

would take responsibility for raising non-state funds to maintain and strengthen the margin of excellence in its budget — money from federal/private grants and contracts and annual giving that will keep the university among the best in the world for years to come.

Currently, the Madison campus is below the median of its peers by about \$1,900 per undergraduate student in state support. This seriously threatens the university's ability to raise additional private funds and maintain its competitiveness to attract the best faculty, staff, students and research grants, Ward says. The shortfall totals roughly \$57 million, which the chancellor is asking the state to provide during the next four years. Some of the additional money would be used to restore faculty positions lost to budget cuts and reallocations during the past few years, and would

be matched by private funds from the University of Wisconsin Foundation and the Wisconsin Alumni Research Foundation.

Wiley says the university is using gift funds now to add the new Sesquicentennial Hires faculty to show university commitment to strengthening and preparing the campus for the challenges of the future. The Sesquicentennial Hires will be in addition to the estimated 400 faculty the university will need to hire in the next four years due to normal turnover.

Overall, Wiley says, virtually all of the 147 proposals were excellent in that they identified interesting and potentially important opportunities for the campus.

"They also revealed some intriguing themes that have arisen spontaneously in many different parts of the campus," Wiley

*continued on page six*

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Seasonal questions answered.

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No business like snow business.

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Helping the campus environment  
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## Professor takes on death row appeal

Erik Christianson

At Holman Correctional Facility, just north of the Florida panhandle in Atmore, Ala., Jeffrey Day Rieber waits to die — and some Madison lawyers, UW-Madison law students and a law professor are laboring to prevent his death.

Convicted in the shooting death of a convenience store clerk in 1992, Rieber is one of about 160 inmates on Alabama's death row. A jury sentenced Rieber to life in prison without parole, but the judge overruled the verdict and sentenced him to death. Alabama is one of only four states that allows a judicial override

of a jury verdict.

Rieber's case now rests with UW-Madison Law Professor Frank Tuerkheimer, several law students and two Madison attorneys. They are seeking to overturn Rieber's death penalty verdict because of what they believe was inadequate legal representation.

Because of attorney-client privilege and confidentiality concerns, Tuerkheimer and his students are prevented from discussing the specifics of their legal work on the case. But in general, they are re-examining the defense by Rieber's former attorney, researching death penalty laws at the state

and federal levels, and investigating Rieber's background.

"We are going back and doing everything his lawyer should have done," says Tuerkheimer, a former U.S. attorney and former Watergate special prosecutor.

The student journeys to the prison where Rieber is incarcerated mark the first time Wisconsin law students have visited death row while working on a capital case. Capital punishment is legal in 38 states, but not Wisconsin.

Like most of his fellow death row inmates, Rieber is poor and was represented

*continued on page eleven*

## Faculty hirings

continued from page one

adds. "For example, more than a dozen proposals concerned expansions in computational areas that would take advantage of and expand the use of high-speed computation and communication, novel computer architectures or computer graphics."

Wiley says the university intends to convene strategy sessions organized around several of these common-theme areas.

"Obviously, we cannot hire all of the 40 or 50 faculty proposed by a dozen different groups in one theme area," he says. "What we can do, though, is ask the proposers to think about the most critical missing elements, areas of commonality and strategic positioning of the campus, and return with proposals that are more tightly focused on those few positions that would provide the highest payoff for Wisconsin."

### LIST OF PROPOSALS ACCEPTED

The following proposals were selected for immediate recruitment (also see: [www.wisc.edu/provost/hiring/sequi.html](http://www.wisc.edu/provost/hiring/sequi.html)).

■ Chemical Biology (three positions): This new field studies the intersection of chemistry and biology, specifically the diversity of small molecules and their interactions with cellular proteins. This proposal will increase cell biology understanding and lead to new chemical discoveries in agriculture and medicine.

■ Chemistry (two positions): The department, ranked in the top 10 nationally, has not hired any faculty in the past six years, while its teaching credits have increased 43 percent. Targeted areas are biological, materials, environmental and computational chemistry.

■ Computer Engineering (two positions): The department will hire faculty with knowledge of electrical and computer engineering and computer sciences to maximize research potential.

■ Computer Science (two positions): As this field becomes increasingly competitive, the department will keep pace by hiring faculty to teach and do research in graphics, networking and possibly a third area not yet named.

■ Cosmology (two positions): In conjunction with the \$100 million AMANDA neutrino telescope in Antarctica, the proposal will hire faculty to help assume the leadership in Antarctica astrophysics and high-energy astrophysics. The astronomy and physics departments will also benefit from the hires. Project AMANDA contains unusually strong components to enhance undergraduate education and outreach to K-12 schools for improved science education.

■ Cultural Studies in Global Context (three positions): The proposal will establish an institutional presence for cultural studies in the humanities. It will enhance programming, link faculty from different departments and programs, and provide international visibility for this new field of humanities research.

■ Economic Sociology (two positions): This proposal will bolster the economic sociology program and the sociology department, ranked as one of the top three in the country by The National Research Council. Economic History studies political and social institutions and how their practices shape and limit the production and exchange of economic values.

■ Food Safety (four positions): Details of this hybrid initiative are not ready for announcement.

■ Minimally Invasive Medical Technology (three positions): This proposal would link the expertise of the College of Engineering and the Medical School in minimally invasive surgery, biomaterials/tissue engineering, biomedical computing, biomedical visualization and medical imaging.

■ Religious Studies (four positions): This interdisciplinary program will seek to add faculty with expertise in the following categories: Islam and Society; Chinese/Japanese Religious History and Literature; Christianity and Society in Asia, Africa or Latin America; 1500-present; Theravada Buddhism; and Religious Ethics.

■ Structural Biology (three positions): Targets faculty with teaching and research interests in X-ray crystallography, nuclear magnetic resonance, atomic force microscopy, computational biochemistry and other structural biology areas.

■ Visiting Artist (two positions): This proposal aims at creating an interdisciplinary visiting artist program in the Arts Institute. ■

# NASA-funded consortium to bring space-age forecasts to farm, forest

Terri Gregory

A new, NASA-funded research initiative, combining expertise from universities, industry, and state and federal government, promises to bring space-age technology to farm and forest in the Upper Midwest.

Organized as a consortium and based at UW-Madison and the University of Minnesota-Twin Cities, the new program is one of seven regional earth science application centers funded as part of a \$14 million effort to direct NASA technology to solving environmental related societal problems.

The UW-Madison component of the new consortium is a combined effort of the Space Science and Engineering Center (SSEC) and the departments of Atmospheric and Oceanic Sciences, Soil Science, and Forest Ecology and Management. It will be directed by George Diak, a senior SSEC scientist, and will focus on the development of new tools — computer models and new remote-sensing and meteorological technologies — to aid management decisions made by agricultural and natural resource managers. UM-Twin Cities scientists will concentrate on monitoring natural resource bases themselves.

The new center, Diak says, has two primary goals: "We want to have a significant positive impact on the economy of the Upper Midwest by applying computer models and new measurement tools to current resource problems, and we want to create new tools to help give us insight into the potential effects of different management practices.

"This includes looking at things like the potential effects of regional climate changes and their influence on forestry and agri-

culture, and our ability to sustain natural and managed environments," Diak says.

Other members of the Wisconsin component of the consortium include Champion International Corp., Case Corp. of Racine, the Wisconsin Department of Natural Resources and the U.S. Forest Service.

According to Diak, the consortium will work on building computer models that depend on remote-sensing technology, satellite-based instruments capable of making detailed measurements of the atmosphere or land over large geographic distances. As NASA's Earth Observing System is deployed over the next decade, a wealth of new satellites and satellite-based tools for measuring the Earth and its atmosphere will come into play.

Using those measurements to power new computer models, Diak said, scientists can help farmers and resource managers determine things like soil moisture, nitrogen content of the soil and grain moisture as crops mature. In forests, by observing and modeling conditions of the soil, plants and atmosphere, it may be possible to forecast disease and insect infestations.

Already, Diak says, there are models that help farmers decide when to irrigate, when to apply chemicals for disease control, and that warn cranberry growers of the potential for overnight frost. Examples of those models can be found on a Web site at <http://bob.soils.wisc.edu/fasacan.html>.

The consortium's industrial members would help find "cost-efficient methods of commercializing emerging farming technologies," says James Stoddart, vice president for Case Corporation's Advanced Farming System's Division. ■

## Let it snow: UW staff clear the path with safety, environment in mind

Liz Beyler

As snow blankets the UW-Madison campus, university officials continue to improve snow removal efforts to ensure public safety while protecting the environment.

The university's Safety Department, with the help of staff from Environmental Services and Custodial Services, has prepared draft guidelines for wintertime salt use on campus.

"When you're out there slipping around, it's easy to think of salt as a way to improve your safety, but you have to think of the environmental consequences, too," says Peter Reinhardt, director of the Safety Department's Chemical and Environmental Safety Program.

"There are a lot of good ideas out there — common-sense practices — for reducing salt use. We want to put them into the guidelines and share them with the entire campus," Reinhardt says. "Hopefully that will raise awareness of the problem and encourage people to be a little more careful when spreading salt."

Reinhardt says the university has already made significant strides in its salt reduction efforts:

■ The Physical Plant reformulated its sanding mixture, which now contains only 5 percent salt. And to cut down on salt use, "No Plow, No Salt" areas were designated in 1995.



and some stairs at Steenbock Library, Vilas, Chamberlin and Agriculture halls, and the Educational Science and Teacher Education buildings.

■ This year, several stairways were added to the list, including Lathrop Hall, Wendt and Memorial libraries, and Atmospheric Sciences. If you'd like to nominate an area for winter closure, contact Daniel Einstein, Physical Plant environmental management coordinator, at 265-3417.

The new guidelines are intended to encourage prudent salt use, minimize salt runoff into Madison lakes, and lessen the damage salt can cause to streets, walkways, vehicles, railings, grass and plantings.

The draft guidelines say early and frequent snow removal is the best practice to minimize salt use because it helps prevent ice formation. Salt doesn't work very well below zero, and has no effect below minus 6 degrees Fahrenheit.

Pedestrians are encouraged to call 263-3333 to report unsafe areas that need to be cleared. They are asked to stay on cleared paths and plowed snow routes, and not cut corners or make their own paths.

For a copy of *Best Management Practices for Salt Use on the University of Wisconsin-Madison Campus*, contact Sally Rowe in the Safety Department by e-mail: [sally.rowe@mail.admin.wisc.edu](mailto:sally.rowe@mail.admin.wisc.edu), or call 262-0979. The department welcomes comments on the guidelines. ■

FOR IMMEDIATE RELEASE 1/8/99  
Contact: Provost John Wiley, (608) 262-1304

NOTE TO EDITORS: An accompanying release provides a summary of accepted proposals.

## CHANCELLOR APPROVES PLAN TO ADD 32 FACULTY

MADISON-Twelve faculty hiring proposals spanning the biological, physical and social sciences and humanities have been approved by Chancellor David Ward in the first round of the Sesquicentennial Hires program.

Provost John Wiley says the proposals were chosen from 147 applications that were all worthy of consideration. The proposals will add 32 new faculty members, and 16 to 25 of them should be at work by the fall semester, Wiley says.

The Sesquicentennial Hires program is part of Ward's budget initiative, which the chancellor says gives concrete meaning to the concept of "public-private partnership." Under Ward's proposal, the state would provide enough funding to bring UW-Madison to the median of its peer group in terms of state support. In turn, the campus would take responsibility for raising non-state funds to maintain and strengthen the margin of excellence in its budget - money from federal/private grants and contracts and annual giving that will keep the university among the best in the world for years to come.

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"They also revealed some intriguing themes that have arisen spontaneously in many different parts of the campus," Wiley adds. "For example, more than a dozen proposals concerned expansions in computational areas that would take advantage of and expand the use of high-speed computation and communication, novel computer architectures or computer graphics."

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"Obviously, we cannot hire all of the 40 or 50 faculty proposed by a dozen different groups in one theme area," he says. "What we can do, though, is ask the proposers to think about the most critical missing elements, areas of commonality, and strategic positioning of the campus, and return with proposals that are more tightly focused on those few positions that would provide the highest payoff for Wisconsin."

###

-- Erik Christianson, (608) 262-0930

## PROPOSALS ACCEPTED FOR SESQUICENTENNIAL HIRES PROGRAM

Here is the list of proposals selected for immediate recruitment under the first round of Chancellor David Ward's Sesquicentennial Hires program:

- \* Chemical Biology (three positions): This new field studies the intersection of chemistry and biology, specifically the diversity of small molecules and their interactions with cellular proteins. This proposal will increase cell biology understanding and lead to new chemical discoveries in agriculture and medicine.
- \* Chemistry (two positions): The department, ranked in the top 10 nationally, has not hired any faculty in the past six years, while its teaching credits have increased 43 percent. Targeted areas are biological, materials, environmental and computational chemistry.
- \* Computer Engineering (two positions): The department will hire faculty with knowledge of electrical and computer engineering and computer sciences to maximize research potential. The faculty will also teach in the new computer engineering degree program.
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- \* Cosmology (two positions): In conjunction with the \$100 million AMANDA neutrino telescope in Antarctica, the proposal will hire faculty to help assume the leadership in Antarctica astrophysics and high-energy astrophysics. The astronomy and physics departments will also benefit from the hires. Project AMANDA also contains unusually strong components to enhance undergraduate education and outreach to K-12 schools for improved science education.
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- \* Food Safety (four positions): The details of this hybrid initiative are not yet ready for announcement.
- \* Minimally Invasive Medical Technology (three positions): This proposal would link the expertise of the College of Engineering and the Medical School in minimally invasive surgery, biomaterials/tissue engineering, biomedical computing, biomedical visualization and medical imaging.
- \* Religious Studies (four positions): This interdisciplinary program will seek to add faculty with expertise in the following categories: Islam and Society; Chinese/Japanese Religious History and Literature; Christianity and Society in Asia, Africa or Latin America, 1500-present; Theravada

## Buddhism; and Religious Ethics.

\* **Structural Biology** (three positions): This proposal targets faculty with teaching and research interests in x-ray crystallography, nuclear magnetic resonance, atomic force microscopy, computational biochemistry and other structural biology areas.

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# Council ring offers rest spot to Arboretum prairie visitors

Sarah Wortham

Walking the trails of Curtis Prairie, surrounded by tall grasses and stalks of flowers, is already a special experience for visitors to the UW-Madison Arboretum. But thanks to a generous gift, a beautiful stone council ring will offer a restful place for reflection and a centralized site for groups to gather at the edge of the prairie.

The Margaret Hudson Council Ring is a gift of longtime Arboretum supporter and former naturalist Margaret Hudson Van Alstyne. The Arboretum's master plan for physical improvements, completed in 1994, called for such a council ring near the McKay Visitor Center, but since that time the Arboretum's landscape designers selected a more secluded spot accessible from the western end of the main parking lot.

The council ring was a signature element of the works of famed turn-of-the-century landscape architect Jens Jensen. The council ring design emphasizes the importance of human beings coming together as equals, and also symbolizes the council fires of native people in North America. The Arboretum already has one council ring, dedicated in 1938 in memory of Jensen's grandson, Kenneth Jensen Wheeler, who

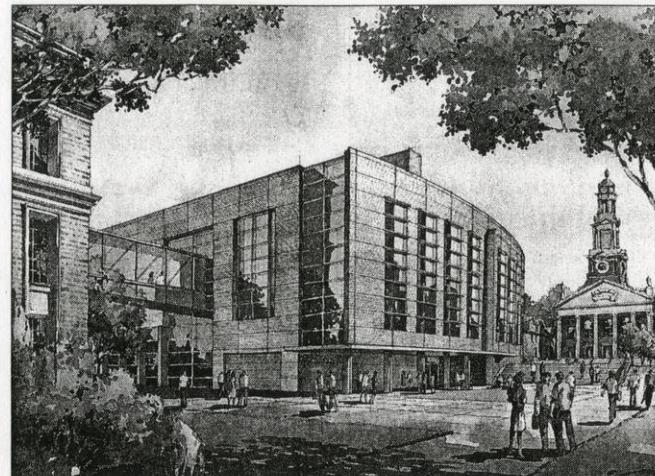
died during his senior year in the landscape architecture program at UW-Madison.

Van Alstyne says her interest in Jensen's work influenced her decision to give the council ring to the Arboretum.

"I've always been fascinated by the ideas of Jens Jensen, and the council ring offers a meaningful place for people to meet as they set out on a tour of the Arboretum," Van Alstyne says.

The council ring will be set within a small grove of oaks at the edge of Curtis Prairie, according to Arboretum Director Gregory D. Armstrong. From this location visitors can enjoy a broad view of the 60-plus-acre prairie, and the surrounding trees will offer a glimpse of the savanna that graced the site before it was settled in the 1840s.

The design for the council ring calls for special limestone that is similar to the stone used in walls in other parts of the Arboretum. Bachmann Construction has already begun work on the ring, digging the earth for footings and the foundation wall. But the stonework may not begin until spring, depending on the weather. Armstrong says the ring should be finished by the end of May ■



The Engineering Centers building is planned for the corner of Breese Terrace and University Avenue.

## City approves \$52 million engineering campus project

The Madison City Council has approved the \$52 million Engineering Centers building project, clearing the way for the first phase of a project scheduled to be completed in 2002.

The council Dec. 1 approved a zoning change to allow for the construction of the research facility on the corner of Breese Terrace and University Avenue. An 800-stall parking ramp would be built north of Camp Randall Stadium on what is now Lot 17.

Bids for the ramp will be sought in the next few months, and construction on the parking structure could start next spring, says Bruce Braun, assistant vice chancellor for facilities planning and management.

Madison council members have praised the university for its willingness to work with the city and adjacent neighborhoods, and expressed their support for the proposal.

The Engineering Centers building would provide much-needed additional space for the college's research projects, outreach activities and student organizations. The new ramp would help meet the need for more parking, especially for visitors to the Engineering campus, Union South, the Biochemistry Building, the UW Foundation and athletic events. ■



Veterinary medicine doctors, from left to right, Gregory MacEwen, David Vail and Lisa Forrest, evaluate follow-up X-rays of a dog. The school treats up to 3,000 pets a year.

## Gifts boost cancer program in veterinary medicine

The cancer treatment program at UW-Madison's School of Veterinary Medicine, which has become one of the nation's largest, is looking for room to grow.

School officials have created a \$250,000 campaign to create a new Cancer Recovery Ward to accommodate the huge increase in pets being treated and to provide more modern facilities. It also just completed a \$500,000 project to install a new computerized tomography (CT) scanner, which provides researchers with an extremely precise diagnostic tool.

"Our program has really grown in recent years, and there's no sign it's going to slow down," says Gregory MacEwen, an oncologist with the school. In recent years, the program has treated between 2,500 and 3,000 pets each year that are referred from across the country.

Veterinary oncology was a small and relatively unknown field only a decade ago, but treatments have become much more promising in recent years, MacEwen says. Treatments have almost cured early-stage melanoma in pets, he says, and have an 80 percent success rate in treating soft-tissue cancers. With new drugs to treat bone cancer and lymphoma, doctors can typically add 12 to 18 months to the life of a family pet.

As a result, veterinarians in the field are now more likely to refer animal cancer cases to schools with oncology programs. Although the treatments are expensive, averaging \$1,500 per client, more pet owners are willing to take the extra step. And in addition to helping animals, veterinary cancer programs can advance knowledge on human cancer as well.

The Cancer Recovery Ward will provide a separate and more comfortable environment for the animals, which are often hospitalized for three to four weeks while they are recovering from major surgeries or are receiving chemotherapy.

The CT scanner will be a major boon to the cancer research program, MacEwen says, because it can be used to precisely monitor the response of tumors to therapy. Private donors gave a total of \$90,000 to support the CT scanner purchase. ■

## Campus committee begins diversity plan review

Erik Christianson

A draft plan to increase diversity at UW-Madison is now under review by a campus committee and will be forwarded to university leaders and the public early next year.

The Diversity Plan Steering Committee on Tuesday, Dec. 8, reviewed the draft, which, when finished, will be the university's response to the UW System initiative to increase student, staff and faculty diversity during the next 10 years.

"We are confident that there are very meaningful and positive recommendations in the report to address diversity issues on campus," says Paul Barrows, associate vice chancellor for academic services and campus diversity, and co-chair of the steering committee.

As part of the steering committee's effort to create the draft report, four working groups examined diversity issues related to undergraduate students, graduate and professional students, faculty and staff, and curriculum, Barrows says.

Recommendations from each working group form the basis for the draft report. Steering committee members include faculty representing key committees, academic staff representing key administrative units, and students.

"This is the way that policy should be set at a university," says Bernice Durand, professor of physics and co-chair of the steering committee. "We have had a broad base with a large number of people

### DETAILS

Public hearings on the draft plan are scheduled:  
Jan. 26 from 4:30-6:30 p.m.  
at Memorial Union;  
Feb. 2 from 2:30-4:30 p.m.  
in Bascom Hall;  
and Feb. 3 from 2:30-4:30 p.m.  
in Union South.

involved. The report will now be turned over to the governance groups, the administration and the campus community for their participation."

The draft report will be posted on the Internet for public review in early January. Three public hearings are scheduled before the Faculty Senate takes up the diversity plan at its meetings on Feb. 1 and March 1, says Durand, who is also a member of the University Committee. The Academic Staff Assembly and Associated Students of Madison also will review the plan early next year.

The UW System Board of Regents approved Plan 2008 last May. The initiative aims to build an educational pipeline to K-12 schools; increase retention and graduation of minority students; boost financial aid; increase minority faculty and staff; and bolster overall campus diversity.

UW-Madison and the other UW institutions must present their diversity plans to UW System officials by April 15. The regents will review the plans in June. ■

Eng.

## LANDSCAPE MAY ALTER CLIMATE

Greenhouse gases, the long-standing villains of climate change, may have a significant new partner in crime: wholesale changes to the world's landscapes by humans.

From the deforestation of the Amazon to the transformation of millions of acres of North American prairies to farmland, humans have remolded the surface of the Earth. Those changes, scientists now suspect, may have a significant influence on climate, changing regional weather patterns at least and possibly contributing to global shifts in climate.

Addressing scientists Tuesday, Dec. 8, in San Francisco at the fall meeting of the American Geophysical Union, UW-Madison climatologist Jonathan Foley said changes to the landscape, coupled with global increases in atmospheric carbon dioxide concentrations, could pack a one-two punch capable of remaking regional climates by altering patterns of rainfall and temperature.

In the past, climate-change scenarios have been linked primarily to the increasing concentrations in the world's atmosphere of the so-called greenhouse gases, carbon dioxide and methane, for example. But some scientists are now beginning to examine the influence on climate of the surface of the Earth and the collection of landscapes, such as forests, farmland and deserts that collectively make up what is known as the biosphere.

The biosphere, argues Foley, probably exerts an influence on climate that is equal to, and in some instances greater than, the accumulation of greenhouse gases. When humans alter landscapes on a massive scale, as has happened across the globe in the past 200 years as farms have replaced forests, basic patterns of climate are disrupted and change is set in motion.

## COLDS TRIGGER ASTHMA

About 85 percent of severe asthma attacks are triggered by a viral respiratory infection. "Respiratory infections are the number one reason patients get attacks of asthma, wind up in the emergency room and are hospitalized," says William W. Busse, professor of medicine and head of the allergy and immunology section at the Medical School.

Recently, the National Institutes of Health awarded Busse and his research team a new \$1.4 million grant to determine how respiratory viruses trigger the development of asthma or cause people who already have the disease to wheeze and cough.

Busse's team will focus on the common cold virus because it has been shown to be associated with worsening of asthma. Researchers will study how the rhinovirus sets up a chain of events that cause certain cells to travel to the airway and produce an inflammatory response that can persist for weeks.

## STUDENT-LED FUSION PROJECT WOWS SCIENTIFIC COMMUNITY

A unique student-staffed fusion project in UW-Madison's College of Engineering is generating excitement in the physics community.

The project, called the Pegasus Toroidal Experiment, produced this year its first plasma — an ionized gas used to store energy and create a fusion reaction — faster than the field has seen before. Scientists from England, Russia and the U.S. sent congratulations on the feat.

What's equally remarkable is this project relies heavily on student researchers, who organize and execute all stages. For a glimpse into this grassroots fusion effort, check "headlines" on the engineering web site, <http://www.engr.wisc.edu/coe/headlines/1998/Nov16.html>.

# Maps give new view of world and cosmos

Terry Devitt

Purchased from a Koryak shaman in Siberia 100 years ago, the coat of softened reindeer skin is decorated with what was long thought to be a random design of bleached-hide disks. Only recently has the covey of disks been assigned what may be its true meaning: a sky map representing the constellations familiar to the Koryak.

This remarkable coat — as well as stick charts from the Marshall Islands, a Lukasa memory board from the Congo and an arrangement of knotted strings left by the Incas — represents an indigenous view of place, the subject of the latest volume in the massive *History of Cartography* project.

"This volume opens up the question of maps in non-Western societies," says David Woodward, a professor of geography and the co-editor of the multi-volume *History of Cartography* published by the University of Chicago Press.

"Here we have a whole volume about what many people wouldn't think of as maps because they look so different from Western ways of representing the world," Woodward says. "It is really overturning the whole idea of a map."

Instead of the measured, geometric representation of the world embodied in

Western maps, charts and globes, indigenous societies often transcend the scientific measurement of the earthly or cosmological through such things as dance, calendrical art, chants and mnemonic devices such as the Lukasa memory board, a configuration of beads and cowrie shells signifying the locations of lakes, trees, spirits and migration routes.

Such "maps" have different forms and functions than the purely cartographic purposes of traditional Western maps, according to Woodward.

Frequently, indigenous cultures view the physical landscape and universe as much more than a passive backdrop for human affairs. For instance, like the Koryak dancing coat with its summer and winter star maps, traditional cartography has a strong connection with shamanism and mystical knowledge.

Another important difference, says Woodward, is that indigenous maps frequently measure distance in time rather than space. Thus, travel is charted as the number of days it takes to arrive at a destination rather than miles or kilometers.

Like early Western maps, indigenous cartography has a tendency to place the well known prominently in the center,

relegating the unfamiliar to the margins.

But there are some indigenous maps, notes Woodward, that have virtually nothing in common with Western concepts. Examples are the stick maps used only by the people of the Pacific Marshall Islands.

Made from coconut fronds lashed to an open frame, and using shells to denote islands, the maps were never carried on the great ocean-going canoes. Instead, they were simply consulted before a voyage or used to teach the principles of swell patterns, a navigational technique that can predict the presence of an island by noting changes in the regular ocean swells.

The common purpose of these indigenous cartographic devices — whether it be an Aztec codex, an Australian Aboriginal bark painting or a Marshall Islands stick chart — is to depict a people's spatial knowledge of the world, Woodward says. But in addition, he says, they serve to remind us that there are other ways to view the world: "As soon as you go beyond the normal Western idea of a map — through a Koryak dancing coat or an Inca khipu — you get new insight and are able to see what rich forms of representation they truly are." ■

## The wisdom behind WISE

### Learning community boosts undergraduate women's success in the sciences

Brian Mattmiller

Imagine you are a first-year physical sciences major, your mind swimming with algebraic notations and atomic weights. Your calculus, chemistry and physics courses are packed with aspiring medical students all gunning for perfect GPAs. Your grueling study regime has you politely declining nights out with friends, and your neighbor's late-night stereo jam is slowly driving you nuts.

But let's add another stress: Let's say you're a woman, outnumbered in most science classrooms by about four-to-one. A sense of isolation may creep in, and for the first time you entertain the thought, "Maybe I chose the wrong path."

This is a common scenario in American higher education, where more than half of all young women who begin pursuing a career in science or engineering change majors in the first two years. By comparison, about two in three men continue on with their first-choice majors in those fields.

At UW-Madison, a program at Elizabeth Waters Hall is countering the trend. Called Women in Science and Engineering (WISE), the program creates a social network and common academic ground for about 100 undergraduate women.

"This has been a small, low-profile program, but we've seen some very dramatic results," says Caitlyn Allen, a plant pathology and women's studies professor who helped create WISE five years ago. "The social and structural support is the important part."

WISE women live together on two Liz Waters floors, and share discussion sections of core chemistry courses, which are required of virtually all science and engineering majors. The community has a range of social events that include dinners with faculty and academic games like "Science Olympiad" held on Sunday, Dec. 6.

Allen says bringing like-minded students together helps battle the isolation, dearth of female role models and chilly classroom climate many women encounter.

By some measures, it's proving its value. WISE students in 1997-98 had an average GPA of 3.39, while UW-Madison women overall averaged 2.98 and men averaged 2.88.

WISE house fellow Monica Awe, a junior in genetics and communication arts, says the learning community's success is almost entirely student-directed. "I think that's the biggest plus," she says. "When you bring similar people together, that



A student tests the electrical conductivity of a potato as part of a Science Olympiad held Sunday, Dec. 6, in Elizabeth Waters Hall, home of the Women in Science and Engineering learning community. The program has developed an educational and social network for women with a common goal: succeeding in a fiercely competitive field where they will be a minority.

networking is bound to happen. And it happens naturally, there's nothing forced about it." ■

## Group plans for future biology buildings

Brian Mattmiller

"Interactive" and "collaborative" should be themes for planning a new generation of biology buildings at UW-Madison, according to a committee responsible for strategic planning in biology.

The committee has recommended that three new buildings in the Henry Mall complex be constructed to pull together faculty from a variety of departments who share similar teaching and research interests. The new buildings are planned to promote interaction between departments and new opportunities for collaboration.

The Biological Sciences Strategic Planning Committee is part of UW-Madison's larger strategic planning effort that would guide

decision-making for future campus buildings. Committee members are now looking for feedback on their plan from faculty, staff and students in biological sciences.

The proposed new buildings include Microbial Sciences, which would integrate the departments of bacteriology, medical microbiology and immunology, and food microbiology and toxicology. A second building would replace two old biochemistry wings and house biochemists, structural biologists and molecular biologists. A third building would provide an expanded home for geneticists, and provide a campus-wide focus for cellular and developmental biology and neurobiology.

For more information, including the full text of the committee's report, visit <http://www.neuroscience.wisc.edu/bsscpc.htm>. ■

FOR IMMEDIATE RELEASE 12/10/98  
Contact: Virginia Hinshaw, Graduate School dean, (608) 262-1044

Engin.

## \$12 MILLION RAISED TO SUPPORT DISTINGUISHED GRADUATE FELLOWSHIPS

Individuals and companies donated more than \$12 million this past year to a new program, Wisconsin Distinguished Graduate Fellowships, that will help the University of Wisconsin-Madison gain a significant advantage in the heated competition for the nation's best and brightest graduate students.

The money has provided nearly 50 Wisconsin Distinguished Graduate Fellowships. UW-Madison officials expect to support as many as 400 graduate fellows by building a \$200-million endowment over 10 years.

The Distinguished Graduate Fellowships program, which involves all UW-Madison schools and colleges and has received a commitment of up to \$100 million in supplementing funds from the Wisconsin Alumni Research Foundation, would be among the largest programs of its kind anywhere.

"Everyone plays a critical role in generating this endowment -- an effort clearly fortified by WARF's financial commitment," says Graduate School Dean Virginia Hinshaw. "Some of these new fellowships are already underway and the future looks bright. This is a great way to strengthen our future as a leader in research."

For research universities like UW-Madison, graduate students are critical participants in the research, teaching and outreach activities at the heart of the institution. Graduate enrollment at UW-Madison fluctuates between 8,000 to 10,000 students annually, making it one of the largest graduate schools in the nation.

Committing such significant resources should help UW-Madison cope with the continuing decline in support for graduate study from state and federal governments.

Selected fellows pursuing master's and doctoral degrees may receive up to \$24,000 annually through the Distinguished Graduate Fellowship program. Full fellows also are eligible for remission of the non-resident portion of fees and tuition.

Leaders of the Graduate School, the UW Foundation and WARF are working with schools and colleges on campus to build the endowment. WARF is a not-for-profit corporation that manages and licenses patents on behalf of UW-Madison faculty and staff. The UW Foundation, also an independent nonprofit corporation, is the principal fund-raising organization for the university.

Schools and colleges that have generated fellowships this year include Agriculture and Life Sciences, Business, Engineering, Education, Letters and Science, Pharmacy and the Graduate School.

"An impressive aspect is the diversity of programs designated to receive the fellowship support," Hinshaw says.

Those programs include German, Scandinavian Studies, Biotechnology, Computer Science, Materials Science, Electrical and Computer Engineering, Industrial Engineering, Physics, Political Science, Accounting and Information Systems, Operations and Information Management, Distribution Management and Kinesiology.

"This is an exciting beginning -- now only \$89 million to go," Hinshaw says. "We encourage potential donors to consider this form of giving."

A gift of \$250,000, coupled with matching funds, will provide an endowment for a full fellowship. Individuals or organizations making donations at that level may name and designate the fellowship.

For information on supporting the fellowship endowment, contact David Weerts at the UW Foundation, (608) 262-5250, or Jim Knickmeyer at the Graduate School, (608) 262-5801.

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--Tim Kelley (608) 265-9870

## Learning

## New Web site experiments with scholarly publishing

A new campus Web site examining the fundamental nature of the parent-child relationship represents an experiment in alternative publishing that puts scholarly papers online months before they would normally be available.

The site, Parenthood in America (<http://parenthood.library.wisc.edu/>), contains 36 presentations from a major conference held in Madison last spring. It offers diverse views on some of the most vexing issues facing the nation, including divorce, moral development, children and schools, health care, reproduction and child care.

"Parenthood implies 'hands on' work in which parents grow with their children," says Jack C. Westman, professor emeritus in the Department of Psychiatry and organizer of the conference. "Although societal pressures can

have negative effects, they also provide opportunities for constructive developments. The site is devoted to elevating parenthood to the status it deserves."

The Web site is an experiment in alternative publishing by campus libraries, the conference planning committee and the UW Press. By placing presentations on the Internet, the proceedings are accessible to millions of potential readers many months before they would normally appear in print.

The site is directed at a broad audience of social workers, psychologists, lawyers, educators, policymakers and an informed general public. The papers are available in their entirety and can be searched by topic.

"Libraries can and should play an active role in the dissemination of information and

knowledge," says Kenneth L. Frazier, General Library System director. "This effort provides striking evidence that a model of communicating leading edge, authoritative knowledge quickly, cheaply and effectively is possible."

A second outcome of the project will be printed publication of selections from the proceedings by the UW Press in an anthology. "The printed version will allow for thoughtful editing of the papers and compilation in a format which is completely portable," says Steve Salemson, UW Press associate director.

A third anticipated outcome is the development of a national Parenthood organization along the lines of the American Association of Retired Persons. A meeting was recently held in Chicago to explore ways of pursuing conference goals into the future. ■

## Community

## City advances \$52 million engineering campus project

Approval from the Madison City Council is the last step remaining in the College of Engineering's journey to upgrade its facilities and build a new parking ramp.

The Plan Commission unanimously approved the \$52 million Engineering Centers Building project Monday, paving the way for the council to take up the proposal Dec. 1.

The plan commission approved a zoning change to allow for the construction of the research facility on the corner of Breez Terrace and University Avenue. The 800-stall parking ramp would be built north of Camp Randall Stadium on what is now Lot 17.

Bids for the ramp will be sought in the next few months, and construction on the parking structure could start next spring, says Bruce Braun, assistant vice chancellor for Facilities Planning and Management. The entire project is scheduled to be completed in 2002.

"I think this is a marvelous step forward, because we had some honest and very long negotiations with the neighborhoods, individuals and the aldermen involved," Braun says. "This is living testimony to the chancellor's stated desire that we be good neighbors and work closely with the city."

Madison Alds. Ken Golden and Napoleon Smith, whose districts would be affected by the project, praised the university for its willingness to work with the city and adjacent neighborhoods and expressed their support for the proposal.

The Engineering Centers building would provide much-needed space for the college's research projects, outreach activities and student organizations. The ramp would help meet the need for more parking, especially for visitors to the Engineering campus, Union South, the Biochemistry Building, the UW Foundation and athletic events. ■



Nina Smith of Waterloo, Iowa, the consensus No. 1 high school basketball recruit in the nation, signs autographs in Madison after watching a basketball game here. She has signed a letter of intent to attend UW-Madison. The prized recruit joins Leah Hefta of McFarland and Kristi Seeger of Stoughton in signing national letters of intent to attend UW-Madison. Smith, a 6-4 center, is a first-team Parade all-American and the second first-team recruit signed at Wisconsin. Smith showed her dominance by averaging 22.1 points while shooting almost 70 percent from the field last season. This past summer, Smith was the leading scorer on the USA team participating in the World Youth Games in Moscow, Russia. The team earned a bronze medal.

## Notable

## Student loan refinancing available through January

Congress' recent reauthorization of higher education spending includes an opportunity for student loan refinancing at a special low rate. But this window of opportunity will close at the end of January.

"Prior borrowers need to be proactive," says Steven Van Ess, director of student financial services. "If this is something you are interested in pursuing, now is the time to do it."

The Higher Education Amendments of 1998, which reauthorized the 1965 Higher Education Act, allow student loan borrowers to apply for a consolidation loan from the U.S. Department of Education's direct loan program.

The interest rate on the consolidation loan is 7.46 percent, significantly lower than most existing student loan rates. While the interest rate would be adjusted each year, it would be based on a lower interest rate formula for the life of the loan.

According to the Department of Education, most people who consolidate their student

loans under this program would save about \$500 per every \$10,000 of debt on an average 10-year loan.

To qualify, former students with loans must have at least one federal direct loan or one loan from the Federal Family Education Loan Program, which includes Stafford Loans and the former Guaranteed Student Loans. There is no charge for the loan consolidation or a minimum balance, and one or more loans can be refinanced.

Current students are eligible only if they hold direct loans. Those with other types of student loans, such as institutional loans, do not qualify.

Van Ess recommends that people contact their lending institution for more details on this refinancing opportunity. They can also obtain more information and an application by contacting the Department of Education's Direct Loan origination center at (800) 557-7392 or on the web at <http://www.ed.gov/DirectLoan>. The deadline to apply is Jan. 31. ■

## Business offers first Net course

The School of Business is launching its first Internet course, a class on management fundamentals.

Students who sign up for Professor Randall Dunham's Organizational Behavior course can study the online material anytime and anywhere they have World Wide Web access — home computers, laptops in remote locations or university computer labs.

Dunham has achieved a national reputation for his innovative teaching of management issues as well as his pioneering efforts in instructional technology. The three-credit course is open to students who want to master the fundamentals of organizational behavior, managing people and groups in organizations.

Through electronic discussion rooms, students can communicate with team members, classmates and instructors. The nonlinear nature of the course allows students to take the course material as they choose.

A course sampler is available by visiting <http://instruction.bus.wisc.edu/obdemo>. ■

## NEWSMAKERS

## QUOTABLE KETTL

Don Kettl, a political science professor who heads the La Follette Institute of Public Affairs, has been the source of choice for reporters seeking a nonpartisan "political observer" in the weeks before November's elections.

Kettl has been quoted at least 30 times in Wisconsin daily newspapers alone this election year, and he shared the commentator's desk for WISC-TV (Ch. 3) election-night coverage.

Kettl typically urges campaigners to give voters more credit, and is sought out for his views on campaign financing (he chaired a state commission on the subject). Even before the September primary, he was predicting a big-money showdown between liberal and conservative forces. "It'll be bombs away from all sides," he told the *Milwaukee Journal Sentinel*.

## PFAU LENDS ELECTION EXPERTISE

On the national campaign scene, sound bites from a rather extensive interview with Michael Pfau, UW-Madison professor of journalism, were featured on an election-eve edition of ABC's "Nightline." Pfau says he discussed the role and influence of campaign advertising in the Feingold-Neumann race, the influence of soft money and the impact of Feingold's strategy to limit soft money and negative campaigning.

## WRIGHT IDEAS EXAMINED

Ken Burns' PBS documentary on architect Frank Lloyd Wright featured history professor William Cronon discussing points including the architect's relationship to broader Emersonian ideas about the relationship between the natural world and the human psyche. "Wright's 'organic' architecture often is misunderstood," Cronon says. "Wright took nature and passed it through the mind of the artist, so he saw his buildings as being more natural than nature itself. Consequently, he wasn't really concerned with whether the roof leaked — what mattered to Wright was the ideal form."

## ESCAPISM IS INESCAPABLE

Professor emeritus of geography Yi-Fu Tuan's new book, *Escapism* (Johns Hopkins University Press; 245 pages; \$28), is attracting academic attention. *The Chronicle of Higher Education* recently reviewed the book, which tackles the human impulse toward escape, fantasy and transformation.

"A human being is an animal who is congenitally indisposed to accept reality as it is," writes the author. Escapism is human, and in fact, inescapable.

Culture can be seen, in general, as an escape from nature, he argues. Our artifacts, our constructions, our placating rituals are attempts to rope nature — unpredictable and often violent — into the human world. But there is also the seeming obverse, the escape to nature. Since antiquity, there have been versions of the back-to-nature sentiment. However, as Tuan points out, the nature one is going back to is itself a construction, a world filtered through cultural concepts of landscape, countryside and wilderness. Yet he says an escape to nature is still an escape from nature.

If escapism, through imagination, can give us a taste of heaven, Tuan writes, it can also create terrestrial hell. The mind "suffers from certain distortions and limitations that have the effect of taking us to where we, in our right mind, would not want to go."

More campus newsmakers: [www.news.wisc.edu/wire/nm.html](http://www.news.wisc.edu/wire/nm.html).

Engineering

Engineering  
Eng. gen

Dec. 3, 1998

TO: Editors, news directors  
FROM: Brian Mattmiller, (608) 262-9772  
RE: The Black Inventors Museum

The contributions of two centuries of African-American inventors, whose ideas range from labor-saving to life-saving innovations, are on display today and Friday, Dec. 4 at UW-Madison's College of Engineering.

The Black Inventions Museum, a traveling exhibit based in Los Angeles, will be showcased from 9 a.m. to 5 p.m. Friday in the Engineering Hall lobby, 1415 Johnson Drive. The exhibit, which is free and open to the public, features biographical sketches of inventors, scale models of inventions and copies of patent documents on more than 100 widely used inventions.

Inventions include the lawn mower, invented by John A. Burr; the gas mask and traffic signal, invented by Garrett Morgan; the fire extinguisher, invented by Tom J. Marshal; the refrigerator, by J. Standard; and the roller-coaster and telephone transmitter, by Granville T. Woods.

Shown in dozens of universities, churches and libraries across the country, the museum is a non-profit corporation founded by book publisher Lady Sala S. Shabazz. Another portion of the exhibit focuses on major advances in African civilization, such as paper, medicine and the alphabet.

The program is sponsored by the Wisconsin Black Engineering Student Society. If you wish to cover the event, contact Alem Asres, an assistant dean of engineering and director of diversity affairs, at (608) 262-2473; or e-mail [asres@engr.wisc.edu](mailto:asres@engr.wisc.edu).

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# Students Take On Real World of Tutoring

By Erik Christianson

**A** SUCCESSFUL college education is not limited to attending lectures and taking notes. It includes learning from the classroom of real life.

Just ask Amy Thiessen.

A senior in elementary education, Thiessen spent 15-20 hours each week last year as a tutor helping Madison kindergartners learn how to read.

"We learn all these theories in class, but when you go into the school and into the classroom, it's so different," says Thiessen, who is from McFarland, Wis. "It's important to see what teaching is like from a hands-on perspective."

Thiessen got much of her up-close experience through the America Reads Challenge, a federal literacy program started last year to ensure that children know how to read effectively and independently by the end of third grade.

Forty-eight UW-Madison students participated as America Reads tutors during the 1997-98 academic year through the work-study financial aid program. This year, Madison school officials hope that 200 UW-Madison work-study students sign up for the program, which focuses primarily on helping elementary school students with reading difficulties or from low-income homes.

"We've gotten uniformly positive feedback from staff who worked with the UW-Madison students," says Kathy Price, community partnership coordinator for the Madison School District. "We're anxious to build on last year's practice."

Thiessen, who hopes to work as a kindergarten teacher after graduation, honed her teaching skills by tutoring kindergartners and second graders at Franklin Elementary School last fall. She helped them read and spell during class and after school. During the second semester, Thiessen completed her teaching practicum in the same kindergarten class in which she had tutored.

"That was really, really neat," she says.

"It built on the relationships I had already established with the students and helped me out as a future teacher."

Senior Amber Wasielewski wants to teach high-school Spanish after graduation, but she still counts her America Reads experience as invaluable. She tutored kindergartners and first graders at Aldo Leopold Elementary School.

"I have an increased ability to think about new ways to do things after working as a tutor with children of different learning levels," says Wasielewski, a Spanish major from South Milwaukee. "I think I'm more flexible. It also reinforced for me that I want to be a teacher."

America Reads is intended to complement classroom instruction and existing federal literacy programs, including Title I and Head Start. College students are encouraged to participate, especially if they qualify for work-study aid.

The program illustrates the value of the work-study program for the university, its students and the community. About 2,200 UW-Madison students held work-study jobs in 1997-98, earning \$2.8 million working on campus and at roughly 400 off-campus employers.

"We've had our students work in school districts before, but America Reads focused our vision," says Steve Van Ess, director of the Office of Student Financial Services, which oversees the campus work-study program. "The school districts are happy, the students are happy and we are happy."

The faculty also is involved. Two UW-Madison professors — Mary Louise Gomez and Ken Zeichner of the School of Education — will evaluate the America



UW sophomore and America Reads volunteer Lea Butler tutoring students at Midvale Elementary School.

Reads program over the next year to measure its success.

Gomez, who is chair of the Council on University-School Partnerships, which seeks to improve learning for children of color and from low-income families in Dane County, says tutoring programs cannot by themselves solve the ills of the nation's schools and childhood illiteracy. But she applauds Read America because it includes two key ingredients that research has shown lead to productive tutoring: linking the help provided by tutors to classroom instruction and providing

training for tutors.

"We also know there needs to be a significant commitment each week to tutoring for it to be successful," she added. "Twenty minutes a week won't cut it."

Thiessen and Wasielewski, meanwhile, encourage their classmates to make the same commitment to America Reads that they did.

"I would definitely give it a try," Thiessen says. "I had a good experience and learned a tremendous amount from this hands-on work."

## Bonus Babies

*A hot job market has computer and engineering grads in high demand*

By Brian Mattmiller

**S**TUDENTS still mulling their majors might be interested in this piece of news: signing bonuses, once the sole province of pro athletes and corporate big shots, are suddenly finding their way to college graduates, especially those in computer sciences and engineering.

Desperate to stock their growing companies from a limited pool of young talent, many computer and engineering firms have turned to the signing bonus as a bona fide recruiting tool.

"This is definitely a new phenomenon for engineering students," says Sandra Arnn, UW-Madison's director of Engineering Career Services.

Arnn was accustomed to hearing occasional stories of signing bonuses offered to some of the college's blue-chip students. But last fall, the stories became so common that she added the question to placement surveys of graduating seniors.

The results: roughly two-thirds of all students with electrical and computer engineering degrees accepted a signing bonus from their new employer. And roughly one-third of all engineering graduates — out of more than

400 surveyed for the fall and spring semester — reported receiving such a perk. The up-front bonuses averaged in the \$5,000 range.

"What's really remarkable is it's not just computer companies," Arnn says. "Almost every Fortune 500 company is in need of engineers who have computer backgrounds, and they're willing to pay signing bonuses to attract them."

She says the signing bonus phenomenon is just one barometer of the banner market for engineering and computer science graduates. Especially in demand are students versed in complex computer architecture, electronic networks and web design. Students who can help remediate Year 2000 computer bug problems also are sought after.

Many students have exposure as undergraduates to technology that's just being introduced in industry, which means they will make contributions almost immediately, she says.

Like the signing bonus trend, starting salaries also are marching upward for engineers and computer scientists. But, says Arnn, students should consider other factors besides salaries and bonuses in making job decisions.

"We definitely encourage our students to look at the big picture," she says.

Dean Zavadsky, a May 1998 electrical and computer engineering graduate, did just that. He took a job in June with Hewlett-Packard Corporation in Santa Rosa, Calif., the best of five offers he received. The deal came with a \$2,000 signing bonus, which he used to buy new living-room furniture, allowing him to leave his tattered college-era couch behind.

The starting salary and bonus were more than he expected when starting his search, but other factors were equally important, he says.

"I really checked into the corporate culture of these companies," he says. "Was there a corporate philosophy of working 55 hours a week, or could I go home after 45 hours a week and not worry about what would be waiting on my desk?"

"I don't want to burn out. I worked long and hard in college, and I wanted to enjoy more free time than I was used to."

**RUSSIAN ORGANIZED CRIME EXPERT TO SPEAK**  
**CONTACT: Kathryn Hendley at (608) 263-5135**

One of the leading Western experts on organized crime in the former Soviet Union will speak Monday (Nov. 23) at the University of Wisconsin-Madison.

Louise Shelley, professor of justice, law and society at American University, will discuss "Organized Crime and Corruption: The Political, Social and Economic Impact on Russia and Ukraine."

Her presentation begins at noon in the faculty law library at the UW-Madison Law School, 975 Bascom Mall.

Shelley has worked as a consultant to the FBI and the U.S. Department of Justice, and her articles on corruption and organized crime have appeared in leading law reviews and social science journals. Her research also includes examining the parallels between Russian and Italian organized crime.

Shelley's visit is sponsored by the Law School's Institute for Legal Studies.

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**STUDENT-LED FUSION PROJECT WOWS SCIENTIFIC COMMUNITY**  
**CONTACT: Team leader Raymond Fonck, engineering physics professor, (608) 263-7799.**

A unique student-staffed fusion project in UW-Madison's College of Engineering is generating excitement in the physics community. The project, called the Pegasus Toroidal Experiment, produced this year its first plasma -- an ionized gas used to store energy and create a fusion reaction -- faster than the field has seen before. Scientists from England, Russia and the U.S. sent congratulations on the feat. What's equally remarkable is this project relies heavily on student researchers, who organize and execute all stages.

For a glimpse into this grassroots fusion effort, check "headlines" on the engineering web site, <http://www.engr.wisc.edu/>.

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**SECC CAMPAIGN MOVES TOWARD GOAL**  
**CONTACT: Greg Zalesak, SECC Board Chair, 263-0590**

A seven-week fund-raising campaign by state and university employees will wrap up Monday, Nov. 30. The State, University and UW Hospital and Clinics Employees Combined Campaign of Dane County (SECC) has raised more than \$1,117,168 to date, or 55 percent of its \$2.03 million goal for 1998. Organizers say contributions are coming in at a pretty normal pace for this point in the campaign.

As of Nov. 20, contributions made by university employees, including UW-Madison, UW System Administration and UW Extension Administration, totaled \$426,557. State agency employees had raised \$690,612 by that date. The figures for UW Hospital and Clinics were not available yet.

FOR IMMEDIATE RELEASE

11/23/98

UW-Madison news briefs for the week of Nov. 22-28:

- UW, guest choreographers to premiere works
- Frazier elected president-elect of national association
- Russian organized crime expert to speak
- Student-led fusion project wows scientific community
- SECC campaign moves toward goal

#### **UW, GUEST CHOREOGRAPHERS TO PREMIERE WORKS**

**MADISON** - New dances created by faculty and a visiting artist at the University of Wisconsin-Madison will debut in "Steps and Landings," a choreographers' showcase Dec. 3-5.

Faculty pieces will include:

- \* "Terpsichores of Wind" by assistant professor Jin-Wen Yu. The work is a contemporary rendition of Chinese lyrical dance set to original music by UW-Madison dance composer Joseph Koykkar and Steve Reich.
- \* "Shattering Hell" by associate lecturer Peggy Choy combines elements of Korean and Puerto Rican dance with Zen meditation movements.

In addition, visiting artist Ed Groff's new piece "Hush, Don't Explain" will employ mannequin-like movements to convey how pop culture conveys love.

Dance students also will reprise "Tala," created by internationally renowned choreographer/dancer Molissa Fenley while she was in residence at UW-Madison last month. Repertory works by UW-Madison dance faculty also will be featured.

"Steps and Landings" begins at 8 p.m. each evening in Lathrop Hall's Margaret H'Doubler Performance Space. Tickets, \$12 general, \$8 UW students and seniors, are available at the door or in advance at the Wisconsin Union Theater box office, (608) 262-2201.

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#### **FRAZIER ELECTED PRESIDENT-ELECT OF NATIONAL ASSOCIATION**

CONTACT: Ken Frazier, (608) 262-2600

Ken Frazier, director of the General Library System for the University of Wisconsin-Madison, is now president-elect of the Association of Research Libraries.

The association is a nonprofit organization based in Washington, D.C., comprising 121 major North American research and academic libraries.

In the past year, Frazier spearheaded the board's creation of Scholarly Publishing and Academic Resources Coalition (SPARC), which he chairs. SPARC is an alliance of libraries that aims to foster more competition in scholarly communication. It is in the process of creating partnerships with publishers who are developing quality but economical alternatives to existing high-price publications.

Frazier has been director of the General Library System since 1992 and a member of the university's library staff since 1978.

- Don Johnson, (608) 262-0076

Though the campaign officially ends on Nov. 30, late contributions are always welcome. Those made on or before Jan. 31, 1999 will be credited to the 1998 campaign.

This year's SECC includes more than 300 nonprofit agencies. Employees have the option of designating the specific agencies they wish to support, and that is what the majority of employees do. In addition, they may make their contribution through a convenient payroll deduction.

The campaign is celebrating its 25th anniversary this year. Since 1973, state and university employees have given more than \$24 million to nonprofit agencies through the combined campaign.

--Liz Beyler (608) 263-1986

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FOR IMMEDIATE RELEASE 10/30/98  
CONTACT: Karen Stauffacher, (608) 262-2810

## GLOBAL FORUM SET

MADISON - A public event designed for anyone interested in international business and education - "The Global Forum: Where in the World Do You Want to Work?" - will be held at the University of Wisconsin-Madison Monday, Nov. 2, 6 -8:30 p.m.

Featuring speaker and author Roger Axtell, who has written nine books on business and social protocol abroad, the forum will be held in Room 1100 in the Business School's Grainger Hall, 975 University Ave. Admission is free.

Axtell will provide a humorous and informative look at international interactions. Retired vice president of worldwide marketing for the Parker Pen Co., Axtell recently was ranked one the 25 most influential people in world trade. He has been described as "an international Emily Post" by The New Yorker magazine and has been a talk-show guest on NBC's "Today" show, the Merv Griffin show, the Regis Philbin show and CNN's "International Hour."

A corporate panel from internationally focused organizations, including Cargill, the Wisconsin Department of Commerce - International Division, General Motors and Rayovac, will follow. Participants will discuss employment perspectives and the global job market. Refreshments and a book-signing will conclude the evening.

The Global Forum is sponsored by the Business School's Center for International Business Education and Research, and the Business Career Center. It is supported by the Agricultural and Life Sciences Career Services Office, Career Advising and Planning Services, Engineering Career Services, International Student and Scholar Services, the International Institute and the Wisconsin Alumni Association.

For further information contact Susan Huber Miller at (608) 263-7682 or Karen Stauffacher at (608) 262-2810.

###

- Helen Capellaro, (608) 262-9213

FOR IMMEDIATE RELEASE 11/11/98  
CONTACT: Thomas Smith, (608) 263-7426, Wayne Pferdehirt, (608) 265-2361

## ENGINEERING CREATES NEW MASTERS FOR PRACTICING ENGINEERS

A new World Wide Web-based master's degree created by the University of Wisconsin-Madison College of Engineering is designed to help professionals advance their careers without interrupting them.

The Master of Engineering in Professional Practice (MEPP), slated to begin in summer 1999, represents what many see as the next wave in graduate education: Capstone-style degree programs that take instruction to the professional. Laptop computers will replace lecture halls, allowing students to complete assignments in the office, at home or on the road.

"We recognize that we may not be the center of (students') universe. That's very different from a traditional masters program," said Karen Al-Ashkar, an adviser in Engineering Professional Development. "These students will have a lot of different priorities, all of which are important."

While traditional graduate education stresses research, MEPP students will take a different track. The curriculum, likened to an engineer's version of an MBA, focuses on technical and organizational skills critical to modern engineers. These include computer applications, project planning and communication skills.

Thomas Smith, director of engineering telecommunications programming, said the advances in web technology will give the course a real-time, interactive quality. Courses will include computer-aided problem-solving, technical project management, communicating technical information and quality management. The second year will include a collaborative project with teams of students.

The web is redefining distance education by helping educators shift from traditional videotaped lectures to something much more adaptable for off-campus students. In this course, Smith said students will make use of threaded discussions, networked email and teleconferencing to stay connected to professors and fellow students.

Michael Corradini, associate dean for academic affairs in the college, said MEPP is part of a larger trend in engineering to meet the increasing demand for distance learning. The college has two other graduate programs approved this year -- technical Japanese, and polymer science and engineering -- that also cater to the professional in the field.

The engineering programs are following a successful UW-Madison model in administrative medicine, which has offered a web-based advanced degree for years, he said. Like medicine, engineering is a field with near-constant change, and continued education is essential, he said.

"We think there is going to be growing demand among engineers who want a master's degree, but don't want to do research," Corradini said.

For more information about the program, contact Wayne Pferdehirt, who was recently named director of the MEPP program, (608) 265-2361, or visit MEPP's web site: <http://epdwww.engr.wisc.edu/mepp/>.

The deadline for applications for the first class is Jan. 15, 1999.

###

--Brian Mattmiller (608) 262-9772

Engineer-  
Engin.  
Prof.  
Dev.

FOR IMMEDIATE RELEASE 11/11/98  
Contact: John Bollinger, (608) 262-3482

Engin.  
Jan

## DEAN OF DEANS: BOLLINGER BOOSTED ENGINEERING'S CREATIVITY

As a UW-Madison undergraduate in 1955, John Bollinger couldn't escape the image of a giant coal heap dumped next to the engineering buildings he studied in every day.

The coal was being stored for UW-Madison's steam plants, but made his corner of campus look positively dumpy. What's worse, he could see the beautiful, ornate buildings of Henry Mall just across the street.

"It irritated the living daylights out of me," recalls Bollinger.

It galled him enough to start a one-man petition drive to have the coal pile relocated. He delivered a petition with hundreds of student signatures to then-Dean Kurt F. Wendt before the 1955 summer break.

"The next semester it was gone," he says with a grin.

It's a fitting story today, as Bollinger reflects on 18 years as dean of the College of Engineering. The physical campus might be his most visible legacy. Engineering Hall now has a corporate-looking modern upgrade, and the old parking lot in front is replaced by a pedestrian mall with an artful centerpiece -- the "Maquina" sculpture and fountain.

Bollinger helped design his own high-tech Henry Mall, and he says it finally gave the college an image. "Now nearly every student gets a graduation picture with parents in front of that fountain," he says. "The value of that far exceeds the investment."

When Bollinger retires from the deanship this summer, he can view a much different campus than the one he inherited. Aside from the physical upgrades, he is widely credited with building a more efficient undergraduate program, infusing the curriculum with an entrepreneurial spirit, and building strong relationships with industry and alumni.

When he came on board in 1981, the college faced serious problems. College enrollment had ballooned to more than 5,000 undergraduate majors. Bollinger remembers that classes were so over-booked that students frequently sat in window wells during lectures.

And with no firm standards on admission, many students were set up for failure. Bollinger says the college used to have an associate dean whose full-time job was dropping students who didn't make the grade. "The old system was really a disservice to students," he says.

"We decided to basically flip-flop the college," he says. "We shrunk the enrollment of undergraduates to protect the quality of instruction, and at the same time expanded our graduate student base."

By the late 1980s, Bollinger says the seven-to-one ratio of undergraduates to graduate students improved to three-to-one, and undergraduate enrollment stabilized around 3,400. Not only did the improved numbers strengthen research, Bollinger says, but also the changes improved success rates for undergraduates. "Today, when a student is formally admitted to an engineering department, the retention rate is 90-plus percent."

With this new foundation, Bollinger says his focus turned to making the college "a competitive, exciting place to be." Bollinger set out to create what he calls an "off-timetable opportunities culture," with programs meant to give students a true flavor of engineering.

As engineering grew more theoretical, Bollinger worried that students could graduate as whizzes in math, physics and chemistry, but never pick up a wrench or tune an engine. He began to nurture development of student teams in hands-on engineering projects, such as the Future Car competition, the Concrete Canoe competition and the Schoofs Prize for Creativity.

The Schoofs Prize, funded by engineering alumnus Richard Schoofs, awards more than \$20,000 each year to student teams who invent commercially viable products. Bollinger also shepherded with the School of Business the Technology Enterprise Competition, in which students not only build inventions, but come up with a complete marketing and development plan.

Bollinger's philosophy shows through in these ideas: Creativity and teamwork are essential parts of engineering. Bollinger says he wanted to give students the tools to be entrepreneurs.

"These are people who perceive problems in the world, and want to make it better," says Bollinger, sounding again like the undergraduate idealist who got rid of the coal pile. "Engineers are always answering the question, 'Why would you do it that way?' They observe in life that there are things people are struggling with."

Bollinger's colleagues describe him as a relentless idea person, someone who continually puts new projects on the table. He is also a team-builder who developed a more collaborative spirit among researchers.

"His style is very much to throw ideas out there, to kind of shoot from the hip, you might say," says Neil Duffie, a mechanical engineering professor and former graduate student of Bollinger. "He would leave it up to colleagues to throw out the bad ones, and capitalize on the good ones."

Bollinger, 63, earned his bachelors and doctoral degrees at UW-Madison, becoming a mechanical engineering professor here in 1961. He is a two-time Fulbright Award winner with research expertise in robotics. His 1963 invention of a robotic welder, which controlled motion in five directions, helped Milwaukee's A.O. Smith Company revolutionize the manufacture of automobile frames.

He also conducted research on industrial noise control -- a talent that proved useful when he was chair of mechanical engineering. He converted an entire office wall into a sound-absorbing panel to help muffle street and construction noise from University Avenue.

Bollinger and his wife, Heidi, share a passion for sailing. He's regarded as a talented yachtsman, and owns a 40-foot sloop that he sails on the Atlantic coast along Nova Scotia and Newfoundland. He's planning to trade in the boat for a larger one with more comfortable living quarters.

After retiring as dean, Bollinger will stay involved in developing the new Engineering Centers building, a massive project that should be completed by 2002. The building will be a major boon to students, providing space for student organizations and student innovation.

###

-- Brian Mattmiller, (608)262-9772

(Editor's note: This item is related to the story about College of Engineering Dean John Bollinger's plan to step down as dean in July 1999.)

#### HIGHLIGHTS OF THE BOLLINGER ERA

The College of Engineering marked many milestones under Dean John Bollinger from 1981-1998. Among other things, the college:

- Expanded Engineering Hall with a \$16 million addition in 1993 that added 70,000 square feet of new space for the college, including UW-Madison's first high-tech lecture halls.
- Completed a \$4.6 million renovation of the materials science building, which added a computerized classroom and an enclosed walkway.
- Planned the biggest-ever capital project for the college, the Engineering Centers building. Still in design phase, it will house leading-edge research projects and provide innovation space for students.
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- Created degrees in manufacturing systems engineering, geological engineering and construction engineering management, and developing the first video-based master's degrees for practicing engineers.
- Began a new freshman design course in 1995, giving first-year students a real-world engineering project from design to the final product.
- Facilitated new federally-funded research centers in engine research, micromachines, space automation and robotics, photonics and microelectronics.
- Instituted three new high-stakes competitions -- the Schoofs Prize for Creativity, the Technology Enterprise Competition and the Aschenbrenner Prize for best prototype -- that encourage students to invent, patent and commercialize their own technology.

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Engineering

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# Dean of deans

## John Bollinger cultivates engineering's creative side

Brian Mattmiller

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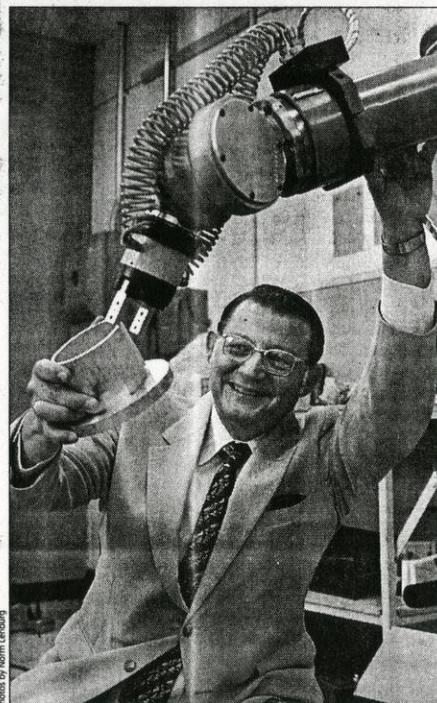
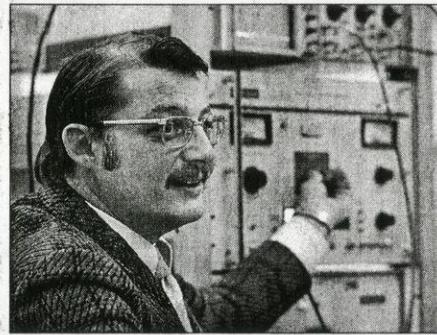
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After retiring as dean, Bollinger will stay involved in developing the new Engineering Centers building, a massive project that should be completed by 2002. The building will be a major boon to students, providing offices for student organizations and spaces for student innovation. "The building will reflect the way students should engage with the world," he says.

Bollinger seems most proud of the roll-up-your-sleeves ethic he has helped foster in the college and of students who follow their own ideas. When asked what separates a garden-variety engineering graduate from a future innovator, he instantly retorts: "There are no garden-variety engineering graduates." ■



John Bollinger became a mechanical engineering professor here in 1961. He is a two-time Fulbright Award winner with research expertise in robotics. His 1963 invention of a robotic welder, which controlled motion in five directions, revolutionized the manufacture of automobile frames. These photos show Bollinger at work in 1975, top, and the 1980s, above.

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# BRIEFS

## DEMOCRACY CONVENTION SET

More than 2,000 students, campus workers and community members are expected to congregate on the UW-Madison campus Nov. 5-9 to take part in the Campus Democracy Convention.

The convention's goal is to establish a new U.S.-based student organization designed to democratize education and support broader efforts for greater democracy.

Contact Associated Students of Madison at 265-4276 for information.

## FORUM OUTLINES PROTOCOLS

An upcoming forum promises to help people make a good transition — and avoid costly mistakes — when working or living in a foreign culture.

"Where in the World Do You Want to Work," is scheduled Nov. 2 from 6-8:30 p.m. in the Morgridge Auditorium, Room 1100, Grainger Hall. Roger Axtell, noted speaker and author of nine books on business and social protocol abroad, will provide a humorous, entertaining and informative look at international interactions. A retired vice president of Parker Pen, Axtell was recently ranked one of the 25 most influential people in world trade. He has been described as "an international Emily Post" by *The New Yorker* magazine. A following panel will discuss employment perspectives and the global job market. For information, call 263-7682 or 262-2810.

## REGENTS APPROVE SPENDING

The UW System Board of Regents has authorized continued design planning for the \$52 million Engineering Centers project. The final design plans and construction still must be approved by the board.

The regents also approved spending an additional \$6.9 million in gift money to complete work on the Biochemistry Building, bringing the total project cost to \$45 million. The extra funds will be used to finish construction on several laboratories and other space.

## CORRECTION

A photo caption Oct. 7 about a dance program contained incomplete information. UW-Madison's Li Chiao-Ping created the work *Odyssey* in collaboration with Douglas Rosenberg.



## Wisconsin Week

Vol. XIII, No. 14, October 21, 1998

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## Learning

### Lectures explore Nazi ties to United States, Latin America

The complex interaction between Nazi Germany, anti-Nazi refugees, Latin America, Eastern Europe and the United States will be explored in the UW-Madison's Curti Lecture series Monday-Wednesday, Oct. 26-28.

Friedrich Katz, a distinguished historian at the University of Chicago, will present three discussions on various aspects of the subject:

- "Nazi Germany and the Cardenas Administration," Monday, Oct. 26. In the 1930s, Mexico had the only leftist government in Latin America. In the first lecture, Katz will discuss German policy toward those countries.
- "The Anti-Nazi Refugees in Mexico and their Surveillance by U.S. Intelligence Agencies," Tuesday, Oct. 27. The prominent anti-Nazi German intellectuals, many of them communists, who fled Germany for Mexico established one of world's most important centers of anti-fascist activity. Katz will outline

line surveillance operations carried out by the State Department, FBI, Naval Intelligence and OSS, and the practical consequences.

- "The Return Home in the Stalinist Trials," Wednesday, Oct. 28. After the war, many of the refugees who fled Hitler settled in East Germany or Czechoslovakia. Katz will describe their involvement in the Stalinist trials in those countries.

According to Stanley Payne, UW-Madison professor of history and scholar of fascism, Katz's lectures hold a great deal of interest during this era of renewed nationalism and closer ties between the U.S. and Latin America.

All Curti Lectures, named for UW-Madison Pulitzer Prize-winning historian Merle Curti, begin at 4 p.m. in the auditorium of the State Historical Society of Wisconsin. For more information, contact Danny Struebing at 263-1810. ■

## Community

### Viaduct project winds down — but only until the spring

The first construction phase of the new Park Street viaduct is nearing completion, and the roadway will be re-opened to traffic on or shortly before Nov. 15, according to Rob Phillips, principal engineer for the Madison Engineering Division.

The segment between Spring Street and West Dayton Street has been closed since July. Phillips said motorists will travel over some patches in the old pavement when traffic begins flowing again.

This year's work includes reconstruction of the railroad bridge and construction of extensive retaining walls and a stormwater pumping station. When the second phase begins in mid-April 1999, crews will be constructing the new roadway, which will include two traffic lanes and a bike lane in each direction, divided by a grassy median. The cost of the 18-month project is \$7.6 million.

Next year's phase will also close Park Street from Dayton Street to University Avenue, city officials said. ■

### Two Madison campus faculty win systemwide teaching awards

A professor of marketing and a mathematician will represent the UW-Madison campus as 1998 winners of the Alliant Undercofler Teaching Awards. The awards will be presented at a ceremony Friday in Van Hise Hall.

Jan B. Heide, associate professor of marketing, is a veteran of the Teaching Academy and has served on its teacher preparation task force. His research area, management organization and inter-organization relationships, have attracted multidisciplinary interest from the fields of law, economics and sociology and more.

Donald Passman, Richard Brauer Professor of Mathematics, teaches courses ranging from "bread-and-butter" calculus to advanced graduate seminars. Passman pioneered the department's instructional use of computers and is recognized as the world's foremost authority on group rings, a fundamental mathematical tool. ■

### Librarians tour campus

Four librarians from Kazakhstan visited the UW-Madison libraries earlier this month to learn more about the increasing use of the Internet in daily library functions.

Tatiana Maksurova, Karina Chintayeva, Bagdat Uzbayeva, and Rys Karimova came to UW-Madison through a program sponsored by the U.S. Information Agency. The four women were hosted here by the International Institute of Wisconsin and Center for Russia, East European and Central Asian Studies. ■



Photo by Mark R. Sander

This sugar maple (scientific name, *Acer saccharum*) on Muir Knoll off Observatory Drive, is one of the trees included in the one-hour, one-kilometer Bascom Hill Tree Walk.

### New brochure tells story behind historic campus trees

Amid the canopy of 6,000 trees adorning the campus, some trees stand out as living history lessons.

A new brochure profiles more than 80 of these unique and noteworthy trees, and invites people on a step-by-step natural history tour along the oldest swath of campus on Bascom and Observatory hills.

"Campus Tree Walks," a 28-page brochure created by UW-Madison's environmental management office, brings the university's 150-year legacy of tree plantings into focus. Intended as a supplement to self-guided interpretive walks, the brochure includes route maps, historical stories and photos, and scientific information about unique tree species.

"From what I know about urban campuses across the country, we have a unique legacy here," says Daniel Einstein, environmental management coordinator at UW-Madison. Areas like Bascom and Observatory hills and the Lake Mendota shoreline have dense concentrations of mature trees dating back, in some cases, to the very first tree plantings in 1851, he says.

The brochure is free at Allen Centennial Gardens and the Campus Assistance and Visitor Center in the renovated Red Gym. For more information, contact Einstein, 265-3417. ■

### Total quality forum to draw attendees from campus, business

Representatives of companies and campuses from across the nation are attending the eighth in a series of national forums on Total Quality sponsored by the University of Wisconsin-Madison.

TQ Forum VIII conference attendees are defining ways to improve the quality of university graduates through university-industry collaboration. The first TQ Forum was held in 1989, hosted by David Kearns, CEO of Xerox.

Speakers at the Madison forum Wednesday and Thursday include David Ward, chancellor of UW-Madison; Ernest Micek, CEO, president and chairman of the board of Cargill; James Duderstadt, president emeritus of the University of Michigan; and Gordon Brunner, senior vice president of research and development for Procter & Gamble.

Participants will address such questions as:

- What does industry want and need in the graduates they hire? And how can higher education and industry collaborate more effectively to ensure that those requirements are met?
- What process can be used to produce curricula and learning experiences that result in well-prepared graduates?
- By what measures do we know if universities are meeting the needs of industry?

The forum, held in Madison's Monona Terrace Convention Center, is sponsored by the UW-Madison Chancellor's Office, School of Business, College of Engineering and Office of Quality Improvement. ■

### SECC launches fund-raising, celebrates 25th anniversary

The State Employees Combined Campaign of Dane County is celebrating 25 years of charitable giving through the workplace as its 1998 fund-raising effort gets underway, continuing through Nov. 30.

Since 1973, thousands of employees, including many retirees, have donated a whopping \$23.7 million to SECC. They have been generous with their dollars and their time. Each year, hundreds of employee volunteers carry out the campaign. SECC's fund-raising goal for 1998 is \$2.03 million.

"One of the reasons we've been able to keep our administrative costs low — 2.65 percent last year — is the large number of volunteers who participate in the campaign. We're very appreciative of their efforts and very proud of them," says Greg Zalesak, chair of the SECC Administrative Board.

The Wisconsin Union's Roberta Mecum is one of many long-time SECC volunteers.

"I got involved because I was asked," says Mecum, "and I stayed because I care. I found out I can make a difference in someone's life. There seems to be more need every year, and as much as we help, there's still so much left to do."

Mecum tells co-workers they'll never miss that dollar a paycheck or whatever amount they give. The option of contributing through payroll deduction was an important feature of the 1973 campaign, and still is today. So is the employee's ability to choose the agencies that will receive his or her money.

Myron Turk, a gardener in the Environmental Services Department, has contributed since the campaign began.

"You can donate to whichever charities are to your liking. You decide on the amount, it's deducted from your paycheck and it's pretty painless — no different than parking fees and all the rest," says Turk.

Today, SECC includes more than 300 non-profit agencies. Each must be approved by an eligibility committee. ■

# BRIEFS

## NEW RAPE CRISIS CENTER OPENS

A new Rape Crisis Center office at UW-Madison, located at 905 University Ave., Room 126, represents an effort to provide more accessible services to sexual assault victims who are students. The center is supported by University Health Services through the donation of office space within its Counseling and Consultation Services and by the Wisconsin Department of Justice.

The new office will provide a full range of victim services including counseling, advocacy, and information and referral. A combination of walk-in hours and scheduled appointments is available.

## LANDS' END LECTURE ANNOUNCED

This year's Lands' End Lecture Oct. 20 at UW-Madison will feature Robert Frisch, a Chicago consultant and associate director of the Center for Retail Management at Northwestern University's Kellogg School of Management.

Frisch will speak Oct. 20 at 6 p.m. in the Memorial Union Theater on "Inside? Outside? Upside Down? The Box is Changing! Key Trends Impacting the Future of Retailing." His talk is open to the public without charge.

Frisch is a strategic development consultant with Andersen Strategic Services of Chicago. In his lecture, he will discuss external trends that are important in strategic thinking for retailers, such as an aging population and the growth of electronic commerce.

His lecture at UW-Madison is sponsored by Lands' End, Inc., in cooperation with the Center for Retailing Studies.

## PRINT CULTURE MINOR APPROVED

This fall marks the first semester of a new Ph.D. minor in print culture, approved last spring as an "Option A" minor by the Graduate School Executive Committee. The minor gives doctoral students the opportunity to design a curriculum around the historical study and sociology of print culture. The study will focus on how the print medium has been available to and appropriated by diverse cultures. The minor's home is the Center for the History of Print Culture in Modern America, a joint program established in 1992 by the State Historical Society of Wisconsin and UW-Madison.

## Wisconsin Week

Vol. XIII, No. 13, October 7, 1998

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## Learning

### Report showcases innovative teaching, learning

Education is being enhanced in many ways at UW-Madison, and a new report documents just how that is being accomplished.

Teaching & Learning Initiatives, produced this summer by the Office of the Provost, chronicles the efforts to reconceptualize undergraduate education, one of the university's top future priorities. It also describes programs aimed at improving graduate education.

The report begins by highlighting the university's residential and non-residential learning communities. These include the Bradley Learning Community, the Chadbourne Residential College, the Chancellor's and Powers-Knapp Scholarship Programs, and the College of Letters and Science Honors Program.

Twenty-three other programs spanning a number of academic disciplines are also listed in the 21-page report, along with contact names, telephone numbers and e-mail addresses. Examples include the Center for Biology

Education, Engineering Learning Center, Lilly Teaching Fellows Program and the Teaching Academy.

The report also contains listings of web sites for the campus learning communities and the initiatives listed in the document.

"Over the last several years, the undergraduates at the University of Wisconsin-Madison have spoken in overwhelming numbers about their satisfaction with their education," Provost John Wiley writes in the report's introduction.

"I believe that one of the reasons for the positive response of students lies in our innovative programming in teaching and learning and in the ongoing collaboration among administrators, teachers and students that makes this possible."

To receive copies of the report or for more information, call 262-5246, or visit: [www.wisc.edu/provost](http://www.wisc.edu/provost). ■

### Lilly Fellows collaborate to improve teaching

Six untenured faculty — already distinguished scholars and teachers — have been named UW-Madison's 1998-99 Lilly Teaching Fellows.

Established nationwide by the Lilly Endowment Inc. in 1974 and in UW-Madison's College of Letters and Science in 1992, the program offers one-year grants to promising assistant professors so that they can either develop a new undergraduate course or redesign an existing one. Each fellow works with an established mentor in the field, as well as with specialists on and off campus.

This year's recipients are:

■ William Bement, zoology, will redesign a course in cell biology to emphasize the process of science.

■ Ksenija Bilbija, Spanish and Portuguese, will develop a new undergraduate course,

Introduction to Hispanic Cultures. The class

will enhance students' language proficiency and increase their exposure to cultural topics through the study of popular music, television,

the performing arts, advertising and more.

■ Matthew Gumpert, comparative literature, will offer a new approach to the study of ancient Greek mythology that will focus on the persistence of classical themes as a basis of contemporary culture in film, television and other media.

■ Paul D. Hutchcroft, political science, will re-evaluate one of his department's foundation courses, Introduction to Comparative Politics, in light of major changes during the last decade in international politics.

■ Marlys Macken, linguistics, will create a course on language diversity in the U.S.

■ Gerhard Richter, German, will develop a course based on the German tradition of the thought-image. Richter is interested in how the images of the modern age such as telephones or gas stations became signs of larger cultural trends in the work of writers such as Bertolt Brecht, Siegfried Kracauer, Ernst Bloch and Walter Benjamin. ■

## Community

### Federal watchdog agency lauds UW System and its campuses for containing costs

The UW System sets a national example for its cost-containment efforts, according to a new report by the General Accounting Office, the federal government's spending watchdog agency.

Along with universities in Oregon and Ohio, UW System campuses get high marks for cutting costs through smarter management, tougher negotiating with vendors and other efforts.

Campuses "have taken a wide variety of efficiency-related measures," the report says. "In addition to eliminating or consolidating a number of administrative functions and academic programs, the system and its schools have taken many other cost reduction or efficiency improvement actions."

On the Madison campus, the report cites the installation of more efficient and effective light-

ing that saves about \$475,000 a year. Systemwide, the report singles out the implementation of injury prevention programs and better claims management that have saved an estimated \$1.1 million so far.

David Longanecker, assistant secretary for postsecondary education in the U.S. Department of Education, says the report shows that the UW has worked hard to preserve access to education in the face of declining state aid.

"The draft report demonstrates what we have believed for some time: public colleges and universities have increased tuition and fees primarily in response to reductions in state spending on higher education," Longanecker says. "This trend must be understood and addressed by policymakers at both the federal and state levels. We

### Strategic planners seek comments from faculty, staff

A committee formulating a strategic plan for the university is about to start pulling together a campuswide plan — but members are looking for your input first.

Six subcommittees have examined issues related to the arts and humanities, social and behavioral sciences, biological sciences, physical sciences, human resources and diversity, and student issues. The subcommittee reports form the foundation for the "strategic planning" part of the university's report to the North Central Association.

Project chair Joseph Wiesenfarth, an English professor, says he is seeking comments from staff, faculty and students on these reports as he and the New Directions Steering Committee begin to synthesize them.

The goal of the project is to produce a document that will not only assess the university's past efforts at strategic planning, but also guide future efforts.

Most colleges and universities conduct an extensive self-study every 10 years as part of the process to be reaccredited by their regional accrediting agency. UW-Madison, as it did in 1988, the last time it was reaccredited by the North Central Association, is using the process not only to show that UW-Madison has met the NCA's requirements during the last decade but also to set priorities for the next 10 years.

The New Directions Reaccreditation Project subcommittee reports have been posted at [www.wisc.edu/newdirections/public/reports/index.html](http://www.wisc.edu/newdirections/public/reports/index.html).

Comments may be sent to 273N Bascom; by fax, 263-9253; or by e-mail, [newdirections@mail.bascom.wisc.edu](mailto:newdirections@mail.bascom.wisc.edu). The New Directions office phone is 263-9233. ■

must do everything we can to convince state policymakers of the importance of providing strong support for higher education."

Kevin Boatright, UW System special assistant to the vice president for university relations, agreed with Longanecker's assessment: "We are serious about controlling costs, yet we need the renewed partnership of the state if we are to maintain quality and access."

The UW System's budget request, which includes UW-Madison's innovative public-private matching fund plan, has been submitted to the governor. The Legislature will begin review of the governor's budget plan early next year.

The report, HEHS-98-227, is available in Acrobat format at: [www.gao.gov/new.items/bysubject.htm#8](http://www.gao.gov/new.items/bysubject.htm#8). ■

### Alumni association invites international alums to Madison for spring convocation

UW-Madison grads from around the world will gather in Madison next May to review global issues, renew old ties and revisit the city that helped educate them during the first-ever international alumni convocation.

Each day of the weeklong conference will focus on business and research aspects of one of five main topics: science and technology transfer; growth and the environment; managing the global economy; the global university; and local culture, politics and globalization.

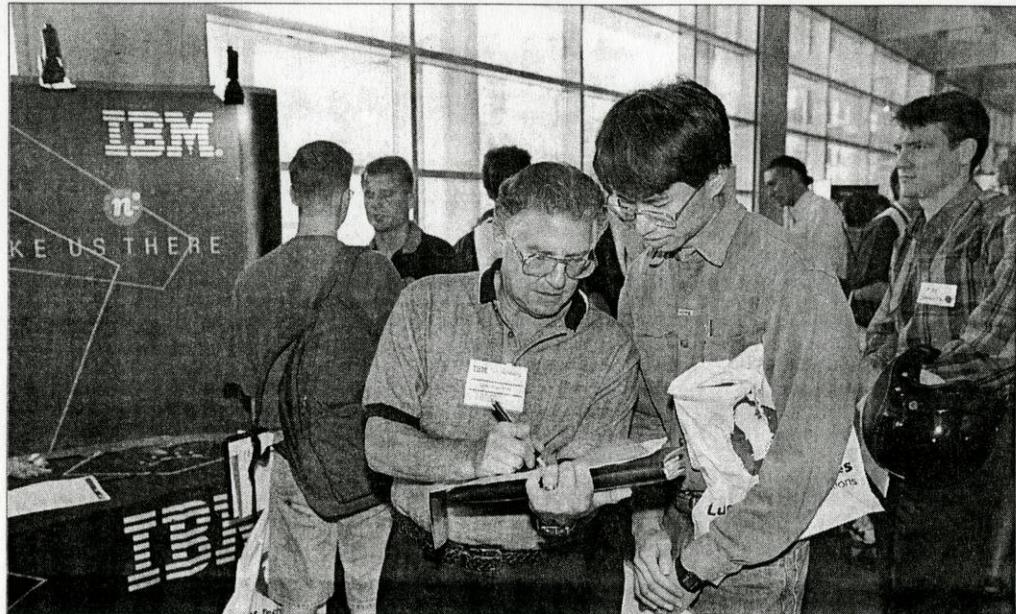
The convocation, "A Global Perspective for the 21st Century," will run May 2 to May 7, 1999, at the Monona Terrace Convention Center and on campus. The convocation is one of seven signature events in UW-Madison's sesquicentennial celebration.

Each morning a university speaker, such as Provost John Wiley, will introduce the day's topic, followed by several panel discussions. Distinguished

international alumni, such as H. Steve Hsieh, vice chairman of the National Science Council in Taiwan, and Chai-Anan Samudavanija, a judge of the Constitutional Court in Thailand, will give keynote talks during daily luncheons.

Afternoon activities are available on campus and in the greater Madison area, such as touring the Arboretum or the University Research Park, or participants may wish to seek out faculty mentors. Additional recreational options include golfing and a dinner boat cruise on Lake Mendota. The week will be capped off by the annual Alumni Weekend.

Registration, which includes five lunches and two dinners, is \$350, or 15 percent less if paid before Feb. 1. Registration by day is available as well. For more information, view the convocation's web site at: [www.wisc.edu/intl-conv/](http://www.wisc.edu/intl-conv/). ■



Last year's College of Engineering recruiting fair brought big names and big money to the UW-Madison campus. Two-thirds of all students with electrical and computer engineering degrees accepted a signing bonus from their new employers, according to a survey of participants.

## Cash used as a recruiting tool

### Computer-savvy engineering grads tantalized with signing bonuses

**Brian Mattmiller**

**S**igning bonuses, once the sole province of pro athletes and corporate big shots, are suddenly finding their way into the back pockets of wet-behind-the-ears undergraduates — at least those with computer talents.

Desperate to restock their growing companies from a limited pool of young talent, many computer and engineering firms have turned to the signing bonus as a bona fide recruiting tool, a way to get a leg up in a fiercely competitive field.

"This is definitely a new phenomenon for engineering students," says Sandra Arnn, director of Engineering Career Services at UW-Madison.

Arnn says she was accustomed to hearing occasional stories of signing bonuses offered to some of the college's blue-chip students. But beginning last fall, the stories became so common that she added the question to placement surveys of graduating seniors.

The results: roughly two-thirds of all students with electrical and computer engineering degrees accepted a signing bonus from their new employer. And roughly one-third of all engineering graduates — out of more than 400 surveyed for the fall and spring semester — reported receiving such a perk. The up-front bonuses ranged from \$2,000 to \$10,000, and averaged in the \$5,000 range.

"What's really remarkable is it's not just computer companies," Arnn says. "Almost every Fortune 500 company is in need of engineers who have computer backgrounds, and they're willing to pay signing bonuses to attract them."

Arnn expects more of the same this fall,

when the College of Engineering holds its annual career fair with a record number of participating companies and government agencies. The fair, scheduled for Sept. 15-18 in the lobby of Engineering Hall, was expanded to a four-day event this year to accommodate the interest of 200 employers. The event is co-sponsored by Arnn's office and the Polygon Engineering Student Council.

Arnn says the signing-bonus phenomenon is just one barometer of the banner market for engineering and computer science graduates. Especially in demand are students versed in complex computer architecture, electronic networks and web design. Students who can help remediate Year 2000 computer bug problems are also sought.

Many students have exposure as undergraduates to technology that's just being introduced in industry, which means they will make contributions almost immediately, she says.

Another hot field is construction engineering management, an area where the college can't produce enough graduates to fill the demand.

Like the signing-bonus trend, starting salaries are also marching upward for engineers and computer scientists. For 1997-98, average starting salaries for chemical engineers was \$45,900; for computer scientists, \$43,750; for electrical and computer engineers, \$44,000; and for industrial engineers, \$41,750.

To most college graduates joining the job market, these numbers may seem in the stratosphere. But the picture was not always this bright for engineers, and only five years ago some engineering students couldn't buy

a job offer, Arnn says.

"It's hard to believe that five years ago, in the trough of a recession, we were only placing about 50 percent of our engineers," she says. "We tell students to enjoy it while it's here, because engineering demand has always run in cycles."

Ironically, while engineering officials can revel in the success of their students, the market has produced some negative side effects for the colleges themselves. It's not just undergraduates who are in demand — with doctoral candidates and even professors getting tantalized by big-money offers from industry, schools are having a tough time recruiting and retaining faculty.

Willis Tompkins, chair of the electrical and computer engineering department, is in somewhat of a bind. He just received campus-level approval to start a new major in computer engineering, but the program is contingent on the hiring of two new faculty. Given the department's recent track record — three faculty job offers, no takers — filling these positions will be extremely tough.

Not only is Tompkins competing with industry, he's competing with every other electrical engineering program in the country. During a recent national meeting of electrical engineering department chairs, Tompkins said all 160 leaders indicated they were trying to hire computer engineering faculty.

James Goodman, chair of the computer sciences department, says his department has been successful in hiring assistant professors, but less so with hanging on to their seasoned faculty. Last year, the department lost one of their long-time professors to Microsoft, which offered the professor an astonishing amount of stock options.

Fortunately, Goodman says, this kind of corporate raiding is discouraged. "Most of our recruiting companies tell us, 'We don't want to eat our seed corn, we don't plan to hire your faculty or your take away your graduate students.'"

**"Almost every Fortune 500 company is in need of engineers who have computer backgrounds, and they're willing to pay signing bonuses to attract them."**

### Grads: Bonus nice perk, didn't seal the deal

**M**oney was not the ultimate bottom line in the job choices of some recent UW-Madison engineering graduates.

Dean Zavadsky, a May 1998 graduate of UW-Madison's electrical and computer engineering department, took a job in June with Hewlett-Packard Corporation in Santa Rosa, Calif., the best of five offers he received. The deal came with a \$2,000 signing bonus, which he used to buy new living room furniture, allowing him to leave his tattered college-era couch behind.

All five offers were made before December 1997, he says, "which took a little bit of the pressure off the job search." The \$48,000 starting salary and bonus were more than he expected when starting his search, but other factors were equally important.

Those included the type of engineering work, the company's location and the amount of work time expected in a given week. He says Hewlett-Packard ranked highest on all factors.

"I really checked into the corporate culture of these companies," he says. "Was there a corporate philosophy of working 55 hours a week, or could I go home after 45 hours a week and not worry about what would be waiting on my desk?"

"I don't want to burn out," Zavadsky adds. "I worked long and hard in college, and I wanted to enjoy more free time than I was used to."

Chris Quanbeck, also a May graduate of electrical and computer engineering, has worked for the past two months with the Motorola Corporation in Harvard, Ill. Quanbeck, who also had the luxury of multiple offers, chose Motorola over the three other jobs because it was the most exciting type of work. Since the other offers were in California and Arizona, this job kept him closer to home, which he considered a priority.

Quanbeck says he socked away his \$3,000 signing bonus in an investment fund, but had passed up a larger one with a California firm. The Motorola job seemed the most comfortable fit. "If you like what you're doing, you're going to become much more motivated," he says. "It's more of an investment in your career."

Sandra Arnn, director of Engineering Career Services, says her office emphasizes those very points when grooming students for the job market. "We definitely encourage our students to look at the big picture," she says. "In two or three years, will they still be in good shape?"

**Electronics center** The College of Engineering will share with five universities a new national center for power electronics aimed at achieving dramatic savings in electric power consumption.

UW-Madison will join Virginia Tech University, Rensselaer Polytechnic Institute, North Carolina A&T State University, and the University of Puerto Rico at Mayaguez in a new National Science Foundation Engineering Research Center for power electronics.

UW-Madison's effort will receive \$500,000 per year during five years. In total, NSF will fund the consortium with \$2 million in the first year with extensions possible for an additional five years.

The new Center for Power Electronics Systems will work to "make the U.S. the most efficient user of electrical energy in the world," according to VPEC Director Fred Lee. Power electronic equipment sales currently exceed \$60 billion annually.

At UW-Madison, electrical and computer engineering professors Robert Lorenz and Thomas Lipo, along with new faculty member Thomas Jahns, will focus on developing hardware for high-performance industrial drives and variable speed air-conditioners for the home. Lipo, campus director of the project, says the NSF funding will sponsor at least 10 additional graduate students, as well as new laboratory equipment.

**Turkey influx** The wild turkey has pulled off a stunning comeback in Wisconsin — but has the turkey's success come at the expense of local grouse populations?

While you can find newly arrived turkeys in former grouse-only woods, the birds' differing habits and food preferences ensure that neither is likely to displace the other, according to Scott Lutz, a wildlife ecologist in the College of Agricultural and Life Sciences.

A species that's expanding its range can hurt an established species by preying on it or out-competing it for food and habitat. But this rarely happens with species — turkeys and grouse, for example — that have historically co-existed, Lutz says.

If you're looking for causes of grouse declines, likely culprits include development of habitat and maturing forests. Lutz's current research at UW-Madison focuses on the ecology and management of quail, turkeys and other birds.

through surgery or drugs. The cases were referred to UW-Madison by veterinarians from around the country.

To develop the vaccine, the researchers began by surgically removing as much of the tumor as possible. They extracted and purified individual cells from the tumor and injected DNA into those cells that accelerated production of chemicals called cytokines. Cytokine molecules stimulate production of certain white blood cells in

have become widely studied in the past decade, could provide a new approach to fighting cancer with fewer side effects than chemotherapy or radiation therapy. This study is unique, Hogge says, because the gene therapy can produce a broad range of immune responses against surviving tumor cells in the patient.

"This is a way to trick the immune system and get the body to fight the tumor," Hogge says.

## Courts most admired by users

**Jeff Iseminger**

Complaining about the judicial system — a virtual birthright for Americans — occurs less among the people who have the most reason to castigate the courts: Those who have used them.

In the case of the courts, familiarity seems to breed respect. That's the finding of a new study by Herbert Kritzer, UW-Madison professor and chair of political science and professor of law, and John Voelker, policy analyst for the Wisconsin Supreme Court. They conducted exit and mail surveys of people who have used the trial-level state courts in Wisconsin.

Compared to the state's general population, court users showed a distinct difference in attitudes. "We found a pattern that persons who very recently were in court reported more positive evaluations than those who had been to court up to a year ago, and both of these groups were more positive about the courts than the general population," says Kritzer. "It appears that, at least in Wisconsin, negativity toward the courts is a function of popular images rather than actual experience."

The power of popular images popped up in another finding of Kritzer's study. "Even though recent court contact increases the courts' positive image," he says, "that image trails off quickly as the general negative perception repeated in the media replaces that spe-

cific experience.

"After all, the natural positive and routine O.J. (Simpson) trial

Kritzer and Voelker say, "The responses were

positive criteria used in the survey from a majority of court users of the general population. "Court decisions take into account respondents and agreed.

A similar survey of the public in perception of the courts in them and those who use them. The court tends to result in positive views of the courts."

## Berkeley chemist gets Hirschfelder Prize

**Terry Devitt**

David Chandler, a University of California-Berkeley theoretical chemist and one of the world's leading authorities in the field of statistical mechanics, has been awarded the Joseph O. Hirschfelder Prize in Theoretical Chemistry.

The Hirschfelder Prize is the largest award in the field of theoretical chemistry. It is awarded annually by UW-Madison Theoretical Chemistry Institute and carries with it a stipend of \$10,000.

Chandler, a professor at UC-Berkeley since 1986, is widely known for his studies of the structure and dynamics of liquids. Early in his career, Chandler made significant contributions to the development of the equilibrium theory of the liquid state.

He is a member of the National Academy of Sciences and the American Academy of Arts and Sciences. Previous awards include a Guggenheim Fellowship in 1981; the 1987 Joel Henry Hildebrand Award and the 1990 Theoretical Chemistry Award, both from the American Chemical Society.

Chandler will spend a week on the UW-Madison campus beginning Oct. 5. He will give three lectures for students, staff and faculty:

■ "Structure of the Liquid State: Ideas from van der Waals to Feynman Revisited," Oct. 5 at 4 p.m., Room 1361, Chemistry

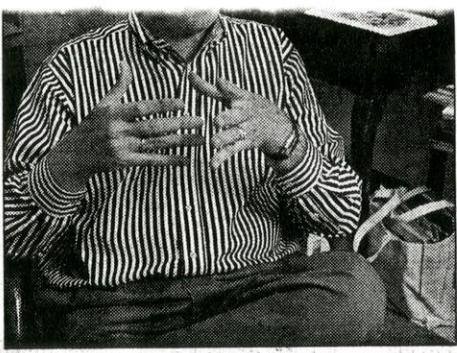
personal role in retaining minority students. In his document, "My Assertion on Retention," being circulated through e-mail, Davis calls for a faculty-run retention initiative, seeks a commitment to teach cross-cultural competency to all students, and urges faculty to help students of color develop a sense of belonging at UW-Madison. Davis plans a meeting Friday at 10 a.m. at the University Club Reading Room to discuss his proposals.

## RED GYM SNEAK PEEK

Get a sneak peek at the renovated Red Gym Oct. 8 at Second Thursday, hosted by the Dean of Students, Office of Visitor Services and the Office of News and Public Affairs. The event is planned for the Campus Assistance and Visitor Center (CAVC), Red Gym, 4:30-6:30 p.m. If construction delays the building opening, Second Thursday will move to Lakefront Cafe, Memorial Union. Free guided tours, one of the facets of the new Visitor Services program, will be available to those attending. A Campus Tree Walk (Bascom and Muir Knoll areas) and a Bascom Hill Historic District Tour will begin at 5:30 p.m. from the CAVC area.

## CONSTRUCTION WATCH

- Preliminary site work on the university's new \$45 million Rennebohm Pharmacy Building is expected to get underway late this week. Observatory Drive and its sidewalks will not be closed until a new road currently under construction is opened, but motorists, bicyclists and pedestrians should be aware of large trucks and other heavy construction vehicles in the area and the possibility of brief traffic disruptions. Those parking in Lot 60 should enter the lot from Observatory Drive. There will be no access from Walnut Street until the new road is completed later this fall. The project is expected to be completed by September 2000.
- The Lot 17 parking ramp at the College of Engineering has been approved by the UW System Board of Regents and the state Building Commission. The \$9.1 million, 800-stall ramp still needs city approval.



**At ASEC, "We try to keep a finger on the pulse of what's happening at the university."**

**"Academic s  
at the college  
in decision  
we hope**

moved here in 1977 to attend graduate school and has worked at the university since 1980. He's also worked for the Madison Symphony and the Jefferson Council for the Performing Arts.

Robinson started out as an Academic Staff Assembly representative in 1990, then became chair of the Assembly's Nominating Committee, which recommends appointments to standing committees and other university committees. He was elected to ASEC two years ago, and this past July, he was elected ASEC chair.

In a recent interview with *Wisconsin Week* writer Erik Christianson, Robinson explained the importance of academic staff governance and why academic staff employees should get involved.

**WW: What exactly does the Academic Staff Executive Committee do?**

BR: After academic staff were given the rights of governance, the Academic Staff Assembly was created, made up of elected academic staff representatives. ASEC, comprised of nine academic staff members elected by the staff at large, conducts the day-to-day operations, we recommend policy to the Assembly, and we serve as a liaison with the other members of shared governance. We try to keep a finger on the pulse of what's happening at the university.

WW: What are your duties as ASEC chair?

BR: I chair the ASEC meetings. The provost chairs the Assembly meetings. In his absence, I will chair the meetings. I work in concert with the secretary of the academic staff on day-to-day things that may arise. I serve as a spokesperson for academic staff issues and as a contact person for any academic staff member on campus. Act as a

FOR IMMEDIATE RELEASE 10/13/98  
CONTACT: Maury Cotter, (608) 262-9313

## TOTAL QUALITY FORUM SLATED IN MADISON

**MADISON** - The eighth in a series of national forums on Total Quality issues affecting both higher education and industry will be sponsored by the University of Wisconsin-Madison Oct. 21-22.

Called TQ Forum VIII, the conference has drawn representatives of companies and campuses from across the nation. Their charge: To define ways to improve the quality of university graduates through university-industry collaboration. The first TQ Forum was held in 1989, hosted by David Kearns, CEO of Xerox.

Speakers at the Madison forum will include David Ward, chancellor of UW-Madison; Ernest Micek, CEO, president and chairman of the board of Cargill; James Duderstadt, president emeritus of the University of Michigan; and Gordon Brunner, senior vice president of research and development for Procter & Gamble.

Participants will address such questions as:

- \* What does industry want and need in the graduates they hire? And how can higher education and industry collaborate more effectively to ensure that those requirements are met?
- \* What process can be used to produce curricula and learning experiences that result in well-prepared graduates?
- \* By what measures do we know if universities are meeting the needs of industry?

The forum, to be held in Madison's Monona Terrace Convention Center, will be sponsored by the UW-Madison Chancellor's Office, School of Business, College of Engineering, and Office of Quality Improvement.

###

- Jeff Iseminger, (608) 262-8287

to point, saving precious minutes following a critical injury or illness. Med Flight transports about 1,200 patients a year.

**Web site among best** The Why Files, a popular Web site that explores the science and technology behind the news, has added three more honors to an already long list of awards and citations. *Popular Science* lists The Why Files as one of the 50 best science web sites. *Fortune* magazine cited The Why Files as among the best sites on the Web for information and commerce. And The Why Files was selected as a Top 10 Educational Site by Learning in Motion, an organization devoted to integrating the Internet in education.



## Wisconsin Week

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ing of and more support for effective responses to crime. Goldstein will spend much of next year researching new directions for urban policing.

Since joining the faculty in 1964, Goldstein has gained national and international attention for his more than 40 years of research and writing on police discretion, police function, the

selected 25 young professionals with the Center on Crime, Communities & Culture. Since 1996, the center has named 43 Soros Justice Fellows and awarded \$9.6 million in grants to more than 130 advocacy and service organizations. The center and the Open Society Institute are part of the network of foundations started by philanthropist George Soros. ■

## UW-Madison campus leader dies of leukemia

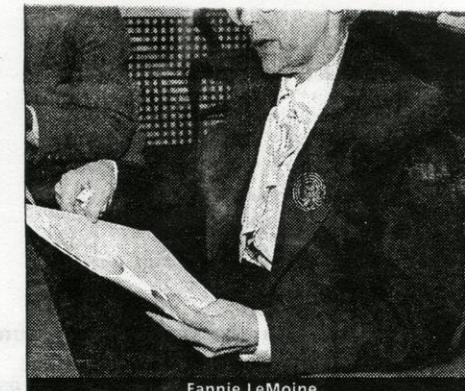
Fannie LeMoine, a champion of academic excellence and an architect of undergraduate enhancement programs at UW-Madison, died Aug. 18 following a 20-year battle with leukemia.

LeMoine, professor of classics and comparative literature, joined the faculty as an instructor in 1966. She chaired the Department of Classics in 1971, and became one of the first teachers in the United States to introduce the study of science fiction and fantasy in her courses on Rome, Latin and Masterpieces of Western Literature. Starting in 1972, she taught a regularly filled-to-capacity colloquium on fantasy and science fiction.

LeMoine assumed the chair of the humani-

ties divisional committee in 1974. She said the experience whetted her appetite for administrative work to find out, she said, how such a complex institution worked.

More administrative duties followed: As chair of the UW-Madison Faculty Senate's powerful University Committee in 1983-84, LeMoine advocated raising faculty salaries, then the lowest among the nation's top 20 institutions. LeMoine chaired the university's initiative, "Future Directions: The University in the 21st Century" in 1986-87. She also spearheaded efforts to implement the report's recommendations in 1989. Her efforts have led to a burgeoning growth in research opportunities for undergraduates, such as the Hilldale



Fannie LeMoine

Fellowships, which pair distinguished faculty with undergraduate students.

Virginia Hinshaw, dean of the UW Graduate School, where LeMoine served as an associate dean, said: "Fannie contributed in so many ways and truly enriched the lives of faculty, staff and students with whom she worked. Her courageous spirit and positive attitude will continue to inspire all of us."

Born in 1940, LeMoine was married to Sigurd Midelfort; she is survived by him and two sons. ■

## Learning

### Engineering creates new master's for practicing engineers

Graduate education's total-immersion agenda, packed with research and teaching assignments, can seem like a daunting lifestyle change for working professionals.

A new World Wide Web-based master's degree created by the UW-Madison College of Engineering may solve that problem by allowing professionals to advance their careers without interrupting them.

The Master of Engineering in Professional Practice (MEPP), slated to begin in summer 1999, represents what many see as the next wave in graduate education: Capstone-style degree programs that take instruc-

tion to the professional. Laptop computers will replace lecture halls, allowing students to complete assignments in the office, at home or on the road.

"We recognize that we may not be the center of (students') universe. That's very different from a traditional master's program," says Karen Al-Ashkar, an adviser in Engineering Professional Development. "These students will have a lot of different priorities, all of which are important."

While traditional graduate education stresses research, MEPP students will take a different track, she says. The curriculum, likened

to an engineer's version of an MBA, focuses on technical and organizational skills critical to modern engineers. These include computer applications, project planning and communication skills.

Thomas Smith, director of engineering telecommunications programming, says the advances in web technology will give the course a real-time, interactive quality. Courses will include computer-aided problem-solving, technical project management, communicating technical information and quality management. The second year will include a collaborative project with teams of students.

Michael Corradini, associate dean for academic affairs in the college, sees MEPP as part of a larger trend in engineering to meet the increasing demand for distance learning. Two other graduate programs approved this year — technical Japanese, and polymer science and engineering — cater to the professional in the field.

The programs are following a successful UW-Madison model in administrative medicine, which has offered a web-based advanced degree for years, he says. Like medicine, engineering is a field with near-constant change, and continued education is essential, he says. ■

## Survey Cont.

call for parents still in denial about risky youth behavior and stress at school.

It shows, as state superintendent John Benson acknowledged, that a "significant proportion of high school students drink, smoke and are involved in some violent and sexual behavior."

But Benson said there was reason for cautious optimism because the extensive survey found that students with a strong family and community support network are much more likely to abstain from risky behavior.

Among the heartening responses: Most kids reported getting firm parental guidance and felt they could turn to adults for help.

Here's a capsule look at findings on risky behavior:

### Weapons

The good news: Fewer students, compared with four years ago, said they had carried a weapon at school or elsewhere in the past month during a non-hunting season. The bad news: Some 15% (mostly males) still claimed being armed, with 6%

saying a gun was their weapon of choice.

And just as many students say they were threatened or hurt at school with a weapon as four years ago — 8%.

Just over half reported always feeling safe at school, another 45% said they usually feel that way and 3% feel unsafe.

### Drugs and Alcohol

Marijuana has grown in popularity, with more than one-third having tried it, usually between ages 13 and 16. Fewer of the smokers are one-time experimenters and many more than before reported using pot 10 or more times, the survey found.

In a one-month snapshot, almost twice as many students reported smoking pot as in the 1993 survey — 21% compared with 11%. Three percent reported cocaine use in that time period. Sixteen percent had used an inhalant to get high at least once in their lives.

"About a third of all students said that someone offered, sold, or gave them illegal drugs on school property in the last 12 months," the survey reports.

On the drinking front, half of

all students reported imbibing at least once in the previous month. "When students drink, they are likely to drink heavily," the survey found.

### Sexual Activity

Four in 10 students reported having intercourse, with about 23% of those who were sexually active saying they had used withdrawal or no birth control the last time they had sex. About one out of four ninth-graders reported having had sex.

Of all those sexually active, 12% said they had been pregnant or made their partner pregnant.

More than one-third of female students said they had been sexually harassed, compared with 10% of males. Twelve percent of young women said they had been forced into having sex, while 4% of young men said that.

### Tobacco

One-third of students reported recent cigarette smoking, unchanged from 1993. One clear trend: Many more students said they were trying to quit.

### Diet

More than 40% said they were trying to shed pounds.

The 99-question Wisconsin Youth Risk Behavior Survey, conducted by the UW-Extension Survey Research Lab, was completed by 1,325 high schoolers chosen at random. Surveyors said it is representative of the opinions of all 274,000 public high school students in the state.

The full report can be found at [www.dpi.state.wi.us/dpi/dlseas/sspwlyrbsidx.html](http://www.dpi.state.wi.us/dpi/dlseas/sspwlyrbsidx.html)



# NEWS

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UNIVERSITY OF WISCONSIN-MADISON

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FOR IMMEDIATE RELEASE 5/4/98

## UW-MADISON NEWS BRIEFS

### **PROFESSOR'S BOOK WINS BIENNIAL PRIZE**

A book by Brenda Gayle Plummer, professor of history and Afro-American studies at the UW-Madison, has won the Myrna F. Bernath Prize from the Society of Historians of American Foreign Relations.

The association awards this prize every two years for the best book written by a woman on American foreign relations, transnational history, international history, peace studies, cultural interchange, or defense or strategic studies. Plummer's award-winner is *Rising Wind: Black Americans and U.S. Foreign Affairs, 1935-1960* (Chapel Hill: University of North Carolina Press, 1996). It analyzes how collective African-American definitions of ethnic identity and race, and experiences with racism in this country affected their views on foreign affairs.

###

### **HERBICIDE APPLICATIONS TO BEGIN**

To control garlic mustard and invasive woody plants in the campus natural areas, chemical herbicides Roundup and Garlon 4 will be applied to areas in the western end of campus, including the Lakeshore Path and natural areas around Picnic Point starting May 6.

The chemical applications will last until June 30. For more information, check the special notices on the Safety Department's Web page at <http://www.wisc.edu/safety/pest98.html> or call 262-9735.

-more-

-more-

## NEW AWARD HONORS ENGINEERING PROFESSOR

The Society of Automotive Engineers (SAE) has created a new educational award honoring Phillip S. Myers, an emeritus UW-Madison professor of mechanical engineering.

Called the Myers Award for Outstanding Student Paper, the national award recognizes the best paper submitted to SAE by a student. Papers can be done on any topic and by students anywhere in the world.

The award recognizes Myers and his wife, Jean, for their lifelong devotion to students and education. Myers is an expert on internal combustion engines, and the Myers have been longtime advocates of student involvement in SAE.

The very first award, presented in February, went to Michael Koenig and Matthew Hall of the University of Texas at Austin. Hall served as Koenig's faculty assistant in the paper. Koenig received \$2,500.

For more information about the award, contact Lori Pail with SAE International, (724) 772-8534; or email lorile@sae.org.

## 1998 POLYGON TEACHING AWARD WINNERS ANNOUNCED

Polygon Engineering Council, the engineering college council of student organizations, announced their annual teaching excellence award winners April 26. Undergraduates vote to determine the awards. The recipients and their departments or programs are:

Faculty and instructors: Lewis Wedgewood, visiting assistant professor, chemical engineering; Henry Guckel, professor, electrical and computer engineering; Jay Samuel, instructor, materials science and engineering; James P. Blanchard, professor, engineering physics; Steven Cramer, professor, civil and environmental engineering; Michael Smith, professor, industrial engineering; Jaafar Al-Abdulla, instructor, engineering mechanics; David Bohnhoff, associate professor, agricultural engineering; Frank Fronczak, associate professor, mechanical engineering; James L. Davis, associate professor, engineering professional development.

Teaching assistants: Thomas D. Culp, chemical engineering; Eric R. Benedict, electrical and computer engineering; Oscar Marcelo Suarez, materials science and engineering; David C. Perry, civil and environmental engineering; Charlene Yauch, industrial engineering; Charles Daniel, mechanical engineering.

-more-

## **OPEN MEETING SET**

The Ad Hoc Committee to Review Athletic Board Relationships was appointed to examine the procedures followed by the Athletic Board in its discussions of recent controversial decisions, including the elimination and addition of sports to meet monetary and gender equity goals, the adoption of the Reebok contract and the recent nonrenewals of head coaches.

The committee has scheduled an open meeting May 6, 4-6 p.m., 165 Bascom Hall, to solicit perspectives, opinions and suggestions from all members of the community.

For more information, contact Paula Gray, Office of the Secretary of the Faculty, 262-3958 or [pjgray@mail.bascom.wisc.edu](mailto:pjgray@mail.bascom.wisc.edu), or Norman Fost, committee chair, 263-8562 or [normfost@macc.wisc.edu](mailto:normfost@macc.wisc.edu).

## **POPE AND KONRAD SELECTED LIBRARIANS OF THE YEAR**

Nolan Pope and Lee Konrad have been named the 1998 Librarians of the Year by their peers in the UW-Madison Librarians' Assembly.

The annual awards, created in 1989, recognize outstanding contributions to campus library services by two unclassified staff members of the General Library System. The first is awarded to an individual who has worked for the system more than 10 years; the second recognizes service of less than 10 years.

Pope was cited for "providing vision and guidance to establish the UW-Madison library system as a leader in library automation among academic institutions."

The associate director of the General Library System for Automation, Pope joined the GLS staff in 1985. He has overseen the development of MadCat (formerly NLS), the networking of PCs and CD-ROM resources, the use of a Web-based front end to library resources, the integration of CIC resources, and the new Virtual Electronic Library (WebZ).

Pope began his professional library career with the University of Florida library system in the late 1970s, where he worked in circulation and reference. He soon became the head of systems and computer-based operations there.

At UW-Madison, Pope has immersed himself in a wide range of responsibilities within the library, the campus, UW System, the Committee on Institutional Cooperation (CIC) and national arenas. He served as special assistant for library automation under

the Office of Academic Affairs for UW System in 1991-92. He has also been on the National Information Standards Organization board of directors since 1992 and has chaired the Standards Development Committee during that time.

He has served as the Standards Committee chair for the American Society for Information Science; as chair of the CIC Library Automation Directors Group; and serves on the CIC Virtual Electronic Library (VEL) Steering Committee.

The Chinese University Development Project invited Pope to lecture and consult in a management seminar on library automation. He was a Mortenson Foundation Fellow, traveling to Moscow to consult on automation with the Library for Foreign Literature. He also spent time planning and consulting in Kiev, Ukraine.

Lee Konrad, director of the College Library Computer and Media Center, joined the GLS staff in 1993. Konrad earned a bachelor's degree in history and a master's in library science from the UW-Madison. Before going to College Library, he held positions at Steenbock and Law libraries.

Konrad was instrumental, along with Library User Education Coordinator Abigail Loomis, in developing CLUE (the computer-assisted library user education program) that introduces undergraduates to the UW library system. He was among the first library staff to teach users about using the Internet.

He has published several articles in library journals since 1992, one of which was selected among the "top 20 [library] instruction articles" for 1996 by the American Library Association.

Konrad was commended for "always being on the forefront in understanding and applying technology to librarianship and instruction."

#### **ENGINEERING UNDERGRADUATE WRITING PRIZE WINNERS ANNOUNCED**

Winners of the College of Engineering's 1998 Steuber Writing Prize have been announced. Endowed by UW-Madison alumnus William Steuber, the contest for engineering undergraduates is now in its seventh year. The winners are:

First place: Gregory B. Ingersoll, "Baroque, Boole, Binary, Beams, and Bach;" second place: Laura Clavette, "Pie is Squared;" fourth place: Mark Grubis, "The Life of an Engineering Student;" honorable mention: Sarah Diny, "Comparison of Four Procedures Commonly Used in Refractive Eye Surgery."

The winning papers can be read at: [www.engr.wisc.edu/epd/steuber/](http://www.engr.wisc.edu/epd/steuber/).

###

## for teaching

lations of molecules and minerals.

**DIAGNOSIS:** An Interactive, media Experience for Students in Health Protection," Glen Stanosz, pathology, to develop exercises using multimedia computer program allows students to diagnose plant diseases and formulate and test health recommendations.

making 'More Better' Visual and Sense, CI 203 and the Cultivation of Cultural Reading Fluency," Mary G. comparative literature, to train students to compose and use Web-based media classroom presentations that explore the interrelationships between visual and verbal texts.

Using Technology to Enhance Learning in Less Commonly Taught Languages," Antonia Schleicher, African

languages and literature, to develop a multimedia CD-ROM and Web-based activities for teaching intermediate level Yoruba.

- "Computer-Based Curricula for Undergraduate Writing Courses," Deborah Brandt, English, to explore using a computer classroom to facilitate the writing process by promoting understanding of technology's relationship to reading and writing.
- "The Use of Computer Technology to Teach Interior Design Visualization - Three-Dimensional Form and Spaces," Wei Dong, environment, textiles and design, to enhance understanding of dynamic interior design concepts using interactive multimedia technology and computer-aided design to develop Web-based instructional modules. ■

## awards

been named annually to exhibit

social worker review committee at a

May 4, 1998, a regis- ter; Suzanne

unit; Anne

Ruiz deChavez, a registered nurse in the intensive care unit at UW Children's Hospital; Janis Littel, a registered nurse in the geriatrics clinic at University Station; Ann White, a registered nurse in the operating room; Laura Wick, a registered nurse in the inpatient pulmonary and gastroenterology unit; Susan Fadness, a social work case manager in rehabilitation; and Dawn Lipke, a licensed practical nurse in neurosciences and ophthalmology.

In addition, a lifetime achievement award was presented posthumously to Steven Seterz, director of surgical services at UW Hospital from 1978 until his death in 1997. During his tenure, patient volume in surgical services doubled. ■

## Community

### sanctuary

to donate Plexiglas, wire mesh, filament toys and other materials from the 50-year-old zoo facility to the sanctuary, according to Kemnitz.

The agreement between UW-Madison and the sanctuary also includes a requirement that the stumptailed colony not produce. Sanctuaries typically require such provision because of limited resources and space. Males in the colony are given vasectomies. But if there is no demand for stumptailed macaques in another facility, Kemnitz said the procedure would still allow for artificial insemination of the females.

The Wild Animal Orphanage currently houses several primate species as well as cats, rare birds and other animals. Kemnitz said the animals that have lived there for many years appear well cared for and healthy.

Kemnitz toured the facility April 16 with Ron and Carol Avestas, president and vice president of the sanctuary; and her staff and invited guests.

Since December, Primate Center officials had been actively pursuing another potential option of sending the stumptails to a sanctuary in Thailand, where stumptails are a native species. The Wild Animal Rescue Foundation in Thailand had expressed interest in creating an enclosure and public education center for the colony.

But the San Antonio option proved to be more financially feasible and posed fewer uncertainties than the Thailand option, Kemnitz said.

We are grateful to the Wild Animal Rescue Foundation, the U.S. Embassy in Bangkok, Montana Sen. Max Baucus and the State Department in Washington for their interest and hard work on behalf of the stumptailed colony," Kemnitz said. ■



### UW police share insights on horseback law

University Police sponsored a training course for 22 Wisconsin mounted police officers and their horses April 29-May 1 in Deerfield. Police departments from Green Bay, La Crosse and Milwaukee were among those who participated.

The course was taught by UW-Madison Police Sgt. Edie Brogan, the first and currently only Wisconsin mounted police instructor recognized by the Law Enforcement Training and Standards Bureau in the Wisconsin Department of Justice.

"Mounted policing is becoming more popular in Wisconsin and across the nation because of its superior visibility, crowd control and preventive patrol advantages, and because it provides good public relations," says Brogan. She hopes to form an association for mounted police in the Upper Midwest.

UW-Madison's mounted unit was created in 1989. ■

## Honored

The newest fellows inducted into the Teaching Academy include: **Clifton F. Conrad**, professor of educational administration; **Craig L. Gjerde**, associate professor of family medicine; **Mary L. Keller**, associate professor of nursing; **Robin S. Kurtz**, faculty associate in bacteriology; **Jonathan E. Martin**, assistant professor of atmospheric and oceanic sciences; **Catherine H. Middlecamp**, faculty associate in chemistry; **Christopher W. Olsen**, assistant professor of pathobiological sciences; **Marilyn B. Orner**, lecturer in women's studies; **Susan C. Paddock**, associate professor of professional development and applied studies; **Caton F. Roberts**, lecturer in psychology; **Stanley A. Temple**, professor of wildlife ecology; and **William H. Tishler**, professor of landscape architecture.

**Emily Auerbach**, professor of English, received the 1998 Award for Excellence from the Robert E. Gard Wisconsin Idea Foundation.

**Brian Bottge**, assistant professor of rehabilitation psychology and special education, received a Cognitive Studies for Educational Practice Award from the James S. McDonnell Foundation to study a mathematics acquisition model that describes how adolescents with learning disabilities solve mathematics problems.

**Marvin F. DeVries**, professor of mechanical engineering, has been selected by the Society of Manufacturing Engineers to receive the 1998 SME Education Award.

Two Division of Continuing Studies staff members earned awards from the University Continuing Education Association. **Susan Disch** received a gold award for "Rediscover a Special Place," a recruiting video for alumni, and **Christina Finet** received a bronze award.

**Richard Eisenstein**, assistant professor of nutritional science, recently received the Mead Johnson Award for research from the American Society of Nutritional Sciences.

**Jim Jones**, professor emeritus of law, received the 1998 Teaching Award from the Society of American Law Teachers for lifetime commitment to issues significant to SALT's mission.

**Jeff Miller**, photographer for the Office of News and Public Affairs, was named Photographer of the Year by the Council for Advancement and Support of Education for photography in publications. He also received a silver medal for an individual photograph. Miller's work appears in *Wisconsin Week*, among other campus publications.

**Allison Sandman**, graduate student in the history of science, has received a Spencer Dissertation Fellowship for Research Related to Education from the Spencer Foundation.

**William F. Tate**, associate professor of curriculum and instruction, received the Outstanding Research Award from the American Educational Research Association, Special Interest Group on Black Education.

**The Wisconsin Engineer**, published by UW students, won seven awards at the 1998 Engineering College Magazines Association National Convention including: first prize for best all-around magazine and most entertaining feature; second prize for best layout-all issues and best cover-all issues; and honorable mention for best layout-single issue, best single cover and best article for general science background.

## Appointed

**Linda Brei**, former director of corporate communications for Wisconsin Power and Light, has been named director of the UW Health Sciences public affairs department.

**Jeffrey Glassroth**, currently chair of the department of medicine at Allegheny University of the Health Sciences in Philadelphia, has been selected to be the new chair of the UW Department of Medicine effective July 1.

**Maureen Maddox**, formerly vice president of information resources at CUNA & Affiliates, has joined the Wisconsin Union as director of marketing.

**James Thomas**, assistant dean of admissions and financial aid in the Law School, has joined the Equity and Diversity Resource Center as a special consultant. His duties include reviewing admissions policies, analyzing diversity projects and programmatic concerns, and coordinating a university-wide assessment of diversity goals and impact of diversity programs.

**Patrick Turski**, professor of neurology and interim chair of the radiology department since 1996, has been appointed the John H. Juul Professor and chair of the department.

**Susan Vande Hei**, interim director of the Morgridge Center for Public Service, has been selected as the new director effective May 26.

Student officers selected to lead the board of directors for the Wisconsin Union include: **Susie Weber**, junior, president; **Kris Martens**, senior, vice president-programs; and **Jim Norton**, junior, vice-president-personnel.

## Published

**Elliott Sober**, professor of philosophy, and **David Sloan Wilson**, Binghamton University, recently co-authored *Unto Others — the Evolution and Psychology of Unselfish Behavior* (Harvard University Press, 1998).

development programs offered by the Management Institute. The recipients are:

### Catherine Attig

Attig is a typesetter with the Dictionary of American Regional English project in the department of English.

But her job duties go far beyond her official title of typesetting system input operator. She creates and updates production and student task instructions, production manuals, text and document files and editorial aids. She helps hire students and volunteers, trains them and checks their work.

In addition, she assists with computer maintenance, proofreading and keeps track of the dictionary project's progress. She specifically assisted the project last spring as it prepared for a national meeting of the Dictionary Society of North America, developing conference materials and filling in wherever needed.

Colleagues describe her as extremely

the communicative disorders department and speech and hearing clinics.

Having joined her current department when it was temporarily short-staffed, Gorman contributed immediately by quickly learning the routine of the department. In particular, she assisted with the department's five-year certification renewal process through the Association of Speech-Language and Hearing Association and a 10-year review through the College of Letters and Science.

Her work ethic, patience, loyalty and positive attitude have distinguished her as an outstanding employee. Gorman is also an active volunteer for her church and the community.

"It is the care, concern and dedication for her job, our faculty, students, clients and the community that set (Linda) apart," reads one nominating letter.

### Barbara Schaack

Schaack is a program assistant in the botany department.

Implement a free standing medical record system independent of the UW Hospital and Clinics system and is a key member of the Clinical Services Peer Review Committee.

In addition to providing stellar leadership to her team, Zweifel supervises three developmentally challenged individuals through the Goodwill Industries' Employment Initiative. Her work has been cited by Gov. Tommy Thompson as part of his Exemplary Employer Award program.

She is also a trusted colleague in the Wisconsin Health Information Management Association, and she organized the Health Services participation in the Dane County Social Services "Adopt-a-Family" program over the holiday season. She also collects winter coats for needy children each fall.

"(Sheila) consistently provides outstanding services and leadership for our students, colleagues, campus and statewide communities," reads her nominating letter. ■

Engineering

## and Sciences

146 people elected to membership in the American Academy of the Academy, an organization founded by the young republic, are chosen in recognition of public affairs and the arts. Those elected include: Crim joined the UW-Madison faculty in 1977. He is at the molecular level and for the development of chemical reactions with light.

and women's studies. Lerner joined the UW as a pioneer in the field of women's history, in Women's History in 1981. Before her retirement, she compiled a groundbreaking oral history on the movement.

political science. He joined the faculty in 1963 and is an authority on political dimensions. He is an authority on political dimensions. The preeminent scholar of politics in Zaire. ■

## Polygon Teaching Awards

### Karen Walsh

Polygon Engineering Council, the engineering college council of student organizations, announced their annual teaching excellence award winners April 26. Undergraduates vote to determine the awards. The recipients and their departments or programs are:

Faculty and instructors: **Lewis Wedgewood**, visiting assistant professor, chemical engineering; **Henry Guckel**, professor, electrical and computer engineering; **Jay Samuel**, instructor, materials science and engineering; **James P. Blanchard**, professor, engineering physics; **Steven Cramer**, professor, civil and environmental engineering; **Michael Smith**, professor, industrial engineering; **Jaafar Al-Abdulla**, instructor, engineering mechanics; **David Bohnhoff**, associate professor, agricultural engineering; **Frank Fronczak**, associate professor, mechanical engineering; **James L. Davis**, associate professor, engineering professional development.

Teaching assistants: **Thomas D. Culp**, chemical engineering; **Eric R. Benedict**, electrical and computer engineering; **Oscar Marcelo Suarez**, materials science and engineering; **David C. Perry**, civil and environmental engineering; **Charlene Yauch**, industrial engineering; **Charles Daniel**, mechanical engineering. ■

Engineering

FOR IMMEDIATE RELEASE 4/14/98

CONTACT: Larry Casper, (608) 263-1600; Anne Miner, (608) 263-4143

## UW-TEC PROGRAM PAVED ROAD TO SUCCESS FOR PROFESSOR'S INVENTION

**MADISON** -A tenacious early market assessment by a group of University of Wisconsin-Madison business students helped Marc Anderson's invention find commercial pay dirt.

Anderson's transfer success (see related story) resulted from his involvement in the Technology Enterprise Cooperative (UW-TEC), a fledgling partnership between the College of Engineering and the School of Business.

Nurtured by engineering Dean John Bollinger and business Dean Andrew Policano, UW-TEC promotes technology entrepreneurship by teaming business, legal and financial talent with researchers who have marketable inventions.

The success of this venture, one of the program's first, shows the power of the partnership.

"There's a lot of excitement over the fact that this can really work," says Anne Miner, a business professor and co-director of UW-TEC. "But we also learned how difficult and complex it was. We will try to learn from a long, creaky process and make it more efficient the next time."

Miner says the early market research done by a six-member student team tracked several different leads in the industry. The students did a creative three-month search for companies, from major grocery chains to trucking firms, and provided Anderson with an evaluation of four markets and nine prospects.

Anderson then followed up with each company, and the fifth one on the list - KES Irrigation Systems - proved to be the perfect match. Anderson says the business group helped narrow a very diverse field.

The marketing team included Tom Nicholas and Bob Smith, MBA students in marketing; Chris Bye, Alec Johnson and Mary Zellmer, doctoral students in management; and Ben Tang, a doctoral student in industrial relations. The team was organizer by Professor Robert Pricer, director of the school's Enterprise Center, and advised by Miner and Pricer.

Beyond marketing inventions, Miner says UW-TEC's greatest value is as an educational laboratory. Students work directly with faculty, staff and the business community to get real experience in technology transfer.

"The co-op idea is something we're really just beginning to roll out and gain some experience with," says Lawrence Casper, assistant dean of engineering at UW-TEC co-director. "This project is the first model for how it can succeed, but we have several others in the pipeline, including another application of photocatalysis technology."

###

- Brian Mattmiller, (608) 262-9772

FOR IMMEDIATE RELEASE

4/14/98

Engineering

(Editor's note: School of Business Dean Andrew J. Pollicano and Jere and Anne Fluno are available for phone interviews. Call Jeff Iseminger at the Office of News and Public Affairs (608) 262-8287 to arrange interviews or to obtain a photo of the Flunos. Media are also invited to attend the groundbreaking and reception. A dinner for School of Business guests will follow.)

### GROUNDBREAKING SET FOR EXECUTIVE EDUCATION CENTER

MADISON - The University of Wisconsin-Madison School of Business will hold a ground-breaking ceremony for its Fluno Center for Executive Education April 17 at 3:30 p.m.

The eight-story, state-of-the-art learning center will be built in the 600 block of University Avenue. It is slated to open in early 2000.

Those scheduled to attend the groundbreaking include Gov. Tommy G. Thompson, Madison Mayor Susan J. M. Bauman, Chancellor David Ward, School of Business Dean Andrew J. Pollicano, and Jere and Anne Fluno, for whom the facility is named.

The center will include classrooms, an amphitheater and dining facilities. It also will have 100 residence rooms for program participants. The ability to offer overnight accommodations is a key aspect of successful executive-education facilities offered by top business schools across the country, because it makes possible a total-immersion educational experience for participants.

The business school currently offers executive-education courses to more than 16,000 executives and managers each year at locations across campus. The Fluno Center will allow the school to focus its programs at one site. Participants in continuing-education courses from other units of UW-Madison, including the College of Engineering and the Medical School, also will use the facility.

The \$22.5 million construction is being funded by private gifts and bonds and without state money. Jere and Anne Fluno, of Lake Forest, Ill., contributed \$3 million toward the center. Jere D. Fluno, a 1963 graduate of the business school, is vice chair and a director of W.W. Grainger, a leader in the distribution of maintenance, repair and operating supplies in North America.

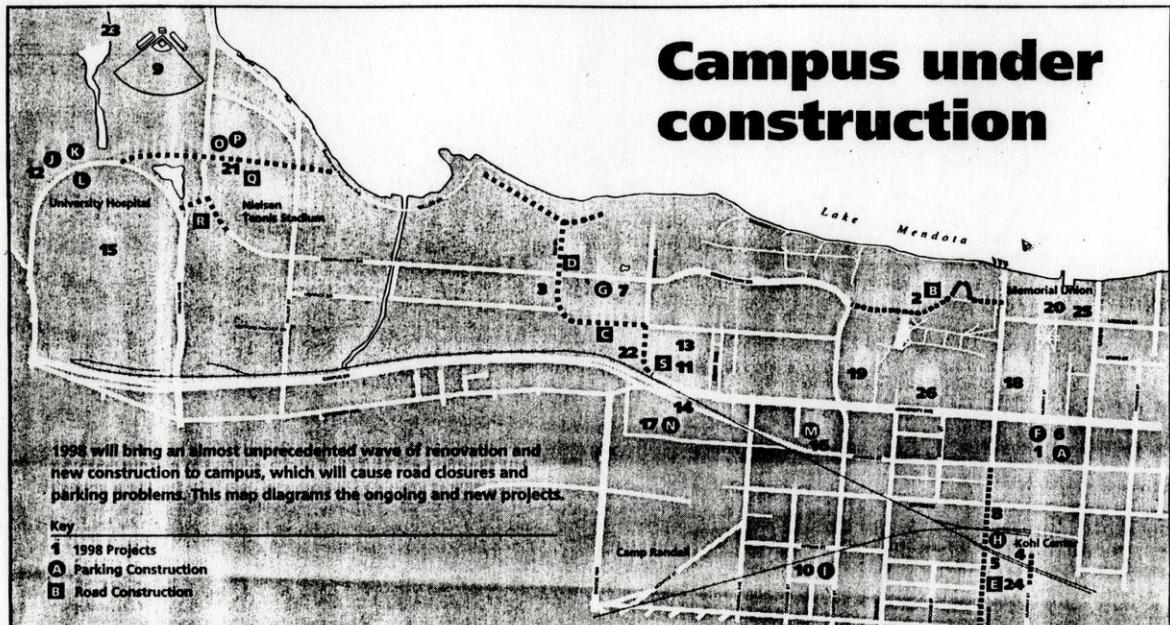
Other major gifts for the building were given by Irwin Smith, chairman of Columbus Circle Investors, and from the Eugenie Mayer Bolz Family Foundation on behalf of John and Robert Bolz of Madison.

The university will build a 300-stall underground parking structure below the Fluno Center to help alleviate the parking shortage in that section of campus and to serve those attending seminars.

###

- Jeff Iseminger, (608) 262-8287

# Campus under construction



1998 projects	Start	Impact
1 Southeast Ramp (Ta) Addition	Underway. Completion: March.	Addition of 248 parking spaces near the Kohl Center <b>A</b> .
2 Water Line Replacement Project	March. Completion: December.	Construction on Bascom Hill from mid-March through mid-July. Possible reduction of Observatory Drive to one lane at times from Bascom Hall to Elizabeth Waters Hall <b>B</b> from July to December.
3 West Campus Utility Project	March. Completion: November.	Possible reduction of Linden Drive <b>C</b> to one lane for a short time this spring and Elm Drive <b>D</b> to one lane from mid-April to mid-November. Half of the bicycle path along Lake Mendota will be converted to use for vehicles during this time.
4 Murray Street Pedestrian Underpass	March. Completion: July.	When complete, will allow pedestrians to get to Kohl Center via Murray Street.
5 Park Street Underpass Renovation (City of Madison project)	April. Completion: October 1999.	Park Street closed from Regent to Dayton streets <b>E</b> from July to October.
6 Fluno Center for Executive Education	April. Completion: December 1999.	Loss of 187 parking spaces in Lot 83 <b>F</b> until underground ramp with 300 spaces is completed.
7 Steenbeck Ramp (Lot 36)	April. Completion: September.	Loss of 78 parking spaces during construction, gain of 350 spaces when completed <b>G</b> .
8 Southeast Recreational Facility Fields	April. Completion: September.	Permanent loss of 117 parking spaces as Lot 48 <b>H</b> will be converted to recreational fields.
9 Goodman Softball Complex	June. Completion: February 1999.	
10 Primate Center Addition	June. Completion: September 1999.	Loss of 50 parking spaces in Lot 51 <b>I</b> .
11 Biochemistry Building	Underway. Completion: June.	
12 Waisman Center Addition	July. Completion: January 2000.	Loss of 111 parking spaces in Lot 82 <b>J</b> and permanent loss of 13 spaces in Lot 63 <b>K</b> .
13 Bock Labs Renovation	Underway. Completion: July.	
14 Materials Science and Engineering Renovation	Underway. Completion: July.	
15 Clinical Science Center Three Module Addition	August. Completion: December 1999.	Loss of 120 parking spaces in Lot 63 north <b>L</b> .
16 Chemistry Addition	August. Completion: July 2000.	Permanent loss of 15 parking spaces in Lot 55 <b>M</b> .
17 Engineering Ramp (Lot 17)	August. Completion: August 1999.	Loss of 350 spaces during construction. Gain of 800 spaces when completed <b>N</b> .
18 Humanities Remodeling	Underway. Completion: August.	
19 Van Vleck Hall Classroom Remodeling	Underway. Completion: August.	
20 Red Gym Renovation	Underway. Completion: September.	
21 Pharmacy Building	September. Completion: September 2000.	Loss of 40 parking spaces in Lot 85 <b>O</b> , permanent loss of 111 spaces in Lot 60 <b>P</b> . Observatory Drive will be reconfigured to the north starting in May <b>Q</b> . Utility work will close Marsh Terrace starting in June <b>R</b> . Traffic could be limited at times as road is widened to two lanes and an exit to Campus Drive is added <b>S</b> .
22 Babcock Drive Project	September. Completion: November.	
23 Eagle Heights Community Center Addition	Underway. Completion: September.	
24 Environmental Management Center	October. Completion: May 1999.	
25 Pyle Center Addition (formerly the Wisconsin Center)	Underway. Completion: October.	
26 Lathrop Hall Remodeling	Underway. Completion: December.	

## Regents urge state for funding to renovate campus buildings

Erik Christianson

With many of its buildings approaching middle age, the UW System has asked the state to establish a special fund for renovating campus facilities.

Under the UW System plan, discussed at the Board of Regents meeting March 5, the state would set up a development fund for renovation that would be administered by the regents. The development fund is the top priority in the UW System's plan to address facilities needs over the next several years.

Sixty percent of state buildings are located on UW campuses, and most are 20 to 40 years old and need renovation, said Marcia Bromberg, UW System's vice president for finance.

"The need (for renovation) is trending upward," added Regent Jonathan Barry of Mt. Horeb during a joint meeting of the board's Business and Finance Committee and Physical Planning and Funding Committee. "We have a big slug of buildings built in the 1960s and 1970s in need of restoration."

The UW System is also seeking bonding authority from the state for construction projects that generate revenue, such as parking ramps and dormitories. Barry said issuing bonds

would speed up the planning and construction process.

Every state university system in the country has bonding authority except for Wisconsin's, Barry said. A similar request was rejected by the state last spring. Granting the bonding authority would require legislative approval.

Other priorities for the UW System include working with the state on special financing programs such as the WISTAR and Healthstar initiatives, identifying new building needs and raising gift money for projects where appropriate.

UW System officials met in late February with Mark Bugher, secretary of the Department of Administration; Rick Chandler, state budget director; and Robert Brandherm, administrator of the Division of Facilities Development, to discuss their plan.

Brandherm gave guarded support for the UW System's plan at the joint committee meeting. He said the need for facilities renovation "is not just a university issue, it's a state issue," as most of the state's 6,900 buildings have not been renovated.

"We welcome the initiative," Brandherm said. "We don't agree with everything, especially the bonding, but we can work together." ■

# Wisconsin Week

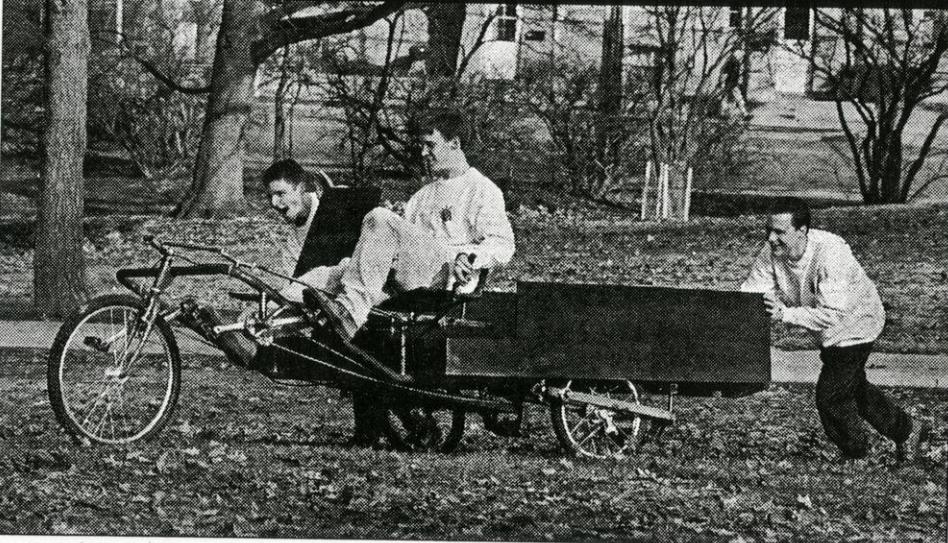
February 25, 1998

Wisconsin Week  
February 25, 1998

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## Now that's using your head



Students Brie Howley (left), Dave Waters (far right) and Eric Wobig tinker with their Turbo Mule.

Jim Beal, College of Engineering

**M**ost people don't spend a lot of time thinking about carrying items from one place to another. Three students who did have won \$10,000 for their effort.

A device known as the Turbo Mule won the first prize at this year's annual competition Brainstorm: the Schoofs Prize for Creativity, which crowns the best invention from undergraduate students and is hosted by the College of Engineering.

The human-powered Turbo Mule, built by students Brie Howley, Dave Waters and Eric Wobig, is intended to provide inexpensive transportation capable of easing the workload of people in Third World countries. "In the African nation of Ghana, approximately 70 percent of all time and 80 percent of all human effort is spent transporting agricultural materials," says Waters. "A lot of that is carried on women's heads. Turbo Mule could relieve a lot of that burden."

Although conceived as a work aid, the inventors say the vehicle could also be used as a taxi, factory cart or recreational vehicle just about anywhere.

Brainstorm awards cash prizes to undergraduates whose inventions are judged most creative, novel, innovative, patentable and likely to succeed in the marketplace. The contest is sponsored by Richard J. Schoofs, chairman of Schoofs, Inc.

Laura Jensen, Patrick Maquire, Chad Vande Hei and Vidya Balakrishnan won second place with The Up-Lift, a device to safely lower and raise a person from a wheelchair-accessible toilet. Third place went to Scott Kurszewski's Hold It, a quick-release, self-locking clamp used to secure a snowmobile to a trailer. ■

## Research, aid fare well in budget plan

Erik Christianson

**R**esearch funding and financial-aid spending will both increase next year

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### Departments

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4 Profile



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# NEWS

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FOR IMMEDIATE RELEASE

9/5/97

## UW-MADISON NEWS BRIEFS

### **ENGINEERING'S LEGO MODEL OPENS GALLERY OF DESIGN'S FALL SEASON**

A vision of the UW-Madison engineering campus — as portrayed through the medium of Lego building blocks — is on display in the Gallery of Design..

Designed and executed by a team of students for last spring's Engineering Expo, the meticulous 9-foot-by-16-foot model includes a possible design of the proposed Engineering Centers building, as well as complete landscaping for the entire college grounds.

Diane Sheehan, professor of environment, textiles and design, says a number of area businesses provided support for the project which will be on display through Sept. 19. The gallery, located at 1300 Linden Drive, is open Tuesdays-Fridays, 11 a.m.-4 p.m., and Sundays, 1-4 p.m. For more information, call 262-8815.

— Barbara Wolff, (608) 262-8292

###

### **SAN DIEGO ECOLOGIST IS NAMED TO ALDO LEOPOLD CHAIR**

Joy Zedler, a biologist from San Diego State University, will join the faculty in spring 1998 as the Aldo Leopold Chair in Restoration Ecology, a new position that will build on the intellectual spirit and example of Leopold.

The new position was created last year as a joint pursuit of the botany department and the UW Arboretum to further Leopold's extensive legacy. A former UW-Madison professor, Leopold founded the Department of Wildlife Management here and was a member of the first Arboretum committee. His work profoundly influenced 20th-century approaches to conservation.

Zedler, an expert on restoring wetland ecosystems, will pursue basic and applied research on restoration ecology. She will teach and train graduate students in the botany department while conducting a research program at the Arboretum. As the Leopold

-more-

## News briefs -- Add 1

professor, she will serve as a campus-wide leader in teaching and research related to restoration ecology.

Zedler earned her Ph.D. from UW-Madison in botany in 1968. She has been a faculty member at SDSU since 1969, and also directed the university's Coastal and Marine Institute and Pacific Estuarine Research Laboratory.

Joy's husband, Paul Zedler, chair of the ecology program area at San Diego State University, will also join the faculty as a tenured professor in the Institute for Environmental Studies and the Arboretum. A Wisconsin native, Zedler is a Ph.D. graduate of UW-Madison in 1968 and a former Arboretum botanist.

Paul Zedler is an expert in the study of extreme events and disturbances, such as fires, on natural systems. He also studies approaches preserving rare and endangered species.

— Brian Mattmiller, (608) 262-9772

###

### DAVIDSON WINS TOP HONOR FROM PSYCHOLOGICAL SOCIETY

Richard Davidson, the UW-Madison Vilas Professor of Psychology and Psychiatry, this summer received the highest honor given annually by the American Psychological Society, the William James Fellow Award.

At the APS's annual convention in July, Davidson received the award along with Edward Taub, a psychologist with the University of Alabama-Birmingham. The award is given for outstanding contributions in psychological research.

Davidson is internationally known for his work on the neural pathways of emotion and emotional disorders. He directs centers on campus sponsored by the National Institute of Mental Health on both affective science and emotion research.

The citation praising Davidson noted that his work "has been a major force in re-establishing the importance of emotion in virtually all areas in the biobehavioral sciences." He is also cited for having virtually single-handedly created a new hybrid field called affective neuroscience, which explores how the brain implements emotion.

"The remarkable range of his influence has secured a very significant place in psychology for the work of Davidson," the citation reads.

APS, founded in 1988, has nearly 15,000 members and is dedicated to advancing the best of scientific psychology in research, application, and the improvement of the human condition.

— Brian Mattmiller, (608) 262-9772

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# NEWS

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3/12/97

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## **UW CHEMICAL ENGINEERING'S MINORITY PH.D. PROGRAM RECOGNIZED**

MADISON — The UW-Madison chemical engineering department's past success in graduating minority Ph.D. students has garnered an invitation from the Alfred P. Sloan Foundation to help increase the numbers.

From 1991-1995, the department graduated six Ph.D.s from underrepresented minority groups. The numbers of minority Ph.D.s has been low historically in fields such as mathematics, science and engineering, and the New York City-based Sloan Foundation offers financial support to faculty or departments that have a proven record of attracting underrepresented minorities to their graduate programs.

Based on figures from the National Research Council, the foundation sent an invitation this year to the UW-Madison chemical engineering department. Sloan program officer Ted Greenwood says the grants provide \$30,000 for each additional student expected to obtain a Ph.D. from the department.

Department chair Sangtae Kim says the department's progress in minority recruiting has come from a combination of program quality and aggressive, personalized recruiting.

Hispanic students have done especially well, Kim says, thanks to a long-standing partnership with the University of Puerto Rico. The department has exchanged students and faculty with the university since the late 1960s, and UW-Madison has a strong word-of-mouth reputation there.

The department's approach to recruiting also makes a difference, he says. Every spring, the department formally invites about 40 of their top graduate recruits to campus for a weekend, giving them a chance to meet faculty and check out research opportunities. Kim says the personal touch has been helpful in recruiting students regardless of race, but has paid dividends in minority recruiting because those students are highly sought after nationally.

###

— Brian Mattmiller, (608) 262-9772



# NEWS

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Engineering, Karen Walsh, (608) 263-2982

## STUDENTS TO GET PRIZES FOR HIGH-TECH BUSINESS IDEAS

MADISON — Students at the University of Wisconsin-Madison will team up to create a business plan for a technology-based business venture as part of a new campus competition.

The Technology Enterprise Competition, announced by Business School Dean Andy Pollicano and Engineering Dean John Bollinger, will award up to \$22,000 in prizes, with a \$10,000 first prize to the student team submitting the best business and product development plan to the UW Technology Enterprise Cooperative (UW-TEC).

Winners will be chosen for the best market assessment, technological assessment and business plan in support of a viable start-up venture.

Teams must consist of at least one business and engineering student (graduate or undergraduate), but students from other UW-Madison schools are encouraged to join or start teams. Students competing will participate in an educational component consisting of seminars, meetings on team process, project management, market assessment of new technologies, intellectual property management and high-tech enterprise formation.

"This competition is a terrific opportunity for students to acquire practical experience in entrepreneurship," said Pollicano, "While the prize money is extremely attractive, students also will gain valuable experience on how evaluate technology in terms of its viability as a successful business venture and how to plan for building value." He said students at the School of Business will be encouraged to enter. "We are especially excited about engineering and business students joining with students from other disciplines," said Bollinger, "because cross-disciplinary teams are how successful high-tech ventures are created in the business world."

The competition will be funded in its first year by the IBM-TQM Quality Partnership

-more-

## Business plan competition -- Add 1

grant to the College of Engineering and School of Business. Competition is sponsored by UW-TEC and School of Business's Manufacturing and Technology Management Program, The Enterprise Center and the College of Engineering.

Although students have until September 26, 1997 to apply, they are encouraged to begin forming teams as soon as possible, according to Professor Anne Miner, co-director of UW-TEC. "This is going to be a lot of fun for students entering this competition ... and a lot of work," she said.

For a complete list of rules, students may email [enterprise@engr.wisc.edu](mailto:enterprise@engr.wisc.edu) or tune in to the website, [www.engr.wisc.edu/tecprize](http://www.engr.wisc.edu/tecprize).

###

— Helen Capellaro, School of Business, (608) 262-9213

Students to Get Prizes for Tech Business Ideas

Madison — Students in the College of Engineering and the School of Business will

choose a business plan for a technology-based venture as part of their summer

competition.

The Technology Business Competition, sponsored by Business 3000 Dan Andry

and the UW-Madison Department of Industrial and Manufacturing Engineering, will

award \$25,000 in prizes, with \$10,000 for the best business plan.

The Technology Business Competition is the first of its kind in the nation.

Students will be chosen for the competition by a panel of business and industry

experts, including professors, business leaders and entrepreneurs.

Students will be asked to submit a business plan for a technology-based venture

that can be used in a variety of industries, such as

manufacturing, engineering, business, technology, management, marketing and

communications.

Students will be asked to submit a business plan for a technology-based venture

that can be used in a variety of industries, such as

manufacturing, engineering, business, technology, management, marketing and

communications.

—note-

# North American settlers: It's no jungle out there

Terry Devitt

The popular image of pre-Columbian North America is of a pristine paradise.

But when Europeans first arrived in North America, they found anything but a primeval landscape. Instead, they encountered a land significantly altered by humans through the use of fire, sophisticated agricultural techniques, mining, and road and mound building, according to UW-Madison geographer William Gartner.

Addressing scientists at the AAAS annual meeting, Gartner said the first Europeans to arrive in North America were met with "an elaborate cultural landscape consisting of roads, villages and mounds."

From fire-maintained prairies and oak openings to altered forests and ubiquitous earthworks and settlements, the American landscape by the time of European contact had already endured thousands of years of modification by large Native American populations, Gartner said.

The pristine view, according to Gartner and others, is to a large extent the invention of 19th century romanticist and primitivist writers like Thoreau and Longfellow. The reality, said Gartner, is that the impact of native peoples was nearly ubiquitous, even in areas with comparatively sparse Indian populations.

Gartner studies the prehistoric landscapes of the American Midwest, and Wisconsin in particular.

A growing archeological, anthropological and geographical literature, he said, continues to reveal just how extensively native peoples shaped the landscape to meet their daily needs. Many scholars now believe there were between 40 million and 80 million inhabitants

of the New World when Columbus first set sail on his voyages of discovery.

"Indigenous peoples routinely cleared the Wisconsin landscape with fire," Gartner said.

"They burned to facilitate hunting and game drives, clear village and agricultural lands, assist in fuel-wood cutting, improve visibility and overland travel, manage pests and facilitate warfare.

"This humanizing imprint was nearly ubiquitous in the pre-Columbian scene," he said.

The northern limits of maize agriculture are now known to extend well into southern Manitoba, and the neighbors to the northwest of those agriculturists changed the land through fire, tobacco cultivation and selective plant collecting.

Although environmental degradation did occur in some areas such as the American bottom region near St. Louis during the 12th through 14th centuries, putting people on the landscape is not necessarily a detrimental one for nature, said Gartner.

For example, the climate responsible for the eastward extension of the tall grass prairies disappeared thousands of years ago, but native-set fires preserved those prairies in some areas such as Wisconsin. Also, forest disturbance through the use of fire and the creation of edge habitat may well have resulted in the large numbers of wildlife, especially the deer, elk, beaver, turkey and quail that so impressed English colonists in North America.

But the prehistoric human imprint on the North American landscape was, to a large degree, masked by the decimation of American Indian populations as a result of exposure to Old World diseases, for which Native American populations had no immunities. This allowed the landscape to recover until about the late 18th century when white colonists, pushing into interior regions, reimposed a human influence on the land.

According to Gartner, the modern North American landscape continues to yield a trove of clues to the prehistoric manipulation of the environment, despite the fact that 90 percent of Indian ridged fields, tens of thousands of mounds and other earthworks, and an unknown number of village sites have been obliterated by the plow, suburban sprawl and other forms of modern development.

As scientists learn more about the extent and nature of prehistoric human influences on the American landscape, it will force scholars to rethink some long-held beliefs, the most famous being that some native peoples such as the Kwakiutl of the Pacific Northwest lived in environments that were so rich there was no need for agriculture.

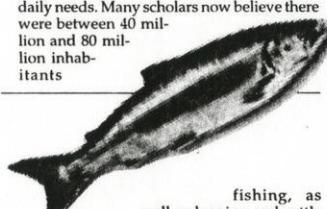
Gartner believes that there are entire systems of native agriculture that are largely ignored because of scanty preservation in the archeological record. The cultivation of tubers and household gardens that yielded food, medicine and fiber are activities difficult or impossible to extract from the archeological record, Gartner said.

"There are all kinds of tubers and they're never stored," said Gartner. "That's the beauty of tubers. They remain in the ground until you need them."

"We all come up with categories that tend to guarantee our results. There is still a lot we have to learn from native peoples about agriculture" and other human activities that may have shaped the land well before the first Europeans set foot on the continent, he said.

**"Indigenous peoples routinely cleared the Wisconsin landscape with fire."**

**William Gartner**  
Professor of geography



fishing, as well as logging and cattle grazing that degrade water quality.

The Pacific salmon debate is as politically complicated as any natural resources controversy in the country, Magnuson said. The different stakeholders include Native American tribes, the electric power industry, mining and agriculture practitioners, anglers and local watershed groups. It also transcends national borders, as the U.S. and Canada have disputes over fishing.

But the image of the salmon resonates deeply with people. "The salmon is an icon to the culture of the Northwest," he said. "It is intimately connected to Native American culture, to cuisine, to art and to economics. The image of the salmon is ubiquitous to the region."

"The region will have deeply lost something if wild salmon in the Pacific Northwest become a relic of the past."



**Madison's Russell Moore** says the harness designed for his dog Ike by a freshman engineering class gives him "a portable hand rail" useful in negotiating stairs.

Jeff Miller

## New tricks for dogs

*Engineering class invents harness, exercise machine*

Brian Mattmiller

With a \$300 budget and abundant creativity, freshman engineering students have created two clever products that have clients smiling and tails wagging at the Wisconsin Academy for Graduate Service Dogs (WAGS).

The products stem from an innovative freshman design course at the College of Engineering that puts students to work on real-world design challenges. Last fall, students teamed up with WAGS to find solutions to two daily-life problems clients face.

The challenges: to create a device that would help pet owners with limited mobility give their service dogs some exercise and to re-design a pet harness that gives clients enhanced balance.

This is low-budget, high-creativity design. Students developed a safe and compact "tennis ball launcher" that can be mounted on a wheelchair and powered by the chair's batteries.

The second group used technology from downhill ski braces to build a more supportive harness for a client who has multiple sclerosis.

Madison resident Russell Moore says the new harness is working beautifully, and he's getting his service dog, a golden retriever mix named Ike, adjusted to the new device. Moore says his old harness for Ike was cumbersome and offered little balance support for walking.

"Before, I couldn't really look at people around me when I was walking," he says. "It took all of my concentration just to stay upright. But the new device helps me look around at people rather than the ground."

The harness is fashioned with quick-release snaps like those found on downhill skis, helping with Moore's limited finger dexterity. It also has a gear shift-like adjustable handle fastened to the harness, which allows him to use Ike for support and help regain footing if he falls.

"I really depend on Ike for all sorts of things," Moore says. "This new brace is like

having a portable hand rail."

Sarah Patzer, training coordinator at WAGS, says the Janesville- and Madison-based organization custom-trains and places service dogs to assist people with mobility impairments. It relies heavily on volunteer support, and related equipment is often expensive and scarce. Patzer says she hopes the College of Engineering class can be a continued source of design ideas for WAGS.

Mechanical engineer Patrick Farrell, of the course's teaching team, says the WAGS challenges fit the class's educational goals perfectly. Faculty look for community projects that can be completed in a semester, have no single obvious solution, are inexpensive and require student-client interaction.

"The technology will get more difficult for students, but the fundamental process of design is all right there," he says. The transition from concept to blueprint to production hits every major point of product development, including patent searches, he says. The design course was created in 1994 with financial support from the Advanced Research Projects Agency. It helps bridge the gap between engineering's theory-packed first-year curriculum and the tangible rewards of the field.

Katie Emery, an engineering student in the ball-thrower project, found it challenging to filter months of brainstorming into a final tangible product. "It could be frustrating for us as freshmen, since we had limited knowledge, money and time," she says.

But even with these limitations, the students brought a professional polish to their project. Their semester-end presentation included a multi-media show with computer graphics, a video and a demonstration that sent tennis balls arcing into the auditorium crowd.

"I had never done a hands-on engineering project like this before, and it really helped me focus my major," adds Emery. "It's like a little prelude of what's to come."

The tennis-ball launcher will be featured in next month's Engineering Expo on campus before it's donated to WAGS.

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# WISCONSIN WEEK

February 26, 1997

For Faculty & Staff

University of Wisconsin-Madison

~~Editor~~

Engineering  
College of

## Music

### Piano handful



Jeff Miller

Eight (count 'em) hands — belonging to Music faculty Ellen Burmeister, Carroll Chilton, Howard Karp and Todd Welbourne — will tackle two pianos as part of the school's 1997 Gala Showcase Concert March 1. For details, see page 14.

## Inside

7

### Service with a wag

Thanks to an inventive group of freshmen, service dogs can learn a few new tricks for their owners.

8

### Winter wonderland

Wisconsin Week takes a fresh look at a waning, draining winter.

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### 15 Position Vacancies

## Micromachine master adds a new dimension

### Engineer profiles 'tall' design at AAAS

Brian Mattmiller

A UW-Madison engineer follows an unusual parameter in the quest to make functional micro-machines. Rather than just smaller, he makes them taller.

Engineer Henry Guckel has been pursuing the "taller is better" premise for years in his applied micro-electronics laboratory, and his techniques are beginning to make their way into commercial products. By using deep X-ray lithography techniques on metal rather than the standard silicon, Guckel builds machines as dust-speck tiny as his counterparts, but with greatly increased height.

Guckel said the added dimension of his micro-machines dramatically increase their power storage capability and make them more functional for devices such as actuators and sensors.

"The more three-dimensional we can make something, the more

applications we will have," Guckel said. "We're building devices now that take up a very small area, but are vertically very tall and consequently offer greatly increased energy storage," he said.

Most of Guckel's parts are smaller in size than the width of a human hair, which is 75 microns. But he has produced parts as tall as 1,000 microns.

Guckel's presentation, during "Engineering the Future with Microsystem Technologies," a session at the annual meeting of the American Association for the Advancement of Science, focused on the benefits of using X-ray lithography in building devices with commercial potential.

The deep X-ray lithography process offers two advantages over making parts with silicon, Guckel said. By using metals such as nickel, copper and iron alloys in micro-motors, the machines are driven by magnetic rather than electrical fields. And metal can be layered faster than silicon, so parts can be made taller within industry's normal time demands.

One strong market for metal

ogy investments; increased funding for student advising; and flexibilities requested for position control and revenue bonding — were not included in the governor's budget, Torphy says.

As is always the case, the budget does not include recommendations for specific pay increases for faculty and academic staff (see related story).

Torphy and Eric Borgerding, special assistant to the chancellor for state relations, are among the many UW-Madison and UW System officials analyzing the governor's budget. UW-Madison comprises about 53 percent of the UW System's proposed \$5.2 billion budget.

"So far so good," says Borgerding. "But there are bound to be things in the budget pertaining to UW not mentioned in the governor's speech that we are not yet aware of."

Thompson presented his budget to the Legislature Feb. 12, saying the spending document "brightens the shining star of our education system — the University of Wisconsin System."

The recent *Kiplinger Magazine* report that ranked the UW-Madison the third-best value in the na-

see BUDGET, page 10

## Pay raise, tuition remain questions

Erik Christiansen

The biggest budget question for UW-Madison this biennium is faculty and academic staff pay raises — but Gov. Tommy Thompson's proposed 1997-99 budget does not give an immediate answer.

UW System officials say the salary plan offered to unclassified state employees, such as faculty and academic staff, won't be known for certain until June.

John Torphy, vice chancellor for administration, says it appears the governor has set aside enough state money to finance raises of 2 percent per year. However, the budget bill gives the UW System Board of Regents the authority to increase faculty and academic staff salaries at a rate greater than the pay plan.

UW-Madison officials say salary increases similar to the 1 percent and 2 percent raises in the last two years will further hamper the university's ability to attract and retain top faculty. UW System President Katharine Lyall and Chancellor David Ward recom-

see QUESTIONS, page 10

## Inside:

### SCIENCE IN

### FOCUS

### Research from the American Association for the Advancement of Science

The annual meeting of the AAAS is a rare free-for-all of new ideas across the entire scientific realm. This year's meeting, held Feb. 13-18 in Seattle, explored the theme of how science is helping improve society. The stories in this series profile some of UW-Madison's contributions to the event, which attracted more than 5,000 scientists.

see pages 6-7

micro-motors is actuators, the mechanical devices in systems that transmit energy to control precise functions such as computer memory. Guckel said micro-motors could control the movement of magnetic recording heads more precisely, expanding the amount of information stored on computer

see MACHINES, page 6

## Smith to head 150th celebration

Peyton Smith, who holds a joint appointment with the Office of Outreach Development and directs the Program Information and Publications Office in the Division of Continuing Studies, has been named coordinator of the UW-Madison's Sesquicentennial activities by Chancellor David Ward, it was announced last week.

Smith accepted a three-year re-assignment to new duties to help plan and carry out Sesquicentennial programs across the campus. He will head a small Sesquicentennial office, supported solely by discretionary gift funds.

"I am delighted that Peyton has agreed to lead this important institutional effort to mark our 150th anniversary," Ward said. "Peyton's experience in outreach programming and communication, his organizational abilities and his broad knowledge of the campus made him an excellent choice for shouldering these campus-wide responsibilities."

see SMITH, page 10

# Researcher: Science must tell the whole forest story

Terry Devitt

In the high-stakes battle over the future of America's national forests, the trump card is science.

Mountains of research have been compiled in an attempt to understand the intricacies of the forest. From studies of the microbes that inhabit forest soils to large-scale experiments in intensive management, scientists have been slowly and surely unraveling the secrets of forests.

This scientific inventory of forests is enormous, but far from complete. Nevertheless, competing interests — from environmentalists to the wise use movement — are mining this mother lode of knowledge to fortify parochial arguments and shape forest policy.

But to Nancy Langston, a visiting professor of environmental studies at UW-Madison, the tendency by the federal government and others to shape forest policy by selectively tapping into the scientific literature diverts attention from the real dilemma of our national forests: the culture clash.

"More information will not save us from our errors, for we can never learn all there is to know. The world is far too complex," Langston told scientists at the annual meeting of the AAAS. "We need to change the way we think about the land, not just change the number of little parts we study, label and preserve."

It's not that Langston thinks studying forests is a bad idea. On the contrary, Langston argues that forests need to be studied more intensively and in new ways. The problem lies in the application of science to forest policy, said Langston who has used the management history of the Blue Mountains of Washington state as a case study of science-aided forest policy gone awry.

Her study of "the Blues," chronicled in the book "Forest Dreams, Forest Nightmares," adds new historical, political and cultural context to the vitriolic debate over the nation's forest resources.

The history of management in the Blue Mountains is instructive, according to Langston, because it demonstrates the unseen role of culture in the development of American forest policy.

Early in this century, for example, when the fledgling Forest Service was plotting the management future of the vast forests of the American West, old growth was considered "decadent" by the prevailing standards of European silviculture, the model held up by Gifford Pinchot, founder of the U.S. Forest Service.

At the time, old growth was viewed by professional foresters as an inefficient and wasteful forest scenario: "The best way to free up the land to grow better forests was to sell off the old-growth timber as soon as possible," said Langston.

The result was a logging boom in the West that inflated harvests and set up an economic house of cards that collapsed in the 1980s when forests were depleted. Ironically, that result was predicted in the 1920s by the very Forest Service planners who formulated the policy.

**"We need to change the way we think about the land, not just change the number of little parts we study, label and preserve."**

Nancy Langston  
Visiting professor of environmental studies

That logic lives on today, said Langston, in the salvage logging program. Proponents of salvage logging argue that the policy will "fix the forest health crisis" and restore Western forests to former ecological states and, at the same time, restore the flow of timber to the depressed mill towns of the West.

"Proponents of the (salvage) rider argued that heavy salvage logging would fix the forest health crisis, and restore ponderosa pine to the inland West," said Langston. "The effect, in just a few months, was to triple or quadruple logging in many areas, returning harvests to the inflated levels of the late 1980s."

This policy, according to Langston, echoes the arguments of the nation's early foresters who justified liquidating old growth pine forests so young, healthy, rapidly growing forests could take their place.

"This, unfortunately, led us into our current troubles," said Langston. "This definition of health is based on human conceptions of efficiency, not on an understanding of ecological processes of mortality and disturbance. The largest problem with salvage logging is that it assumes dead wood is bad for a forest and must be removed to make the forest healthy."

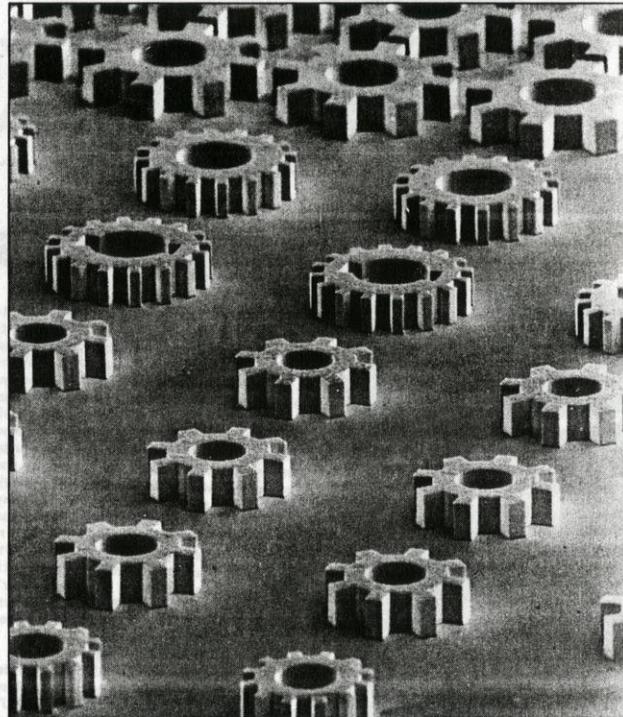
Salvage logging can be beneficial to some forest stands, but Langston noted it has become a cure-all, a political tool that pretends to answer a scientific problem.

What foresters need as they sculpt policy, according to Langston, is not necessarily more science, but a broader understanding of past policy and cultural ideals that transformed forest communities into "storehouses of commodities."

"By ignoring those links, we get the ecology wrong, since it fails to recognize the ways that ideology and politics shape definitions of forest health," she said. "Science isn't going to give us a simple or necessarily right answer." ✓

## SCIENCE IN FOCUS

Research from the American Association for the Advancement of Science



**Micromachines produced by Henry Guckel's electrical and computer engineering lab are typically smaller than the width of a human hair. Just imagine how small the gears (above) are.**

### MACHINES

*from page 1*  
disks. Current technology can read information on computer disks within two microns. But a micro-mechanical actuator could read the disk within one-tenth of a micron, a factor of ten improvement, Guckel said.

Commercial ventures into micro-machines are just beginning to develop in the United States, Guckel said. A new company called MEMSTek, based in Vancouver, Wash., started last year and has licensed a number of Guckel's patents. The company is crafting microscopic nozzles for use in ink-jet printers that make detailed copies, and making tiny pumps for use in medical equipment.

Deep X-ray lithography uses X-ray light to shine through a stencil-like mask and etch precise patterns into a metal plate. The light source is generated at UW-Madison's Synchrotron Radiation Center. Guckel's lab has improved on the process by combining it with surface micro-machining, which holds the dimensions of parts more precisely.

One of the drawbacks of the process has been its high cost, Guckel said, but they are pursuing ways to bring costs down by creating more parts per each X-ray exposure. The development of shared "print houses," such as the one at Brookhaven National Laboratories, has also produced cost-effective results for companies just getting into micro-mechanics.

## Fishy studies cloud Pacific salmon picture

Brian Mattmiller

Science may be pointing a way out of the gridlock over rehabilitating wild Pacific salmon in the Columbia River basin, where once-annual spawning runs of 20 million fish have greatly diminished.

John Magnuson, a UW-Madison zoologist who chaired a National Research Council study on Pacific salmon, said the politically charged environment among interest groups makes it hard to distinguish between credible and "tainted" science.

The answer may be in a new independent scientific board that will better integrate salmon research and management. Created by the Northwest Power Planning Council and the National Marine Fisheries Service, the board has been broadened to include more disciplines and wider responsibility, Magnuson said.

"Public agencies have the money devoted

to research, but it has been difficult to make the hard decisions to move ahead," Magnuson said during the AAAS annual meeting. Magnuson served on a panel discussion of how scientific consensus can contribute to the recovery of Pacific salmon.

The topic has taken on urgency with the recognition that a lot of genetic diversity is being lost forever. Pacific salmon have disappeared from 40 percent of their native breeding ranges in Washington, Oregon, Idaho and California over the last century. Many unique, locally adapted populations have become extinct in some rivers, he said.

Despite spending roughly \$100 million a year to help rehabilitate the fishery, many wild populations are still dwindling, added Magnuson, director of UW-Madison's Limnology Laboratory.

The 1995 NRC report "Upstream: Salmon and Society in the Pacific Northwest," recommended solutions that cover the total ex-

panse that salmon inhabit, from mid-Pacific schools to major rivers to spring-fed tributaries. The human influences that occur all along that route will have an impact on salmon survival. "There is no magic bullet, but recovery is doable if problems are addressed across this geographic range," he said.

One surprise from the report is that fish hatcheries, created a century ago to restore salmon stocks depleted by dams and overfishing, have in themselves contributed to the decline of wild salmon stocks.

The hatchery-raised fish are replenished at a much faster rate than native fish, greatly reducing the percentage of native fish over time, he said.

The NRC report recommends operating hatcheries as laboratories for understanding more about wild fish, and rehabilitating wild populations instead of producing fish for capture. It also calls for cutbacks in ocean

Dec. 4. 1997

TO: Editors, news directors  
FROM: Brian Mattmiller, (608) 262-9772  
RE: Sen. Herb Kohl tours UW science labs Friday

U.S. Sen. Herb Kohl, D-Milwaukee, will take a fast-paced tour Friday morning (Dec. 5) of University of Wisconsin-Madison research efforts, including new dairy product markets, food safety and advanced fusion experiments.

Reporters may attend the morning sessions from 11 - 11:25 a.m. when Kohl visits Babcock Hall, 1605 Linden Drive. The tour will begin in room 111 of the building.

During that time, Kohl will hear presentations on emerging markets for Wisconsin dairy products. Ken Shapiro, associate dean for international programs, will discuss the Babcock Institute, which is helping Wisconsin agribusiness find global markets. Kohl will also tour the Center for Dairy Research and hear from Director Rusty Bishop about new dairy markets being forged by the center.

Kohl's support has been instrumental to the success of those programs.

The visit, organized by UW-Madison's federal relations office, will give the senator a first-hand look at other projects he has encouraged through Senate subcommittee work. Those include food safety projects from the Food Research Institute and an advanced fusion experiment in the College of Engineering.

In addition, Kohl will get a glimpse of the future of agricultural and health research in genomics. Presenter Michael Sussman, director of the Biotechnology Center, will talk about the huge potential of genetic research to improve food production.

For more information on the visit, please contact Rhonda Norsetter, assistant to the chancellor for federal government relations, at (608) 263-5510; or Brad Fitch, Kohl's communications director, at (202) 224-6939.

###

Engineering

Fusion

## MILESTONES

from page 3

"This professorship enhances our relationship with a truly outstanding clinician and dedicated scientist," said Daniel M. Albert, Frederick Allison Davis Professor and chair of the UW Medical School Department of Ophthalmology and Visual Sciences.

Since 1993, Kushner has been named in five national or regional publications listing the best doctors/ophthalmologists, including the 1996-97 edition of *The Best Doctors in America*. He has presented six named lectures and has received numerous national and UW awards, including the Outstanding Surgical Professor Award twice from UW ophthalmology residents.

## HONORED

Arthur B. Ellis, Meloche-Bascom Professor of Chemistry, has won the George C. Pimentel Award in Chemical Education, sponsored by Union Carbide, for advancements in the instruction of materials science.

Arthur Glenberg, professor of psychology, has been invited to give a presentation at the Smithsonian Institution in Washington, D.C., on Feb. 10 on the topic "The Meaning of Meaning."

Janet Hyde, professor of psychology, has been awarded an honorary doctorate from Denison University. She also received the Heritage Award for career contributions to research on the psychology of women from the Psychology of Women division of the American Psychological Association.

Neal Jorgensen, David Wiegert and Delma Woodburn were honored for their contributions to the Farm and Industry Short Course at its annual alumni reunion. Receiving Service to Agriculture Awards were Jorgensen, CALS executive associate dean, and Wiegert, who recently retired from the Department of Dairy Science. Woodburn received the Friend of Short Course Award, recognizing special assistance to the program. Woodburn graduated from Short Course in the 1930s and established the J.S. Donald Award, named for her father, given each year to the outstanding teacher in Short Course.

Yvonne Ozello, professor of French and associate dean for humanities in the College of Letters of Science, has been appointed by the French government to the rank of Officer in the Order of Palmes Academiques. Created by Napoleon I in 1808, the Palmes Academiques honor distinguished educators, academics and artists.

Martin Smith, coach of the UW men's cross country team, and Peter Tegen, coach of the women's team, were each named Big Ten Coach of the Year in cross country following the 1996 season.

Charles Snowden, Emlyn Professor of Psychology, was one of five Master Lecturers at the annual meeting of the American Psychological Association in Toronto. His subject was "Tamarin Family Values: Origins of Monogamy and Cooperative Child Care." He is also joint editor of *Parental Care: Evolution, Mechanisms and Adaptive Significance*, a new book from Academic Press.

## APPOINTED

Phil Elmassian has been named an assistant coach for the UW football team. Elmassian, who will coach defensive backs for the Badgers, comes to the UW after a year with Boston College's football staff.

Morton Gernsbacher, Bartlett Professor of Psychology, has been appointed editor of the journal *Memory & Cognition*.

Howard Martin, dean of the Division of Continuing Studies, has been selected as a North American Fellow, as part of an alliance among continuing education associations in Mexico, Canada and the United States.

Ken Zeichner, Hoefs-Bascom Professor of Teacher Education, Department of Curriculum and Instruction, has been elected to a three-year term on the Board of Directors of the American Association of Colleges of Teacher Education, a consortium of more than 700 colleges and universities involved in the preparation of educators. He also currently serves as vice president of the Division of Teaching and Teacher Education in the American Educational Research Association.

## PUBLISHED

Jorgen Herbst, emeritus professor of educational policy studies and history, has published *The Once and Future School* (Routledge Books).

William L. Van Deburg, professor of African American studies, is editor of *Modern Black Nationalism: From Marcus Garvey to Louis Farrakhan* (New York University Press).

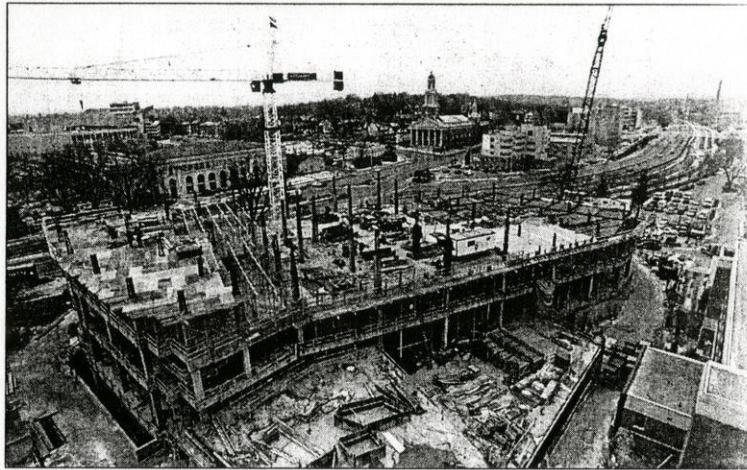
Karl Zimmerer, professor of geography, is author of *Changing Fortunes: Biodiversity and Peasant Livelihood in the Peruvian Andes*, published by the University of California Press.

## West campus project begins to take shape

The new Biochemistry Building, the latest step in modernizing UW-Madison's teaching and research space, is beginning to take shape after nine months of construction.

The construction team is nearing completion of the concrete and metal frame for the \$34.9 million building. Michael Cox, a UW-Madison biochemist leading internal plans for the building, says it will be a distinctive addition to campus, housing 23 research teams and up to 300 people.

The building is funded through the Wisconsin Initiative for State Technology and Applied Research (WISTAR), as well as the Wisconsin Alumni Research Foundation. Construction is expected to be complete by May 1998.



Jeff Miller

## Engineering plans brainstorms for Edison

Jim Beal  
Engineering Publications C.

The College of Engineering invites the UW campus to celebrate the 150th birthday of Thomas Alva Edison on Feb. 11. One of the outstanding geniuses in the history of technology, Edison earned patents for more than a thousand inventions, including the incandescent electric lamp, the phonograph, the carbon telephone transmitter and the motion-picture projector. In addition, he created the world's first industrial research laboratory. This spirit of invention continues to thrive on the College of Engineering campus. Students will showcase their own inventions

in competition for more than \$22,000 in prizes in Brainstorm, the Schools Prize for Creativity. New this year are two \$2,500 awards by Brainstorm judge Tom Aschenbrenner for best invention prototype.

Student inventions include everything from automotive improvements to portable hot tubs. Students will present their inventions to a panel of judges from 8 a.m.-2:30 p.m. in the Grainger Technology Transfer Auditorium in Engineering Hall. For each presentation attended, UW students will get a chance to win door prizes, including a personal digital assistant from Hewlett-Packard. Door prizes will be awarded with the Schools and Aschenbrenner Prizes.

At 2:30 p.m., inventor and College of Engineering professor of electrical and computer engineering Deepak Divan will give a presentation entitled "From College Professor to the School of Hard Knocks."

Throughout the day, the college will show an 18-minute Edison Day video entitled "The Invention Factory: The Story of Thomas Edison and his West Orange Lab."

At 4 p.m., School of Business Dean Andrew Pollicino will announce the creation of "Tec Prize" — a new invention contest starting this year.

The celebration concludes with the awarding of prizes and the lighting of the State Historical Society's Edison Generator.

## Regent president to engage Senate in open discussion

Brian Mattmiller

Michael Grebe, president of the UW System Board of Regents, will attend the Feb. 3 meeting of the Faculty Senate for an open-ended discussion with faculty.

Grebe will offer brief comments updating the senate on current issues at the regents level, then be available to take questions from the floor. The meeting will be held at 3:30 p.m. in 272 Bascom Hall.

University Committee Chair Evelyn Howell invited Grebe to share opinions about pressing issues, such as biennial budget deliberations and the faculty salary plan. Senate members are encouraged to prepare questions in advance for Grebe, Howell says.

The senate also will continue its discussion on the merits of pursuing enabling legislation for faculty collective bargaining. During the December meeting, senate members voted to have the University Committee research the implications of enabling legislation on faculty governance, tenure, salaries and other issues, says Howell. As part of the report, June Weisberger, a UW-Madison professor emerita of law and expert on public sector collective bargaining, will give the senate an overview of the State Employee Labor Relations Act and the implications of bargaining at public universities.

In other matters, the senate's Ad Hoc Committee on the Use of Student Course Evaluations will present a progress report that covers the broad range of views collected on the subject. Senate members are expected to take action this semester on an approach to improve course evaluations campuswide.

"we can be  
more  
demanding  
about what we  
expect  
departments  
to offer in  
honors  
courses."

William Cronon  
Honors Program  
director

## HONORS

from page 1

L&S honors dean who runs the program with Cronon, the extra flexibility will open new vistas for faculty and advisers, giving them more time to identify and interest talented students.

"This added accessibility will allow me and my colleagues in academic advising to encourage many more students to discover and develop their own potential for honors work than we have been able to encourage in the past," she says.

\* Honors in the Major, composed of whatever menu of courses a department or program designates as being appropriate for the best undergraduate majors. According to L&S Honors Committee member Duncan L. Carlsmith, associate professor of physics, "This will permit departments to take a fresh look at capstone activities for their best students."

Cronon adds that the Honors Program will stipulate that most degrees in this sequence also include a senior research thesis.

"This will have the effect of making an honors degree available to undergraduates who discover their own capacity for excellence in a single disciplinary area after their freshman year," he says.

\* Comprehensive Honors will go to students completing both Honors in the Liberal Arts and Honors in the Major requirements.

Cronon says that in addition to opening the L&S Honors Program to a wider circle of students and involving departments more heavily in defining undergraduate excellence in their own particular disciplines, the changes also will make it easier for the program to exercise quality control over honors courses.

"A number of honors students have become disillusioned and dropped out of the program because of the wide discrepancies in various honors courses," he says. "Courses in which students earn honors credit merely by doing extra work, such as adding a few pages to a final paper, simply do not have the intellectual payoff to be worth the trouble. By holding Honors in the Liberal Arts to 24 credits, we can be more demanding about what we expect departments to offer in honors courses. In turn, giving departments control of what happens in an honors major gives them a strong incentive to identify and design a curriculum for their best undergraduates."

Cronon notes that fall '97 also will inaugurate the Chadbourne Residential College, a university residence hall not limited to honors students, but open to all undergraduates desiring to make the acquisition of knowledge an integral part of their lives. In addition, he says the committee is pursuing several peer mentorship programs, which would train undergraduate writing fellows to work with other students in improving their writing skills. Cronon says the writing-fellow approach would allow older students to help younger ones become more involved with research earlier in their undergraduate careers. It also would provide opportunities for student leadership, he says.

"If we are successful," he says, "we will be far more effective in serving the ideals for which honors ought to stand: recognizing the extraordinary diversity of human talent, celebrating it and nurturing it whenever and wherever students are willing to take up the challenge of exploring it in themselves."

## Pizza in, plasma out

*On a shoestring, research team produces a quite remarkable fusion reactor*

Terry Devitt

Using borrowed equipment, a promising new design and students paid with pizza, the College of Engineering has landed the nation's first, and so far only, major new fusion program at a university within the past two years.

Known as Pegasus, the three-year, \$2.5-million program is funded by the Department of Energy (DOE). It involves the design and construction of a small, but innovative, fusion reactor prototype capable of generating high-pressure hydrogen gas plasmas.

In the context of the nation's fusion research programs, the grant is relatively small potatoes, according to nuclear engineering professor Raymond J. Fonck. But over the past year, Congress slashed funding for the nation's fusion research programs by 40 percent and the DOE, as it redirects fusion research, has been forced to pull the plug on at least seven major fusion programs at universities nationwide.

"We are, we think, the biggest new program at a university in the country," says Fonck. "This is at a time when we are shutting down major programs at national laboratories and universities."

Fusion energy is the same kind of energy created by our sun, where temperatures and pressures are so high atoms fuse together and release enormous amounts of energy. The development of a working, economical fusion reactor is an elusive and long-sought goal of science. Success would mean an environmentally benign, cheap and almost limitless source of new energy.



"We've come up with a way to make that hole as small as anybody thought possible, and we can do it cheaply."

Shrinking the hole depends on the development of high-stress, high-technology magnets positioned in the middle of the torus. The magnets channel huge amounts of stored energy almost instantaneously into the device to create the fusion plasma.

The supply of magnets for Pegasus is being provided at low cost by the National High-Magnetic Field Laboratory at Florida State University, which sees the project as a testbed for the novel magnets low aspect ratio fusion device require.

Pegasus now involves six UW-Madison undergraduates, two graduate students, one full-time scientist, one technician and

Fonck. The undergraduates, in addition to working for the pizza Fonck buys out of his own pocket, are now receiving nominal hourly wages for the work they perform. But according to Fonck, they are more motivated by the experience they are gaining from involvement in the innovative project.

It is, Fonck says, an opportunity to work as part of a team and get hands-on experience in a research setting, skills valued by many employers.

"The purpose is not to turn everyone into fusion researchers, but to give them experience in real-world problem solving, especially in a team-oriented project," he says.

**Hands-on learning:** Professor Raymond Fonck, right, discusses blueprint plans for the Pegasus project with Ben Lewicki, student foreman. Both undergraduate and graduate students are involved in designing the fusion reactor.

The key to the new project's funding success, says Fonck, is an economical, small-scale and innovative reactor design, and a heavy reliance on undergraduate and graduate students to build and operate the device.

The project was born in an earlier unfunded project known as Medusa. In that project, undergraduates, using the castoff equipment of other fusion programs, con-

structed a tabletop fusion experiment of novel design that was able to produce plasma performance levels of interest even to the sophisticated community of fusion scientists. "People were amused that we could do this," says Fonck. "It was a small machine and it yielded plasmas that were useful."

The design of Medusa, and now Pegasus, is known to fusion scientists as a "low aspect ratio" design, meaning the hole in the center of the donut- or torus-shaped stainless steel vessel that holds the high-temperature plasma is as small as possible.

"In theory, plasma performance is very sensitive to the size of the hole," Fonck says.

Jeff Miller

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Breakfast • 7 - 10:30 a.m.  
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Breakfast Bar: yogurt, granola,  
fruit & more

Lunch • 11 a.m. - 2 p.m.  
Dinner • 4:45 - 6:30 p.m. (M.R.)  
Pasta Bar  
Potato Bar  
Salad Bar  
Hot Entrees

### SUNDAY BREAKFAST

8 a.m. - 12:30 p.m.  
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next to Memorial Union. A  
memorable spot to bring family  
and out-of-town guests.  
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# NEWS

UNIVERSITY OF WISCONSIN-MADISON

Engineering, College of

10/10/96

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Madison, Wisconsin 53706-1380

FOR IMMEDIATE RELEASE

10/10/96

CONTACT: Raymond J. Fonck (608) 263-7799, [fonck@engr.wisc.edu](mailto:fonck@engr.wisc.edu)

## AS FUSION SCIENCE RETRENCHES, UW REELS IN A NEW PROGRAM

MADISON — Using borrowed equipment, a promising new design and students paid with pizza, the University of Wisconsin-Madison's College of Engineering has landed the nation's first, and so far only, major new fusion program at a university within the past two years.

Known as Pegasus, the three-year, \$2.5 million program is funded by the Department of Energy (DOE). It involves the design and construction of a small, but innovative, fusion reactor prototype capable of generating high-pressure hydrogen gas plasmas, the fuel that drives fusion energy production in a process similar to the one that powers our sun.

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The key to the new UW-Madison project's funding success, says Fonck, is an economical, small-scale and innovative reactor design, and a heavy reliance on undergraduate and graduate students to build and operate the device.

- more -

✓✓✓

## Pegasus -- Add 1

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The design of Medusa, and now Pegasus, is known to fusion scientists as a "low aspect ratio" design, meaning the hole in the center of the donut- or torus-shaped stainless steel vessel that holds the high-temperature plasma is as small as possible.

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"The purpose is not to turn everyone into fusion researchers, but to give them experience in real-world problem solving, especially in a team-oriented project," he says.

In the meantime, Fonck says, Pegasus promises to add to the body of knowledge that might one day make fusion energy a reality.

###

— Terry Devitt, (608) 262-8282, [trdevitt@facstaff.wisc.edu](mailto:trdevitt@facstaff.wisc.edu)



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FOR IMMEDIATE RELEASE

3/7/96

CONTACT: John Wiley, (608) 262-1304

## 21 UW-MADISON GRADUATE DEGREE PROGRAMS MAKE U.S. NEWS TOP 10

MADISON — A *U.S. News and World Report* ranking released today of select graduate programs placed 21 different schools, departments or specialties from the University of Wisconsin-Madison in the nation's top 10.

The magazine's seventh annual guide, available on newsstands March 11, focuses on 14 professional schools and science-related graduate programs in the country. Rankings include colleges, schools and departments, plus individual research specialties within a discipline.

UW-Madison programs rank among the nation's top 10 in the following: the School of Education, 5th; library science, a three-way tie for 6th; the School of Journalism, tied for 7th in print and 10th in radio/television; chemistry, tied for 10th; and computer science, 10th.

Other UW-Madison specialty degree programs ranked highly. In geology, hydrogeology and sedimentology/stratigraphy both ranked 2nd in the nation. In the biological sciences, microbiology ranked 3rd; in mathematics, logic and mathematical statistics both ranked 3rd; in business, real estate ranked 2nd; and in engineering, chemical engineering and nuclear engineering both ranked 4th.

In the School of Education, a whole slate of specialties ranked in the top five, including: administration, tied for 1st; curriculum and instruction, 1st; educational psychology, 2nd; educational policy, 3rd; secondary education, 4th; counseling, 4th; and elementary education, 5th.

Other UW-Madison programs making the U.S. News list include: geology, ranked 19th; biological sciences, a four-way tie for 11th; mathematics, a three-way tie for 12th; physics, a five-way tie for 17th; advertising (journalism), 11th; public relations (journalism), three-way tie for 12th; the School of Business, 30th; the College of Engineering, 16th; and the Law School, 43rd.

UW-Madison Provost John Wiley said he was gratified to see both the number and

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## U.S. News rankings – Add 1

variety of Ph.D. programs recognized by the magazine. But while the U.S. News rankings are popular, the measures used are not as rigorous or as meaningful as other rankings, he said.

"In the U.S. News ranking, every department or unit is rated on a different set of criteria, so there is really no way to compare different programs with each other," Wiley said. "These rankings include an eclectic subset of our programs, but other approaches use more rigorous data."

The National Research Council (NRC), for example, conducts a major review of graduate programs every decade that uses far more data and peer reviews, he said.

Last fall, the NRC placed 16 UW-Madison doctoral programs in the nation's top 10, and another 35 programs made the top 25. That survey asks nearly 8,000 faculty members around the country to rank 41 different fields at 274 doctorate-granting universities.

— Brian Mattmiller, (608) 262-9772

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UW-Madison's College of Engineering has been ranked among the top 100 in the nation in the

Engineering News-Record's annual list of the nation's top 200 engineering schools. The

Engineering News-Record's annual list of the nation's top 200 engineering schools. The

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CONTACT: Helene Demont, (608) 262-5516

## COLLEGE OF ENGINEERING TO PRESENT ACHIEVEMENT AWARDS

MADISON — The University of Wisconsin-Madison College of Engineering will present 11 Distinguished Service Awards Friday, Oct. 27, at the 48th annual Engineers' Day Dinner. They will go to alumni and faculty previously associated with the college who have had outstanding careers of 20 or more years in engineering or related fields.

Four additional awards will be presented to College of Engineering faculty and staff: The Benjamin Reynolds Smith Award for Excellence in Teaching will go to Chemical Engineering Professor James A. Dumesic. The Byron Bird Award for Excellence in a Research Publication will be presented to John R. Conrad, professor of nuclear engineering and engineering physics. Richard J. Casper, senior instrumentation specialist for the Materials Science Center, will receive the Bollinger Academic Staff Achievement Award. The Ragnar E. Onstad Service to Society Award will be presented to Professor C. Allen Wortley, of the Department of Engineering Professional Development.

Recipients of the Distinguished Service Awards are: John A. Annin, president and CEO, Herschel Corp.; Donald E. Cheney, executive vice president, Finley Engineering Co., Inc.; Do Won Chung, vice chairman and CEO, Kangwon Industries, Ltd.; Rene M. Dupuis, president, Structural Research, Inc.; Dong Soo Hur, president and CEO, Honam Oil Refinery Co., Ltd.; Ronald E. Mengel, director, Engineering Process Teams, Kraft Foods, Oscar Meyer Foods Division; Juzar Motiwalla, director, Institute of Systems Science, National University of Singapore; Chung-Hyun Nam, president, Daewoo Engineering Company; Mathukumalli Vidyasagar, director, The Center for Artificial Intelligence and Robotics, Defense Research Development Organization (India); William B. Winter, chairman and CEO (retired), B-E Holdings, Inc., and Bucyrus-Erie Co.; Tat Ching (Henry) Yu, managing director, Sunnex Products Ltd.

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— Paul Bauman, Engineering Publications, (608) 262-2481



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## **U.S. NEWS RANKS UW-MADISON NO. 32 OVERALL**

## **ACADEMIC REPUTATION LANDS UW AMONG TOP THREE PUBLIC UNIVERSITIES**

MADISON — The University of Wisconsin-Madison is rated No. 32 among national universities in this year's ranking by U.S. News & World Report.

The ranking, featured in the magazine's edition this week, is based on a variety of criteria, including financial resources, student selectivity, faculty resources and academic reputation. This is the first year in which U.S. News has shown the actual rank of each university in the tier below the top 25.

UW-Madison was ranked No. 17 in academic reputation (tied with the University of Virginia and Dartmouth) and among public universities was No. 3 in reputation (tied with Virginia) following the University of California-Berkeley and the University of Michigan.

The only Big Ten schools to make the top 25 were Northwestern at No. 13 and Michigan at No. 24. The only public universities were Michigan and Virginia.

The U.S. News survey this year for the first time included rankings of undergraduate business and engineering schools. UW-Madison's School of Business finished No. 7, and the school's real estate program was rated No. 3 within its specialty.

The undergraduate program in the UW-Madison College of Engineering was No. 11, with its chemical engineering program No. 2 behind MIT.

"Most public universities are simply not going to be in the top 25 due to the criteria used such as selectivity," said John Torphy, vice chancellor of administration at UW-Madison. "Even Berkeley didn't make it."

"I am glad that the undergraduate programs in business and engineering ranked so well. At least in those cases, I believe the ranking was based on peer evaluations and reputation."

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— Jeff Iseminger, (608) 262-8287



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**CONTACT: Sheryl Merkes at (608) 262-1671, (608) 277-1496 or (608) 262-9860.**

## STEEL BRIDGES, CONCRETE CANOES HIGHLIGHT STUDENT ENGINEERS' EVENTS

MADISON – On April 28 and 29, science and technology fans will be able to witness both concrete canoe races and the construction of 20-foot scale-model steel bridges.

The events are part of an annual conference, hosted this year by the University of Wisconsin-Madison student chapter of the American Society of Civil Engineers. Teams from 13 Midwest colleges have been invited.

"The Steel Bridge and Concrete Canoe Competitions are excellent opportunities for people to see how technology taught in classrooms can be applied to real life," said Sheryl Merkes, chair of the competition weekend. Admission to both events is free.

The bridge competition will be held April 28 from 8 a.m. to 4 p.m. in the Dane County Forum, with an hour break at noon. Half of the teams will compete in the morning and the other half in the afternoon.

As spectators look on, students will assemble the bridges they have been designing and constructing since the school year began. "It takes anywhere from three to 20 minutes to put up each bridge," said Merkes. "Then the judges will start testing the structures." Bridges will be evaluated on function, weight, construction speed and aesthetics."

The canoe competition will be held April 29 from 9 a.m. to 4 p.m. on Monona Bay, near Brittingham Park, with an hour break at noon. Throughout the day there will be sprint and distance races for men's, women's and coed teams.

In addition to race results, entrants will be judged on the aesthetics of their craft, a design paper, an oral presentation, and a display board. When not racing, the canoes will be exhibited on shore.

At last year's conference in Milwaukee, UW-Madison's bridge team placed first, and its two canoe teams finished second and third.

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— Paul Bauman, (608) 262-2481  
Engineering Publications

# Engineering, College of General

## News briefs -- Add 2

recognition of two student projects.

The Animal Companion Club won for an educational videotape stressing the importance of proper dental care for pets. The school's Feline Club won for its brochure on how to manage human allergies to cats.

Both of those winning projects will be available at Dog Jog '95. For more information about the race, contact Sullivan at (608) 265-2850.

— Brian Mattmiller, (608) 262-9772

## CAMPUS STREET NAME CHANGE AFFECTS ENGINEERING CAMPUS

Some street names just make good sense. That's the thinking behind an on-campus street name change meant to reduce confusion about the location of the UW-Madison's College of Engineering. The majority of engineering facilities at UW-Madison are now located on Engineering Drive — not Johnson Drive. The name change went into effect on July 1.

The former Johnson Drive, an extension of Johnson Street west of the 200 block of North Randall Avenue, serves the College of Engineering campus. Over the years, the slight difference in the Johnson Street and Johnson Drive names has caused some confusion for visitors and for people sending mail to engineering buildings. As part of the name change, the mailing/delivery address and/or names of several of the buildings along the drive will also change.

UW-Madison engineering facilities and their correct mailing addresses are:

- Mechanical Engineering, 1513 University Ave.
- Engineering Hall, 1415 Engineering Drive
- Materials Science Center, 1509 University Ave.
- Temporary Building 23 (T-23), 1530 Engineering Drive
- Engineering Research, 1500 Engineering Drive
- Temporary Building 27 (T-27), 1440 Engineering Drive
- General Engineering, 1510 Engineering Drive
- Temporary Building 22 (T-22), 1540 Engineering Drive

— Bill Arnold, (608) 262-0930

## LIBRARIES BENEFIT SET FOR GARDENS

"Gathering in an Autumn Garden," a benefit event for the UW-Madison Libraries, will be held Sunday, Sept. 10, from 2 p.m. to 5 p.m. in Allen Centennial Gardens, 620 Babcock Drive.

Garden tours will be given at 3 p.m. and 4 p.m. by Marilyn Sachtjen, creator of a

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# PROFILE

## ROBERT ENRIGHT

**A**s film director Alfred Hitchcock once observed, we are all guilty. And consequently, one might surmise, we are in a glaring need of forgiveness.

To Robert Enright, the first paradox of forgiveness is that, despite the universal and urgent need for it, researchers conscientiously have shunned forgiveness as an area of inquiry.

Until very recently, Enright, an educational psychologist, has devoted the bulk of his 15-year career here to studying forgiveness, its processes and the uniformly positive effects on those who elect to walk its path. He says the last decade has produced hard evidence linking forgiveness with lower blood pressure, lower anxiety, lower anger levels, and higher self-esteem. And that, he says, may be just the beginning.

To further explore and celebrate this mysterious and overlooked process, Enright and colleagues in the UW-Madison departments of educational psychology, sociology, law, philosophy, social work and more will join other specialists from around the world for the first National Conference on Forgiveness. The event will be held March 30 - April 1 on the UW-Madison campus.

Enright's own research has centered on understanding how we come to forgive — if we do — and what we stand to gain from it. He began by examining what forgiveness is not.

"There's a tradition that equates forgiveness with reconciliation," he says. "While it might be nice to reconcile, it's not always possible, and you can forgive without reestablishing a relationship."

Nor is true forgiveness forced: The quality of mercy is indeed not strained. "If you feel you *must* forgive, you're doing it for all the wrong reasons," and unlikely to reap the benefits genuine forgiveness offers, he says.

Also crossed out of Enright's definition is the psychological pretense that the hurt doesn't matter — a route, he says, guaranteed to lower self-esteem rather than enhance it.

Instead, true forgiveness seeks to separate the offense from the victim's response to the offender. That mandates acknowledgment and respect of the offender's humanity, Enright says, and presents the second paradox of forgiveness. "The victim is able to give the other person good gifts — civility, perhaps, or even kindness — without implying that the offender deserves them."

It's a prescription aimed at making the victim feel both benevolent and powerful, he adds: "In that sense, forgiveness really sets you free."

But what of the person forgiven?

"This is another area about which we know very little — we're just starting to look at the impact forgiveness has on somebody who's caused hurt," he says. Enright and his colleagues recently embarked on a three-year study of forgiveness as a coping mechanism in low-income families. He says he has a hunch that gangs afford poor children complete acceptance and belonging, compared with what often preoccupied and overwhelmed blood relatives can offer.

"Every problem is compounded for impoverished families because of the economic stress," he says. "If these families can introduce forgiveness and compassion with each other, gangs might become less tempting for children." Although it's too early for conclusion, Enright says very preliminary findings are encouraging.

"Millennia of nonscientific writings have implied that forgiveness is worth trying," he says. "We now have scientific data supporting the ancient advice and pointing people toward effective ways of forgiving."

For more information about the conference, contact Enright at 262-0835.

— Barbara Wolff



*'If you feel you must forgive, you're doing it for all the wrong reasons.'*

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BRUCE FRITZ

Ten undergraduates participated in the first annual Schoof's Prize for Creativity in the College of Engineering. The contest was sponsored by chemical engineering alumnus Richard Schoof (row one), shown with the participants and the Tri-Sailor, the contest's winning invention. Students, left to right, are: row two, contest winner Tom Swetish, Matt Younkle, Martin Radue, David Overbo, and Mary Poupre; and row three, Mickey Ellis, Jonas Zahn, Kervin Krause, Louis Clark, and Chris Hamilton.

## Brainstorm: Engineering awards Schoofs Prize for Creativity

By Jim Beal  
College of Engineering

The full force of "Brainstorm" filled the sail of UW-Madison College of Engineering undergraduate inventor Tom Swetish Feb. 23. Swetish is the \$10,000 first-prize winner of the Schoofs Prize for Creativity. He is already fielding proposals from other entrepreneurs who want to manufacture his collapsible land yacht/iceboat. Swetish designed his wind-powered, sailable vessel so that it can disassemble without tools in about 15 minutes. The vessel can be transported on the roof rack of a car.

Contestants had 30 minutes to present their inventions and field questions from the judges. Mechanical engineering senior Mary Poupre was first to proffer. She designed "Acufill II" as a portable, rechargeable device that can accurately fill a syringe for diabetics suffering side effects such as loss of vision or loss of feeling in the hands.

"How many settings does your device have?" asked judge Tom Aschenbrenner, an electrical engineering alumnus of the college and an independent financier/investor and entrepreneur. "Are there different sized bottles of insulin?"

"Does insulin have to be refrigerated?" added judge Andy Riteris, a patent attorney and mechanical engineering alumnus. "And if so, how does your device take that into account?"

"What is the market for this device? How many diabetics are there in the U.S. and how many would need this device?" asked judge Steven Price, director of the Graduate School's University-Industry Relations (UIR).

Poupre appeared cool and composed. She had contacted the major manufacturers of insulin to find the standard vial size. She also knew that the vials are stored unrefrigerated. While she responded to the barrage, other contestants watched wide eyed. At least one ran off to the library to do some last minute research. (Poupre won a fourth place prize of \$1,000.)

Chemical engineering alumnus and contest sponsor Richard Schoof was so impressed with the quality of the entries that he increased the number of awards to include four additional fourth prize awards.

Second-prize winners Chris Hamilton and Martin Radue will split the \$7,000 third-prize for their rotary valve system. Openings in the rotating cylindrical valve align with fixed passages in the cylinder head of an engine allowing the exchange of gases between the atmosphere and the cylinder. The valves are driven by electric motors which are in turn controlled by a programmable microcontroller. The

team's design allows maximum flexibility for valve timing and engine control and efficiency.

Jonas Zahn took third prize and a check for \$4,000 for his swimming pool heater deck. The design allows pool water to be pumped through special deck boards. As the pool water cycles through the deck, the sun heats the water. Zahn says his design will heat a pool quickly and efficiently. In warmer climates, pool water can be used to cool uncomfortably hot decks.

The remaining fourth-prize winners and their inventions included:

Louis Clark: Clark presented a photocatalytic fuel cell based on technology created by Civil and Environmental Engineering Professor Marc Anderson. Clark's device would use sunlight to break down pollutants and produce heat.

Kervin Krause: Krause presented a magnetic slipring which uses induction, rather than mechanical means, to transmit information from a stationary device to a rotating device. Sliprings have many uses in industrial applications.

David Overbo: Overbo's improved process for window tinting involves a variable-intensity screening material made with a flexible manufacturing process.

Matt Younkle and Mickey Ellis: The pair devised an ultrasonic measuring system. Fluids and sound waves combine in their system to measure thickness more quickly and safely than today's methods. By dispensing coupling fluid from the same device as the ultrasonic testing unit, a worker can take measurements with one hand instead of two.

The judges based their decisions on creativity, prospects for commercial success, and technical and market innovation. Like the judges, College of Engineering Dean G. John Bollinger was impressed with the quality of all of the submissions. "Not one of these entries was offered half heartedly. Each involved a great deal of thought and effort. These students truly exemplify the spirit of invention," he said.

Brainstorm is administered by UTEC, the College of Engineering's industrial entrepreneur outreach organization. Invitations for next year's contest will be mailed to undergraduates this spring.

### Next issue: March 22

Because of spring break, the next issue of Wisconsin Week will be published March 22. Please submit items for Calendar, Bulletin Board, Faculty and Staff News and other sections by March 13.



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# NEWS

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## AFRICAN AMERICAN SCIENTISTS, ENGINEERS FOCUS OF COLLEGE DISPLAY

MADISON — As part of "Black History Month," the College of Engineering has created a display highlighting 40 distinguished African American engineers, medical pioneers and scientists. It features information on technology leaders from the 1800s to present day, including blood bank creator Charles Drew, astronomer and inventor Benjamin Banneker, agricultural scientist George Washington Carver, noted electrical engineer Granville T. Woods, and space shuttle astronaut Mae Jemison.

"We want students, the university community and the public to be aware of the important contributions African Americans have made to all areas of technology and enterprise: health, engineering, agriculture, the space program," says the college's Assistant Dean for Diversity Alem Asres. "They are role models for all of our students, but particularly for our African American students."

The display is located across from the college's Diversity Affairs Office, 1147 Engineering Hall, 1415 Johnson Drive. For more information, contact the Diversity Affairs Office at (608) 262-7764.

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**(Note to editors, news directors:** The Engineering Mall and sculpture will be dedicated on Friday, Oct. 21 at a ceremony beginning at 11:20 a.m. across from Engineering Hall, 1410 Johnson Drive. The mall's water special effects will be turned on for the first time during the ceremony, and sculptor William Conrad Severson will be in attendance. After the 11:20 a.m. ceremony, media may tour the mall's underground control room. For more information, contact Karen Walsh at (608) 263-2982.)

## ART MEETS ENGINEERING IN SCULPTURE TO BE DEDICATED OCT. 21

MADISON — The University of Wisconsin-Madison's engineering faculty and students create through the art of science and technology. Now in their midst is a work of art which expresses and commemorates that creative process.

Fabricated in stainless steel and standing 18-feet high, the sculpture "Maquina" will formally become part of the College of Engineering campus during dedication ceremonies for Engineering Mall on Friday, Oct. 21. Maquina (Spanish for "machine") is the work of St. Louis artist and UW-Madison alumnus William Conrad Severson.

The artwork is the focal point for the new mall, which will provide a needed greenspace and gathering place in the midst of the engineering campus.

Maquina is also a fountain, part of a dynamic system which will ultimately include water as a liquid, vapor and solid, along with compressed air, sound and light. Water will flow down off the sculpture base into a flume extending northward to the end of Engineering Mall, where it will be forced up into a 22-foot-high clear column. The water will then spill gently over the sides of the column and into a reflecting pool at the base. Inside the column, bubbles of compressed air can be used to create large bubbles in a "bursting"

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## Engineering sculpture -- Add 1

effect. Finally, a visible-light laser can be shined up through the column to make a fire-like effect after dark. (The water special effects will be turned on for the first time at the dedication ceremony.)

Engineering students will be the prime "magicians" conjuring these dramatic effects, said College of Engineering Dean John G. Bollinger. "The special effects capabilities of this mall will serve as a kind of classroom for our students. We want them to have the experience — and the fun — of working with a computer-controlled system like this."

The effects will be controlled from a laboratory underneath the mall. Bollinger said students will be able to vary lighting of the sculpture, laser lighting configurations in the clear column, and compressed air effects for Maquina's water circuits and in the column. In the future, provisions may be made for speakers so students can add a sound dimension, he added.

A competition is underway for teams of students to create a design of these special effects to debut at the college's Engineering Expo in April 1995. Teams must coordinate the effects with the Expo theme and present a plan for implementing them using computer real-time process control. Finalists for this competition will be announced at the mall dedication.

For sculptor Severson, Maquina's completion is especially meaningful. "The university and I in many ways have a love affair. I very much wanted to create a sculpture at the university. Attending the UW was an important step in my life and in my father's life. My father was one of 15 children and the only one to come off the farm to graduate from the University of Wisconsin. That was a very big thing to do in 1921. Then four of his sons and many nephews followed in his footsteps. We feel so strongly that it's our university — we possess it in the sense of being alumni." Severson, a 1947 graduate in art, donated his artwork as part of the UW Foundation's Campaign for Wisconsin. Members of his extended

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## Engineering sculpture -- Add 1

family contributed toward fabrication costs for Maquina, and other companies and individuals donated funds and gifts-in-kind for the mall project.

An important aspect of designing the mall was making it a place where people, especially students, would feel comfortable gathering, Severson said. The design team (including mall architect Richard Cummings) "felt very strongly that this must be a student-oriented area," Severson said. "We've used pylons to define the entrance to the engineering campus, and we want it filled with student activity. Also it should be a great place to relax. It has excitement — a dynamic attraction. Water will run as a liquid, a vapor, and a solid. It will attract people and communicate to students about their engineering role and its quite often aesthetic aspect. All those things are statements which will have a new, strong aesthetic presence."

George McCue, art and urban design critic emeritus of the St. Louis Post-Dispatch, has said of Maquina, "Far from being an optional extra, the art of water requires integration with the art of sculpture, and with design for harmony and mutual enhancement. Water performance is art, engineering, plumbing, architecture and landscaping. In summer, the sculptural use of water in Maquina will be expressed in blasts of spray and mist, and during Wisconsin winters the water sculpture becomes a self-made crystalline object."

To Severson, there is a special connection between engineering and art that comes alive in Maquina. "The form derived from a contemporary engineer's tool which is very exciting as a sculptural form. Everything about this sculpture gives a sense of force, power and control.

"Maquina represents the engineer's tools, the aesthetics of those tools, and the engineer's role in creative problem solving. After all, the great adventurers and creators of our age are the engineers."

Two other artworks for the engineering college will also be dedicated at the ceremony. A life-size sculpture of an engineering student, titled "The Wisconsin Engineer," will lean against a column in front of Engineering Hall. The statue was created by artist J. Seward Johnson Jr., known for his strikingly realistic bronze sculptures of people. The sculpture was donated to the college by the Grainger Foundation. Inside Engineering Hall, a 3-by-8 foot serigraph featuring the colors of the rainbow in a geometric design will be unveiled. The piece was created by artist Judith Azur and donated to the college by UW-Madison alumnus Dr. Warren E. Gilson.

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— Karen Walsh, Engineering Publications Office, (608) 263-2982



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## COLLEGE OF ENGINEERING SPONSORS ENTREPRENEURSHIP SEMINAR SERIES

MADISON — The College of Engineering's UW-Technology Enterprise Cooperative (UW-TEC) is sponsoring a series of seminars this fall dealing with entrepreneurship and technology-based businesses. The seminars are part of the college's School's Prize for Creativity undergraduate entrepreneurship competition, but are also open to the university community and the general public.

All seminars will be held from 4 p.m. to 5:30 p.m. in room 1800 Engineering Hall, 1415 Johnson Drive. Refreshments will be served after each seminar. For more information, contact Kathy Luker at [brainstorm@engr.wisc.edu](mailto:brainstorm@engr.wisc.edu) or (608) 265-3761.

### Seminar schedule:

- Wednesday, Oct. 12: "Take the Mystery out of Creativity and Stimulate Innovation," by Winston J. Brill, Winston Brill and Associates and publisher, R&D Innovator. What is creative thinking? What does it take to stimulate it? How do you direct creative thinking toward work goals? Why is creative thinking especially necessary in today's environment? Brill discusses these issues as they relate to managing yourself and those who work with you.

- Wednesday, Oct. 26: "Creating New Technology-Based Businesses," by Tom David, principal, Origen Group. Learn a new way of thinking about forming and perpetuating new entities. Should technology-based businesses be formed to create specific products or provide specific services, then be disbanded? What should the new relationship between suppliers, end users and employees look like? Explore options for alliances,

partnering and other new corporate structures and hear what leading-edge companies are doing to provide new products and keep pace with technologies that change faster than products can hit the market.

- Wednesday, Nov. 9: "Protecting What You've Discovered: Patents and Other Intellectual Properties," by Andy Riteris, attorney, Michael Best & Friedrich. What is patentable? Riteris will discuss the ins and outs of the patenting process from discovery to patent. Learn about issues such as foreign rights, what constitutes intellectual property including trademarks, copyrights, licensing, trade secrets, patents, and note book procedure and documentation.

- Wednesday, Nov. 30: "Technology isn't Enough: Business Perspective of Launching Technology-Based Ideas," by Tom Aschenbrenner, independent financier, investor and entrepreneur. Important business topics such as obtaining capital sources and financing, market considerations, gauging competition and intelligence gathering will be covered. Creating a management team for manufacturing, distribution and marketing will also be discussed.

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— Karen Walsh, Engineering Publications, (608) 263-2982



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# NEWS TIPS

UNIVERSITY OF WISCONSIN-MADISON

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Sept. 15, 1994

**TO:** Editors, news directors  
**FROM:** Brian Mattmiller, (608) 262-9772  
**RE:** Engineering class project

The first year of engineering college, normally an imposing odyssey through fundamental physics and calculus, can seem light years away from the actual business of engineering.

A new course in the University of Wisconsin-Madison College of Engineering is trying to solve that problem by giving first-year students an early taste of real engineering. The cross-disciplinary design course stresses teamwork and imagination in solving a real-world problem.

In this case, students will spend the semester making Old World Wisconsin, a 576-acre ethnic museum run by the State Historical Society, more accessible to people with disabilities. All of the museum buildings are authentic structures collected from across the state, and renovated to reflect their 19th Century condition. And many of them have access problems, such as steep six-step porches and narrow entrances.

On Tuesday, September 20, the 80 students enrolled in the course will take a day-long visit to Old World Wisconsin and get design ideas to improve wheelchair access to the buildings. By the end of semester, they will not only have designed the changes, but constructed them at the site.

The group will arrive by bus Tuesday between 9:30 and 10 a.m., and will stay until approximately 3:30 p.m. Media representatives are invited to drop in during the visit to talk with students and faculty about the unique class.

Denice Denton, an electrical engineering professor, organized the class with the help of grants from the federal Advanced Research Projects Agency, Proctor and Gamble Corp., and the college totaling \$350,000.

Denton said engineering colleges are recognizing that the theory-packed first year

-more-

## Engineering class -- Add 1

may be sending students the wrong impression of what a career in engineering is all about. Retention is a big problem in that first year, especially among women and minorities, and early hands-on course material could improve that situation.

The course is being taught by a six-member faculty team from a variety of departments in the college. It was designed over the summer with input from engineering undergraduates.

The media contact during Tuesday's trip will be Mike Corradini, a professor of nuclear engineering and engineering physics. He can be reached in advance at (608) 263-2196. A student consultant to the group who helped design the class this summer, senior Robyn Ryan, will also be happy to talk to reporters.

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# NEWS

UNIVERSITY OF WISCONSIN-MADISON

Engineering School of

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8/10/94

**(Editor's note:** For more information on this program, contact Professor Urban Wemmerlöv, director of the Erdman Center for Manufacturing and Technology Management, UW-Madison School of Business, Grainger Hall, 975 University Ave., Madison, WI 53706, (608) 263-2563; Fax: (608) 263-3142.)

## NEW MASTER'S PROGRAM MERGES BUSINESS, ENGINEERING STUDIES

MADISON — "Leading a manufacturing company to a competitive international position requires specialized knowledge of technology and business," says Andrew J. Pollicano, dean of the University of Wisconsin-Madison School of Business. "To address the challenge of businesses who need managers for manufacturing organizations, we are establishing a new master's degree in Manufacturing and Technology Management, combining courses from business and engineering disciplines."

The new specialization at UW-Madison was developed by the Joyce Erdman Center for Manufacturing and Technology Management (MTM). A \$2 million gift from Marshall Erdman, of Marshall Erdman & Associates, Inc., Madison, helped create the center. Erdman said he wanted to support a program to "encourage business managers to spend time on the factory floor producing products." The center is named for the late Joyce Erdman, who served as president of the UW System Board of Regents and the business school's Board of Visitors. She was a guiding force for Grainger Hall, the \$40-million home for the School of Business that opened last fall. The Erdman Center's mission is to direct educational and research programs focusing on the management of manufacturing and technology, provide student scholarships, and offer courses and conferences.

-more-

## New master's program -- Add 1

"The MTM track is designed to develop managers for manufacturing organizations for which product and process innovations are critical activities," said Urban Wemmerlöv, director of the Erdman Center and the Kress Family Wisconsin Distinguished Professor at the business school. "We are fortunate that one of the nation's finest engineering colleges in the country is on the UW-Madison campus."

Manufacturing organizations now operate in environments characterized by global competition and rapid technological change. The new center, according to Wemmerlöv, takes up manufacturing's challenge that managers and technologists are not able to communicate well with each other. "Our students will understand both business and engineering so they can bridge the gap between these two cultures," he said. Wemmerlöv has been involved with the engineering college's Manufacturing Systems Engineering Program for more than 10 years and administers the Erdman Center with the support from a team of faculty from the School of Business and the College of Engineering.

The two-year program offers course work in management, as well as engineering and science. Core areas include business foundations, information systems and technology, quality management and methods, human resource management, manufacturing management, management of innovation and technological change. At least two project courses involving teamwork and industry-based problems are also required. Candidates for admission to the program must have an engineering, science or business undergraduate degree.

UW-Madison's School of Business is known for its high-quality master's programs, which train students in areas of specialization including security analysis, arts administration, real estate, distribution management, actuarial science and insurance, and marketing research. The MTM track, available to students this fall, is the latest in a series of "niche" programs offered by the school.

###

— Helen Capellaro, (608) 262-9213



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5/4/94

**CONTACT: Donald L. Dietmeyer, (608) 262-3484**

## **COLLEGE OF ENGINEERING STUDENTS PRESENT TEACHING AWARDS**

MADISON — Nine professors, two instructors and eight teaching assistants (TAs) were honored with Outstanding Teaching Awards from the Polygon Engineering Council at the University of Wisconsin-Madison's College of Engineering. The awards ceremony was part of the organization's annual banquet April 24.

The council is composed of representatives from all the engineering student organizations. Honorees are selected by the engineering undergraduate student body. The recipients are:

- Agricultural Engineering: Richard Straub, professor
- Chemical Engineering: Juan de Pablo, assistant professor; Gary A. Huber, TA
- Civil and Environmental Engineering: William Berg, professor; Charles P. Dunning, TA
- Electrical and Computer Engineering: Gentry Crook, assistant professor; John G. Wohlbier, TA
- Engineering Mechanics and Astronautics: Ronald Thomson, lecturer; Mark J. Fleming, TA
- Engineering Professional Development: Donald Woolston, adjunct assistant professor
- Geological Engineering: Bezalel Haimson, professor; Insun Song, TA
- Industrial Engineering: Stephen Robinson, professor; Siu-Shing Chan, TA
- Materials Science and Engineering: Reid Cooper, associate professor; Mark P. Arvedson, TA
- Mechanical Engineering: Jay Martin, associate professor, Robert L. Gustafson, TA
- Nuclear Engineering and Engineering Physics: Michael Corradini, professor

In addition to the awards program, Polygon promotes engineering campus activities and acts as liaison between administration and students.

###

— Kelly Radloff, Engineering Publications, (608) 262-2481

## **THE CAMPAIGN FOR WISCONSIN**

### **PERTINENT FACTS**

**About the University of Wisconsin-Madison**

**and**

### **PROFILES**

**of Academic and Program Units**

## COLLEGE OF ENGINEERING

### Overall Strengths, Important Programs and Projects:

- Ranked among the top dozen engineering schools in the U.S., the College features the departments of Chemical Engineering, Nuclear Engineering, and the Manufacturing Systems Engineering Program as among the nation's best.
- Four major national research centers, sponsored by the National Science Foundation, NASA, the Department of the Army, and the Sematech Consortium of Semiconductor Manufacturers, respectively.
- Seven current or emeritus faculty are members of the prestigious National Academy of Engineering.
- Twenty-one faculty hold Presidential Young Investigator awards, presented by the National Science Foundation—the highest total of any engineering school in the country.

### Outstanding Faculty Members:

- R. Byron Bird and Edwin Lightfoot, Chemical Engineering. Co-authored the definitive text on transport phenomena.
- Robert Ham, Civil and Environmental Engineering. International expert on landfills.
- Marvin DeVries, Mechanical Engineering. Authority on manufacturing systems.
- Henry Guckel, Electrical and Computer engineering. Microelectronics expert who has developed a method for producing tiny micromachines.
- Gerald Kulcinski, nuclear engineering. Heading an effort in conjunction with NASA to recover helium 3 from the surface of the moon to fuel fusion reactors.

### New Directions, Future Turns:

- Engineering talent is an important national resource for our technology-based society, and it is important that our best engineering colleges maintain their world leadership positions. The College of Engineering has great potential to be better, but limited state resources make it impossible to move forward without private contributions. Among technical areas identified in the College as being particularly significant in the future: manufacturing systems and processes; waste treatment and disposal; fusion power; new technologies for construction engineering; application of technology in space; micromachines and sensors; and photonics.

### Fund-Raising Priorities, Capital Campaign:

- Gifts designated for academic programs that allow for improvements in equipment and facilities, or that could be invested to provide a reliable flow of earnings. These gifts will give departments and faculty the flexibility to seize opportunities and initiate new activities.
- Endowed professorships to retain top faculty and recruit the best available new faculty.

- Student scholarships and fellowships to attract the next generation of technical leaders.
- Specific programs and projects prioritized for campaign funding:
  - \* Professorial chairs in Photonics, Construction Engineering, Technology Transfer, and Nuclear Engineering; professorships in Industrial Engineering and Pulp and Paper Sciences and Engineering; Bascom professorships in Engineering Mechanics, and Materials Science and Engineering.
  - \* Graduate student fellowships, especially those targeted for women in engineering, minorities in engineering and for outstanding entering students.
  - \* Teaching Quality Fund, to help initiate special educational improvement programs and provide awards for outstanding teaching achievement.
  - \* Issues in Engineering Fund, to support topics such as professorial ethics, social responsibility, and guest lecturers on contemporary issues in engineering.
  - \* Student Activities and Career Fund, to finance student organizations, competitions, special programs for women and minorities, and student co-op and internships.
  - \* New Programs Fund, to provide resources to initiate new programs to keep the College attuned to evolving needs, such as: Construction Engineering and Management, Communication Skills, Pulp and Paper Science and Engineering, Geological Engineering and Astronautical Engineering.
  - \* Facility: the proposed Engineering Centers Building.
- The total campaign goal for the School of Engineering is \$31,000,000.

## Faculty Senate to consider undergrad requirements

By Bill Arnold

A revised report that suggests general education requirements for undergraduates will be considered by the Faculty Senate at its April 4 meeting. The University Committee accepted the report Monday. The Faculty Senate is expected to vote on the issue at its May 2 meeting.

Drafted by the campus Committee on Undergraduate Education, the report recommends significant changes in the university's undergraduate English composition and math requirements. Should these recommendations be adopted, nearly all entering freshmen would be required to take at least five credits of instruction in literacy — with a primary focus on writing. The committee's goal is to make the requirements effective beginning fall 1995 for entering freshmen and transfer students.

Lloyd Bitzer, chair of the committee and professor of communication arts, says that the future for many students will be made brighter by the new requirements. "There's a sense that too many of our students graduate without ever getting solid, college-level instruction in writing and mathematics," Bitzer says. "Our report suggests requirements meant to help those students who aren't currently receiving instruction in English composition and basic rhetoric, and in mathematics and quantitative reasoning."

Joel Grossman, political science professor and chair of the University Committee, thinks many of the report's recommendations are needed, especially in the area of English composition. "The report contains many good ideas, but many of the details need to be worked out," Grossman says, noting the requirements would be implemented at the college- and department-level.

In general, the committee has found strong support for its recommendations, Bitzer says. "No one disagreed with the committee's recommendation that the English composition requirement must be upgraded markedly," he says, adding modifications were made primarily in credit allotments and in the addition of two components — library and environmental literacy.

The committee heard strong support from library staff and others on the panel's recommendation that an "information literacy module" (instruction in using the resources of university libraries) be a key part of the university's required communication courses.

Currently, the only campuswide general education requirement is for three credits of ethnic studies. However, schools and colleges establish their own requirements.

The new requirements, as revised by the committee, for all undergraduates would include:

- Communication, three to five or six credits in composition and rhetoric. While some schools and colleges would require six credits, some would require five.

- Quantitative reasoning, three to six credits consisting of three credits of mathematics, statistics, computer science, or formal logic; and three credits of additional course work in quantitative reasoning.

- Natural science, one four- or five-credit course having a laboratory component; or two courses providing a total of six credits.

- Humanities/literature/arts, six credits.
- Social science, three credits.
- Ethnic studies, three credits.

Bitzer says UW-Madison schools and colleges should be able to incorporate the recommendations with no increase in the number of credits required for graduation. However, he says, meeting the report's recommendations probably will mandate some resource redeployment.

The committee recommends that the all-campus Academic Planning Council determine whether courses nominated to satisfy the communication and quantitative reasoning requirements are suitable and that it review, evaluate and report on UW-Madison instruction offered in satisfaction of the two requirements.

The committee's first report was completed in August 1993, was distributed to faculty members in January, and discussed at public hearings last month.

## Design for Diversity ...

(Continued from page 10)

qualified individuals from those groups among faculty and staff, the report states. UW System institutions met 102 percent of faculty hiring goals and 99 percent of academic staff hiring goals; awarded 933 baccalaureate degrees to African American, Native American, Asian American and Latino/Hispanic students in 1992-93 — up 71 percent from 1987-88; established an institutional ethnic studies general education or graduation requirement; and met 80 to 106 percent of annual student recruitment goals — 85 percent of the total five-year goal.

Regent Erroll Davis says that he is pleased the UW's resources will help prepare more students from racially and ethnically diverse backgrounds for college. "It's important to understand that this board had the option of being part of the problem or part of the solution," Davis says. "This institution does have a societal responsibility to help underrepresented minorities reach our campuses. I'm proud of the progress that has been made, and I realize that there is more progress to be made."

### 'One of those win-win situations'

## Interactive video brings distance education closer

University courses aren't new to television. But the classes have usually been taught at ungodly hours and are almost always one-way affairs. The professor talks and the students listen.

Now, with new, two-way video technology, distance education is becoming almost as real as sitting in the first row of a college seminar.

UW-Madison launched its first compressed interactive video programs this semester with two credit and two non-credit courses available on both the Madison and Eau Claire campuses.

The College of Engineering offered an undergraduate credit class, "Contemporary Issues in the Engineering Profession," which takes place at 3:30 p.m. each Tuesday.

A class of 24 students at UW-Eau Claire and more than 400 at UW-Madison are joined by a two-way televised hookup. They can all listen to lectures and respond or ask questions.

The lecturer, who is in the auditorium of Engineering Hall on the UW-Madison campus, can see and hear all the students and can show visuals.

The School of Education's video class is a graduate seminar called "Strategic Collaborative Planning for School-to-Work Transition." Each Thursday night, nine Eau Claire students join six Madison students to discuss topics with their instructors,

Allen Phelps and Kathleen Paris of the Center on Education and Work.

The School of Library and Information Studies/Continuing Education Services is offering two non-credit video classes — "Outstanding and Award Winning Books for Preschoolers," which was held in early March, and "New and Emerging Information Technology," which will be held April 25 and May 2.

Steve Siehr, an outreach specialist with the UW-Madison Office of Outreach Development and coordinator for this campus' efforts with interactive television, says he wants to expand the use of the new technology so "students around the state can take courses they can't get on their own campus and adults who are fully employed can take professional development classes. With interactive video they can all have access to many more educational opportunities," he says.

UW-Madison was able to begin video conferencing when the Division of Information Technology (DoIT) purchased compressed video equipment last fall. "We were interested because we saw this technology as an extension of what we do — using information media to improve learning," says Kathy Christoph, manager of instructional technology for DoIT. "It was a good way to combine audio and video to instruct."

The DoIT office first offered the new equipment to the College of Engineering to use for a pilot project. Since Engineering has a television studio in its new building on Johnson Drive, the site was ideal, said Siehr.

The least expensive part of the new technology is the two-way compressed video data-line hookup, which costs \$11 an hour in Wisconsin (as compared to \$1,000 an hour for a satellite hookup). "It's not full-motion video like you see on your TV at home or with a satellite," said Bob Perras, head of audiovisual services for the Engineering School, "but it provides a picture that is quite acceptable for classrooms."

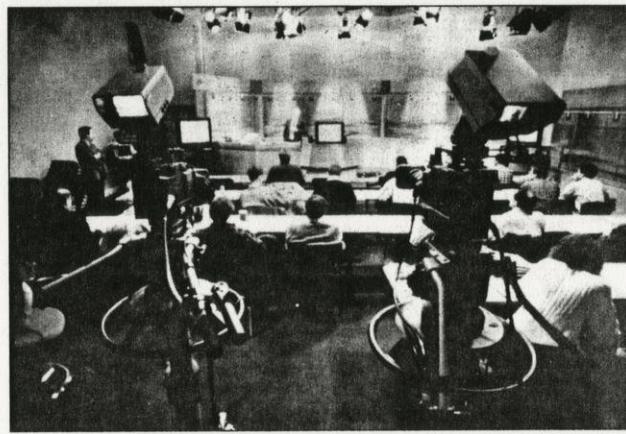
For the interactive video classes, two people operate TV cameras, one in Madison and one in Eau Claire, and a third person serves as a trouble-shooter in case the picture goes off, the power fails or some other problem develops.

Instructors involved in the compressed video programs have been impressed. "It was so much better than I imagined," said Paris. "As I've gotten more comfortable with the television format, the students at both sites have as well. We've had some very

lively discussions which feel like we're all in the same room."

Paris added that instructors must be organized: "In the past I might have said I'll make copies and take them to class with me but you can't do last-minute things when half your class is in Eau Claire."

Engineering Professor Don Woolston said that he has welcomed Engineering's experimentation with the new technology. "I think we have a responsibility to interact with the rest of the state," he says. He admits that the short delay between when a question is asked at the lecture site and when a response comes back takes some getting used to. "You expect an immediate response in a classroom and even the



The interactive TV studio in Engineering Hall allows students at UW-Eau Claire and UW-Madison to be joined by a two-way televised hookup. The students can listen to the class lecture and respond to questions, and the lecturer, who is in the Engineering studio, can see and hear students in both locations.

JEFF MILLER

few seconds delay with compressed video can be unnerving at first," he says. However, he expects the "experts" to reduce the delay as they perfect the system.

"I would be surprised if we don't see a lot more use of compressed video in the coming years," he adds. "The reduced costs, compared to using a satellite, should make it feasible for more departments to use it."

Holly Hart, director of at-risk programs for the Eau Claire Public Schools, and a student in the education seminar, says she has been "delighted" with the compressed video class.

"We had been requesting this kind of option for some time because we think Madison has a strong education program and we want to be part of it. But we can't drive seven hours every week to attend one class," she notes.

Hart likes the "wonderful breadth" of students in her class. "When we take classes here," she says, "it's usually the same people, but with interactive TV we get to hear from a much wider mix of people in our field." She says the new technology also means that the Eau Claire community can keep and attract good educational administrators. "They will know that if they want to work on their doctorate, they won't have to leave to further their education. It's one of those win-win situations," she says.

Hart hopes that education programs will be expanded next fall so that "we will be able to select from several classes, not just have a single course to take." Interactive television access will come, she emphasizes. "It could come from Berkeley or any campus around the country, but we would prefer classes from Madison."

Siehr says a number of issues still need to be ironed out, including: scheduling problems when schools begin their semesters at different times or have different spring breaks; deciding which campus registers students; and determining whether students pay for the class as part of the credit load at their own school or pay additional fees to the originating school.

*In the 1994-1995 school year, the UW-Madison campus will again have funding to present interactive television classes from the Engineering studies to the Eau Claire campus. Siehr is accepting proposals from faculty or staff for credit or non-credit classes for the fall or spring. His telephone number is 262-6765.*

— Judy Reed, Outreach Information



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Engineering College  
General

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**CONTACT: Helene Demont, (608) 262-8991**

## **UW-MADISON COLLEGE OF ENGINEERING HONORS ALUMNI**

**MADISON —** The University of Wisconsin-Madison College of Engineering will honor 14 distinguished service citation recipients at its 46th annual Engineers' Day dinner Friday, Oct. 8.

The citations are given to alumni and faculty, previously associated with the college, who have at least 20 years of professional experience and who have had outstanding careers in engineering or related fields.

In addition, the Benjamin Smith Reynolds Award, given annually for excellence in teaching engineering students, will be presented to Sanford A. Klein, professor of mechanical engineering. The Byron Bird Award for Excellence in a Research Publication will go to David C. Larbalestier, professor of materials science and engineering.

John W. Mitchell, professor of mechanical engineering, will receive the Ragnar E. Onstad Service to Society Award, and the Bollinger Academic Staff Achievement Award will be presented to Robert F. Perras, director of Engineering Audiovisual Services.

Recipients of the distinguished service citations include Jes Asmussen, professor of electrical engineering, Michigan State University, East Lansing, Mich.; Charles C. Baker, research program director, Fusion Energy Division, Oak Ridge National Laboratory, Oak Ridge, Tenn.; Ned W. Bechthold, president and CEO of Payne & Dolan, Inc., Waukesha, Wis.; Robert K. Catterson, retired vice president, research and development, Briggs and

-more-

Engineering alumni -- Add 1

Stratton Corp., Wauwatosa, Wis.; George E. Miller, chief engineer-research, Outboard Marine Corp., Waukesha, Wis.; James E. Patton, vice president, Professional Imaging for the United States and Canada, Eastman Kodak Co., Rochester, N.Y.; and David W. Peterson, president, PRI Associates, Inc., Durham, N.C.

Also receiving awards are Rafael Rangel, president, Monterrey Institute of Technology system, Monterrey, Mexico; Vinod K. Sahney, senior vice president, planning and strategic development, Henry Ford Health System, Detroit, Mich.; John L. Selky, president, I/N Tek and I/N Kote, New Carlisle, Ind.; Michael R. Sfat, president emeritus, Bio-Technical Resources, Manitowoc, Wis.; Robert J. Smith, attorney-at-law, Wickwire Gavin, P.C., Madison; Thomas R. Vanderpool, technical manager, 3M Co., St. Paul, Minn.; and Richard N. White, professor of structural engineering, Cornell University, Ithaca, N.Y.

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— Engineering Publications Office, (608) 262-5988



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**CONTACT: Lawrence Casper, (608) 262-5215; Jay Martin, (608) 263-9460**

## **STATE, UNIVERSITY AND BUSINESS**

### **PARTNERSHIP TO BENEFIT WISCONSIN SMALL ENGINE MANUFACTURERS**

MADISON — Small engines are big business in Wisconsin. The industry is responsible for 90,000 direct and indirect jobs in the state, according to Wisconsin Department of Administration estimates. Ninety percent of the small engines produced in the United States are made in Wisconsin, as well as significant manufacturing of marine engines. But the industry faces stiff competition from foreign competitors in meeting future EPA and California emission requirements.

An industry team has formed an engine technology consortium to ensure the vitality of this important state industry. The Wisconsin Small Engines Consortium (WSEC) consists of representatives from the University of Wisconsin-Madison College of Engineering's Engine Research Center, the UW-Milwaukee School of Engineering and Applied Science, and Wisconsin engine manufacturers Briggs and Stratton, Harley-Davidson, Nelson Industries, Tecumseh Products, Mercury Marine, Kohler and Outboard Marine. The consortium was initiated with the help of Governor Tommy Thompson (a member of the federal Clean Air Act Advisory Committee) and the state Department of Natural Resources.

The consortium will concentrate on research to develop engine technology which will improve fuel efficiency and help meet stricter emission requirements. It will also train student engineers to meet future industry needs. The research over the next five years will

-more-

## Engine consortium -- Add 1

be partially funded through \$470,000 of the state's share of a settlement of suits between the federal Department of Energy and petroleum companies found to have illegally overcharged consumers for petroleum products. Matching funds will be provided by the consortium members.

"This consortium enables us to pool our individual resources and talents so we can develop cooperatively the low emission, high efficiency engine technologies needed for the future if we are to remain competitive in today's worldwide market," said David Jones, president of Mercury Marine in Fond du Lac. "The results of our work will benefit all of the state's residents, as well as the manufacturers. Wisconsin's recreational marine engine manufacturers directly employ more than 3,000 state residents and purchase approximately \$200,000,000 worth of goods from Wisconsin suppliers."

A unique strength which the UW-Madison College of Engineering brings to the consortium is its ability to harness emerging technologies and make them available to all of the consortium members, said Lawrence Casper, the college's assistant dean for industrial research and development.

"One example of this is the advanced combustion modeling and engine simulation we've done with Cray Research, a Wisconsin-based supercomputer manufacturer," said Casper. "You wouldn't immediately think that supercomputer technology has a linkage to lawnmower engine technology, but in fact it does."

"There's an important web connecting manufacturers, high tech companies like Cray, and university researchers. The College of Engineering brings these groups together and provides technical resources and expertise that might otherwise be out of reach for many of the consortium members."

UW-Madison College of Engineering has been engaged in engine research through

-more-

Engine consortium -- Add 2

the Engine Research Laboratory for more than 45 years. The Engine Research Center was formally established in 1986 when major funding was received from the U.S. Army Research Office, designating it as the Army's Center of Excellence in Advanced Propulsion Systems. The center is an international leader in engine research areas including combustion, emissions, in-cylinder modeling, heat transfer, spray dynamics, lubrication and mechanical design. In the past 10 years, it has produced more than 80 graduate students with expertise in engine technology.

The new consortium's success will depend on close cooperation between the industry and university researchers, said Mechanical Engineering Associate Professor Jay Martin, who is affiliated with the Engine Research Center. "The university participants must learn what the crucial problems are, and understand how industry views potential solutions to these problems," he said. "The industrial participants must ensure that what is produced in this cooperative effort is relevant to their needs, and make a commitment to learn and use what has been produced."

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— Karen Walsh, (608) 263-2982  
Engineering Publications



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**CONTACT: Andrew Wilcox, (608) 263-4545**

## HEWLETT-PACKARD CONTINUES TRADITION OF UW-MADISON SUPPORT

MADISON — Hewlett-Packard Company (HP) has donated computing and medical electronic equipment worth \$450,000 to the University of Wisconsin-Madison College of Engineering and the UW Hospital and Clinics. These grants are the latest contributions in a 13-year relationship between UW-Madison and HP.

The grants include seven HP high-end workstations valued at \$400,000 for the College of Engineering and HP medical patient-review stations worth \$50,000 for the hospital. HP's grants of cash and equipment to UW-Madison since the early 1980s total more than \$10.3 million.

"Wisconsin is very important to HP as a center of higher education in the Midwest," said John Schaffer, HP University Affairs, university relationship manager to UW-Madison. "We work with the Madison campus on many levels, including research and development, philanthropy, recruiting, continuing education, public policy and sales. In addition to cash and equipment grants, HP employees who are Wisconsin alumni have been active for more than ten years, interviewing, sponsoring and hiring UW graduates from engineering, computer science, business, business/commerce and other disciplines."

"Hewlett-Packard workstations offer the high performance we need to integrate an engineering education with high-technology development," said Greg Moses, associate dean of the College of Engineering. "This equipment will better prepare UW-Madison graduates

-more-

## Hewlett-Packard -- Add 1

to meet the engineering challenges of tomorrow."

The college has been able to achieve a five-year capital improvement plan in just over two years because of HP's grants. "We appreciate Hewlett-Packard's gift and the company's recognition of the important work being done in our engineering program," said COE Dean John Bollinger. "It is this kind of relationship between business and education that will help improve our nation's competitiveness." HP's Full Disclosure System, the patient-review station donated to the hospital, allows 24-hour visual monitoring of vital patient information.

Since 1980, Hewlett-Packard has made cash and equipment gifts totaling \$144,178 to the university for faculty development and minority programs. The company has donated \$51,878 in cash to the UW Foundation to match HP employee gifts made to the university. In addition to the College of Engineering, HP has made cash and equipment grants to the university's Computer Science Department.

The latest Hewlett-Packard grants will be administered through the UW Foundation as part of The Campaign for Wisconsin, a major capital campaign seeking to raise \$400 million to support scholarships, professorships, research and other program advancement at the UW-Madison.

"The Hewlett-Packard gifts represent an investment in our world-class University," said Andrew A. Wilcox, UW Foundation president. "The dividends of these relationships will benefit not only students and faculty, but business in general and the future work force of our society."

Hewlett-Packard Company is an international manufacturer of measurement and computation products and systems recognized for excellence in quality and support. The company's products and services are used in industry, business, engineering, science, medicine and education in approximately 100 countries. HP has 93,100 employees and had revenue of \$16.4 billion in its 1992 fiscal year.

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— Lynne Johnson, (608) 263-7003

## & NOTES

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— The University of  
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spot in a national poll. The Badgers travel to Illinois today for 7:05 p.m. game, which will be televised on Channel 15 in Madison. The UW ends its road trip Jan. 30 when it meets Penn State. The next home game for the Badgers is Feb. 3 against Northwestern at 7:05 p.m. in the Field House.

■ **L&S Teaching Fellows** — The College of Letters and Science has received a three-year grant from the Lilly Foundation to establish a Teaching Fellows Program for assistant professors. The deadline for departments to submit a nominee is Feb. 26.

A faculty committee, chaired by Professor Yvonne Ozello of the Department of French and Italian, will select five full-time faculty members who are in the second to fifth year in the tenure track. For one year, each Fellow will work to redesign an existing course or develop a new one. The Fellow will be released from one course during the year. As a group, the Fellows will share their experiences in regular meetings, and will attend two national meetings of Lilly Fellows. Each Fellow will choose a mentor faculty member.

"We are excited to be able to give our very best assistant professors the opportunity to be creative in developing an undergraduate course. We want this to have the full support of the departmental executive committee, so we are asking for departmental nominations, rather than individual applications," M. Crawford Young, L&S acting dean, said. Nominations should be sent to 102 South Hall.

■ **Unique kit adds new dimension to chemistry** — For many science and engineering students, forming a mental map of how atoms organize themselves to make such solid-state materials as diamonds, silicon, graphite and the new superconductors is an exercise in frustration. Textbook pictures lack depth and no computer software package seems tangible enough to give students a feel for the atomic structures that form the basis for the high-tech



Christy Cargille supervised assembly of the unique kit for the ICE.

materials that are assuming increasing importance in the worlds of science and engineering.

But now a new, low-cost, easy-to-use kit promises students a three-dimensional handle on extended atomic structures.

The kit was developed by Ludwig Mayer, chemist at San Jose State University in collaboration with Professor George Lisensky of Beloit College and the Institute for Chemical Education (ICE), which is directed by Professor John Moore at UW-Madison.

The kit is based on the way atoms naturally pack into solids. Layers of colored balls are stacked with smaller atoms fitting in the spaces between larger atoms. Students are guided in building a particular structure — from table salt to superconductors — by templates over a plastic base and a series of rods that together serve as roadmaps.

"The idea is to help students connect chemistry with common and high-tech materials," said Arthur B. Ellis, a UW-Madison professor of chemistry and head of the project under which the kit was produced. "To my knowledge, there is no kit for these important structures that's as simple as this and that's as versatile as this."

Developed with the help of the National Science Foundation, the Dreyfus Foundation, the Dow Chemical Company Foundation and the UW-Madison Office of Outreach Development under the auspices of ICE, the kit can be used to build nearly 50 different structures that would commonly be discussed in science and engineering courses. For more information about the kit, contact ICE at 262-3033.

■ **InterLibrary Loan service expanded** — Two changes have dramatically extended InterLibrary Loan service (ILL) to General Library System patrons. ILL provides faculty, staff, and students with materials not held in campus libraries.

• After-hours ILL service moved from the Memorial Library Reference Department to Circulation, expanding available ILL service by 36 hours. This

## Conference introduces TAs to total quality

By Amy Krueger  
College of Engineering

Procter & Gamble's *TQM University Challenge*, held last May, helped the School of Business and College of Engineering begin to bring theories and practices of continuous improvement into the classroom. Carrying the process one step further, the College of Engineering is training its teaching assistants in total quality management (TQM) and continuous improvement.

On Jan. 14, approximately 125 engineering TAs attended "The Teaching Improvement Process: The Role of Total Quality Management in the Classroom."

**Technical skills aren't enough anymore, you have to focus on continuous improvement.'**

**William Kempke**

"The seminar was designed around the themes of continuous improvement, involvement of everyone in an organization, and data-based decisions — the heart of TQM," said Sandra Counter, conference organizer and adjunct assistant professor of Engineering Professional Development. Workshops in the seminar addressed developing successful presentations, improving student-TA communication and survival skills for new TAs.

William Kempke, product manager for the AS-400 at IBM Rochester, began the seminar by explaining how TAs might fit academics into the TQM and continuous improvement framework. Liken students to a product by finding ways to help the students be the best they can be, he said. He added that today business needs people with great technical skills, TQM skills and life skills. "Technical skills aren't enough anymore, you have to focus on continuous improvement," he said.

College of Engineering Dean John Bollinger explained that introducing quality into the classroom confirms a commitment to excellence, develops improvement processes to assure a path to excellence, encourages faculty and staff to rely more on data-based decision making, and establishes clear directions for the future.

UNIVERSITY OF  
**WISCONSIN**  
MADISON

**Wisconsin Week**

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# NEWS

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FOR IMMEDIATE RELEASE

3/23/92

**CONTACT: Joe Skidmore, (608) 264-2104; Sheryl Merkes, (608) 798-3570**

## STUDENT-BUILT BRIDGES ON DISPLAY

MADISON — Steel bridges built by engineering students from 12 Midwestern colleges and universities will be on display at the Dane County Arena on Friday, March 27 from 3 to 5 p.m.

Civil and environmental engineering students build the 20-foot bridges for an annual contest sponsored by the American Society of Civil Engineers. This year, the UW-Madison student chapter of the society is hosting the event in conjunction with the Great Lakes Regional Conference "Bridging the Gap to the Environment." The event is free and open to the public.

The bridges are judged in five categories: aesthetics, weight, cost of materials, construction time and deflection -- how much the bridge sags when loaded with weights.

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— Amy Krueger, (608) 262-2481, (608) 263-5988

College of Engineering



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# NEWS

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12/2/91

**CONTACT: Thomas Chapman, (608) 262-2191; John Bollinger, (608) 262-3481;  
Thomas Cunningham, (608) 255-1574**

## PROGRAM HELPS ENGINEERING STUDENTS CONNECT WITH JAPAN

MADISON -- The days are gone when a top-flight engineer's need-to-know list included only technical expertise in such demanding fields as computers, electronics or mechanics. Engineers still have to be chock-full of the knowledge that is their bread and butter, but in addition, knowledge of Japan -- its language and culture -- can be the ticket to a truly successful career.

Nearly one-third of the world's technical literature is in Japanese and more than half of the world's patents in 1990 were issued in Japanese last year, according to Thomas Chapman, associate dean for international relations at the College of Engineering. Much of this material is available only in Japanese, Chapman said.

The University of Madison's College of Engineering has been a pioneer in the effort to equip engineers with the skills they need. The UW-Japan Engineering Leadership Program, begun in 1985, aims not only to train engineers who can help American firms do business in Japan, but to allow companies to keep track of highly advanced and advancing Japanese technology. (UW-Madison recently received a \$2.9 million federal grant to train American engineers in understanding how the Japanese manage technology. See related story.)

While other engineering programs in the U.S. offer instruction in Japanese at the

-more-

## Engineering program -- Add 1

graduate level, the UW-Madison's program is unusual, says Chapman, because it is offered to undergraduates. "It's hard to learn Japanese when you're in a professional research program," he said. "It's better to start early."

The program, started five years ago by Engineering Dean John Bollinger and now-retired professor Merton Barry, not only provides students with intensive instruction in technical and ordinary Japanese, but teaches them about the country's history and culture. The program grew out of the UW-Madison's capacity to teach technical Japanese. -- two books on the subject were authored by faculty here. Students in the program also spend a year at a Japanese university working on an engineering project. The intensive instruction in Japanese accompanies the college's standard engineering curriculum.

Chapman, who has guided the program for the past three years, said the students who participate are keenly motivated and highly focused.

Thomas Cunningham is one example. A fourth-year mechanical engineering student, and one of 14 in the program, he came to the university with a strong interest in Japan. He spent his senior year of high school there on a Rotary Club scholarship.

While the program is difficult for Cunningham, he said it's one he finds very rewarding. "The students are great and highly motivated," he said. "They are people who I try to emulate."

And, for Cunningham, the program's demands offer a kind of built-in variety. "Studying Japanese helps get away from engineering a bit," he said.

The Leadership Program is supported by some major U.S. companies. Firms such as Xerox, General Electric Medical Systems, and Kodak sponsor students in the program.

-more-

## Engineering program -- Add 2

Recently Allan-Bradley, the Milwaukee-based industrial firm which makes automated control equipment, joined the initiative. The firm is interested in trying to develop strong ties to Japan, said Gary Vose, manager for international human resources.

"We need to have people in positions where they can work with the Japanese and understand their culture, customs, and language," he said.

A recent graduate of the program, Greg Lillegard is now working for General Electric Medical Systems in Waukesha, Wis. He said his training helps his firm deal with Yokogawa Medical Systems, a Japanese firm in which GE owns the majority share, and as an electrical engineer, "makes him perfectly confident of his ability to get his points across" to his Japanese colleagues.

Another graduate of the program, Andrew Strauch, who works for Xerox believes the program will make him effective in working with Fuji Xerox, a 50-50 joint venture in Japan between Xerox and Fuji Film. Strauch, who joined Xerox two years ago, said that as a result of his training "I can start seeing differences in my ability to get things done."

Both Lillegard and Strauch emphasized that they are much more than translators of technical Japanese, but are able to help their firms bridge gaps between cultures and to have a significant impact in helping them do business in Japan.

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--Harvey Black, (608) 262-9772



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# NEWS

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*Engineering School*  
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11/29/91

**CONTACT: Thomas Chapman, (608) 262-2191**

## **UW-MADISON GETS GRANT TO HELP ENGINEERS LEARN JAPANESE**

MADISON -- The University of Wisconsin-Madison has recently received a \$2.9 million federal grant to train American scientists and engineers in understanding how the Japanese manage technology.

The grant, from the Air Force Office of Scientific Research, funds a coordinated program to provide Japanese language training, which will include an intensive summer course in Japan and as many as 150 one-year industrial internships there for students following graduation. UW-Madison, which will coordinate Japanese language training, is part of the 13-school consortium known as EAGLE, Engineering Alliance for Global Education. The program is based at the University of Illinois.

In addition, the UW-Madison Department of Engineering Professional Development will offer technical Japanese language instruction and seminars in various aspects of Japanese technology and management methods via satellite, through the auspices of the National Technological University.

The NTU is a non-profit institution, consisting of 40 universities, which provides education for scientists and technical managers, by means of satellite and teleconferences through a network of nationwide locations..

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-- Harvey Black, (608) 262-9772



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10/10/91

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## **UW-MADISON COLLEGE OF ENGINEERING HONORS ALUMNI**

MADISON--The UW-Madison College of Engineering will honor 11 distinguished service citation recipients at its 44th annual Engineers' Day dinner Friday, Oct. 25.

The citations are given to alumni and faculty previously associated with the college with at least 20 years of professional experience who have had outstanding careers in engineering or related fields.

In addition, the Benjamin Smith Reynolds Award, given annually for excellence in teaching engineering students, will be presented to Dale F. Rudd, professor of chemical engineering. The Byron Bird Award for Excellence in a Research Publication will go to Warren E. Stewart, professor of chemical engineering; and the Bollinger Academic Staff Achievement Award will be given to Richard J. Cashwell, senior lecturer, nuclear engineering and engineering physics.

William W. Wuerger, associate dean for operations, will receive the Ragnar E. Onstad Service to Society Award; and Harold A. Peterson, professor emeritus of electrical and computer engineering, will receive an Electrical and Computer Engineering Department Centennial Citation.

Recipients of the distinguished service citations include: Ronald L. Daggett, owner, Engineering Industries, Verona, Wis.; David H. Eber, vice president of

-more-

Engineering alumni -- Add 1

engineering technology, The Trane Company, LaCrosse, Wis.; Lyle G. Hassebroek, president, CH2M HILL, Inc., Denver, Colo.; Lowell B. Jackson, vice president, transportation and structures, Greenhorne & O'Mara, Inc., Greenbelt, Md.; Gail E. Janssen, president and chairman of the board, F & M Bancorporation, Kaukauna, Wis.; Brian L. Joiner, chief executive officer, Joiner Associates, Inc., Madison; Ernest S. Micek, president, corn milling division, Cargill, Inc., Minneapolis, Minn.; John P. Riggs, vice president of research, Hoechst Celanese Corporation, Summit, N.J.; Manfred E. Suess, president, Technimet Corporation, New Berlin, Wis.; Howard F. Voigt, chief engineer, overseas product engineering, Ford Motor Company, Dearborn, Mich.; David A. Woolhiser, supervisory research hydraulic engineer, U.S. Department of Agriculture, Tucson, Ariz.

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-- Engineering Publications, (608) 262-5988

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## COLLEGE OF ENGINEERING FACULTY RECEIVE APPLIED TECHNOLOGY GRANTS

MADISON--Faculty members in the University of Wisconsin's College of Engineering have received grants through the UW System Applied Research Program. The grants, funded by the governor and legislature, encourage faculty to apply their expertise to applied research which will boost Wisconsin's economy. The faculty members and their projects are:

Assistant Professor Doug Cameron and Professor Edwin N. Lightfoot, chemical engineering, will investigate using microbes to produce polysaccharide gums from whey permeate. Whey permeate is a major waste product in the state and nation — more than 25 billion pounds of it are disposed of annually in the U.S.

Polysaccharide gums have a variety of industrial applications, including oil drilling muds, cements, waste water treatment, and as thickeners in the food industry. Assistant Professor Mark Etzel, food science, is the co-investigator.

Professor Henry Guckel, electrical and computer engineering, will study the design and manufacture of low-noise electronic components and data extraction circuits. The program is linked to an existing research program in sensor technology and micromechanics. Low-noise electronics, together with advanced sensors, lead to sophisticated sensor systems.

Some examples are X-ray detectors with amplifiers, pressure and force sensing systems, and building monitoring systems. All result in a measuring

instrument in which the sensor system is leveraged for high economic gain. The research group will work with at least two Wisconsin companies, and develop long-term design and manufacturing plans which will result in future economic growth and new products.

Professor Terry Richard, engineering mechanics, and Professor Frank Worzala, materials science and engineering, will work with Trek Bicycle of Waterloo, Wis., to optimize materials for bike frames. They will subject the company's bikes to off-road test conditions and measure strains to quantify what contributes to the "feel" of a good road bike. The results will help to determine materials and joining techniques for better frame construction.

Professors Dave Otis and Mohamed El-Wakil, mechanical engineering, and Engineering Dean John G. Bollinger are developing a new concept for humidification and dehumidification. Currently, separate devices are needed for both processes. The group is designing a single porous tube which will perform both humidification and dehumidification. A prototype will be offered to Wisconsin companies. The work is being done under the auspices of the Wisconsin Center for Space Automation and Robotics (WCSAR).

Professor John Conrad, nuclear engineering and engineering physics, and Professor Richard Dodd, materials science and engineering, are collaborating with Harley-Davidson, Inc. of Milwaukee on a project to apply the Plasma Source Ion Implantation (PSII) process to extend the life of die casting molds. These dies deteriorate in use due to wear, corrosion, erosion, and thermal fatigue, thus reducing the quality of castings. The dies eventually must be replaced at a high cost to the user. The die casting industry and consumers could benefit significantly if the lifetime of the dies is prolonged.

Professor Norman Beachley and Associate Professor Frank Fronczak, mechanical engineering, will work to increase the efficiency of power trains in heavy off-road equipment. They will combine the engine and hydraulic pump in vehicles such as front-end loaders into a single, more efficient and less expensive unit. They will be presenting their ideas to the state's heavy equipment manufacturers.

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# University of Wisconsin Foundation

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Immediately

07/12/91

CONTACT: James P. May, Corporate Public Relations manager, S.C. Johnson & Son, Inc., manager, (414) 631-2436; Timothy Reilley, senior vice president, UW Foundation, (608) 263-4545.

## S.C. JOHNSON WAX GRANT SUPPORTS GRADUATE RESEARCH

MADISON--A \$360,000 grant from S.C. Johnson & Son Inc. will offer research opportunities for University of Wisconsin-Madison graduate students over the next five years.

Officials from the Racine-based company presented the first portion of the Samuel C. Johnson Distinguished Fellowship Fund to the University of Wisconsin Foundation during a Friday, July 12, ceremony. The fund ultimately will support six fellowships in science and engineering, providing additional knowledge for industry and commerce.

The fellowship fund is named after the current chair of S.C. Johnson & Son Inc., a consumer-products company founded in 1886 by Johnson's great-grandfather and namesake. The company is commonly known as S.C. Johnson Wax.

"Based on our long experience with the University of Wisconsin and the high degree of respect that we have for that institution, we feel it's important to continue to support its scientific and research endeavors," said James F. DiMarco, a senior vice president of the company.

During 1991-92, two three-year fellowships will be funded in the College of Engineering's chemical engineering and mechanical engineering departments.

Add 1--Johnson Wax grant

Research will focus on the composition and properties of papers and plastics.

The university will select fellowship recipients, and the students and faculty will choose topics of research from broad suggestions provided by S.C. Johnson Wax. The focus of the other four fellowships will be decided later.

"The projects in plastics and cellulose technology demonstrate how the research interests of our faculty and students can easily overlap with the interests of a company competing in the world marketplace," said College of Engineering Associate Dean Gregory Moses. "Engineering research is most exciting when it fulfills academic goals and prepares students to play a role in the industrial research sector."

Andrew Wilcox, president of the UW Foundation, which will administer the grant, said the gift is "an excellent example of a Wisconsin corporation advancing the state's educational opportunities. The gift also helps to prepare UW graduates for work in such corporations," he said, noting that about 100 UW-Madison alumni are employed at the company's headquarters in Racine.

The Johnson Wax gift was received as part of The Campaign for Wisconsin, a major capital campaign being conducted by the UW Foundation. Through the campaign, the Foundation seeks to raise \$350 million to support scholarships, professorships, research and other program advancement at the the UW-Madison.

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--Kelly Radloff, (608) 263-0386

# UW news

From the University of Wisconsin-Madison / News Service, Bascom Hall, 500 Lincoln Drive, Madison 53706. Telephone: 608/262-3571

Release:

4/21/91

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## ENGINEERING, LAW SCHOOL EARN TOP 25 RANKING FROM US NEWS & WORLD REPORT

MADISON--The University of Wisconsin-Madison's Law School and College of Engineering are listed in the top 25 of their respective fields in US News and World Report's annual graduate school ratings published in the April 29, 1991 edition of the magazine (on newsstands Monday).

The College of Engineering was ranked 14th among engineering schools in the U.S.; the Law School was 21st.

Two programs in the engineering college were cited as being among the top five in the nation by U.S. engineering deans surveyed by the magazine. The chemical engineering program was ranked fourth, as was the college's nuclear engineering program. In ratings by professional engineers, UW-Madison's chemical engineering program tied for second with similar programs at the University of California at Berkeley and the University of Texas at Austin.

John Bollinger, dean of the College of Engineering, said he was "delighted that our engineering program is ranked in the top 15 in the country." He called the nuclear and chemical engineering programs "models for the college."

Bollinger received word of the rating the same day that the college broke ground on a \$16 million addition to the Engineering Building. Referring to that project and others, he said, "as we expand our physical plant, we'll certainly be in the top 10."

Gerald Thain, associate dean of the Law School was pleased with his school's rating, but was a bit more reserved. "It's more of a beauty contest than anything else, but it's much nicer to be listed than not. The ranking shows that people in the profession around the country recognize this as a very strong school."

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-- Harvey Black (608) 262-3571

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