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In this issue:

The Full Report

of the

Legislative Committee

on

University Policy

A New England Mutual agent ANSWERS SOME QUESTIONS about

why I left a good job to sell life insurance

WHEN A MAN MAJORS in chemistry in college, how will he get along in life insurance? Let's look at Horace "Tink" Olmsted, Lafayette '39. After using his chemical training as a technical salesman in industry, he joined New England Mutual in Pittsburgh only two years ago. Today he's a member of our *Leaders' Association* and is knocking at the door of the *Million Dollar Round Table*. Any college course can be a good foundation for life insurance. The success of over 900 collegetrained New England Mutual agents proves this to be a fact.





THE COMPANY THAT FOUNDED MUTUAL LIFE INSURANCE IN AMERICA - 1835

What did you do before you got into life insurance?

"For six years I was a technical salesman for a big chemical company. They sent me to Pittsburgh as district representative. Then in 1952 I joined New England Mutual."

Being a district representative sounds pretty good. Why did you leave?

"Well, it was a good job, but I was tired of taking orders from a distance. I had too much responsibility with too little authority. And, of course, my family and I had to live where the company wanted us. All in all, I wasn't too happy about my job."

Does life insurance give you what you want?

"I'll say it does. I'm my own boss. I can live where I want, choose my clients, and earn as much as my ability will let me. The training courses at New England Mutual have given me a professional education. And, on top of all this, life insurance gives me the chance to do some real good in the world."

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"The Company has a proved selection process for determining your aptitude and will tell you frankly what your chances are for success. Write Vice President L. M. Huppeler, 501 Boylston Street, Boston, Mass., if you are interested. No obligation will be implied, either way. Or, if you prefer, send first for the booklet below.

This booklet tells why 17 men chose a business career in life insurance selling. Simply mail coupon to	Why We Chose
New England Mutual Life, Box 333-1A, Boston 17, Mass.	9, 5 B
Name	
Address	
CityState	



WISCONSIN

Official Publication of the Wisconsin Alumni Association

JANUARY 15, 1955

VOL. 56, NO. 9

Articles in This Issue

6
Following
page
eight

Departments

Keeping in Touch with Wisconsin	4
University News	6
On Wisconsin in Sports	9
(following page 32 of the repor	t)
Club News	10
Campus Chronicle	12
With the Classes	14
Badger Bookshelf	15

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SAFE DRIVING. We were asked to say something about Safe-Driving (S-D) day on these pages. So we will, even though it is long since past (Dec. 15), and it probably proved little—except that it's the people who don't pay much attention to safe driving cautions that cause the most accidents.

THE CUP THAT CHEERS. The average quantity of milk consumed each day by students living in the UW residence halls is one quart. The dorm cafeterias still provide all the milk a student can drink—at mealtime.

That's one way the University is helping to solve the dairy products surplus. Here's another. The Regents have approved the installation of milk vending machines on the campus in classroom buildings. It's the first time such contrivances, dispensing *any* manner of food or drink, have ever been permitted in our hallowed halls. Milk used is to be supplied through the UW department of dairy and food industries and arrangements will be made by the Union. The machines will dispense 10-ounce glasses instead of the usual 8-ounce bottle, too, digging into that surplus so much the faster.

And on top of all this the University has let another cat out of the bag. Refreshment stands at home football games from now on will offer milk drinks along with the customary hot dogs, coffee and pop.

PHARM BOY: Former Gov. Oscar Rennebohm, now a Regent, won a state dairy festival milking contest recently on the steps of the capitol in Madison. Under a generous Holstein, he easily pulled away from his opposition, UW assistant coaches Milt Bruhn and George Lanphear and bank president Thomas Hefty. Rennebohm got $1\frac{1}{4}$ pounds of milk in $1\frac{1}{2}$ minutes, then returned to his bovine partner after the contest with the sage advice: "Never leave a cow half-milked."

THE WISCONSIN ALUMNUS, published once monthly in December, January, February, March, April, May, June, July and September, and three times monthly in October and November. (These extra issues are Football Bulletins.) Entered as second class matter at the post office at Madison, Wis., under the act of March 3, 1879. Subscription price (included in membership dues of the Wisconsin Alumni Association) \$2.50 a year; subscription to non-members, \$5.00 a year. Editorial and business offices at 770 Langdon St., Madison 6, Wis. If any subscriber wishes his magazine discontinued at the expiration of his subscription, notice to that effect should be sent with the subscription, or at its expiration. Otherwise it is understood that a continuance is desired.



keeping in touch with WISCONSIN

JOHN BERGE, Executive Director WISCONSIN ALUMNI ASSOCIATION

RUSSIA and her satellites are making determined efforts to outstrip the free world in technical education, according to figures computed by Dr. Benjamin Fine, Education Editor of the *New York Times*.

"The free world," says Dr. Fine, "is in danger of losing the important technological race for trained scientists, engineers and technicians. The Soviet Union is making an intensive effort to increase its supply of technically trained personnel. . . From all indications, the entire educational power of the Soviet state is committed to the goal of overtaking and surpassing the United States in the scientific and engineering fields."

Dr. Fine's survey shows that the Soviet Union graduated 54,000 engineers in $1954-2\frac{1}{2}$ times as many as the United States. The United States graduated 50,000 engineers in 1950, but only 20,000 last June. During the same period, the number of Russian-graduated engineers jumped from 28,000 in 1950 to 54,000 in 1954.

Russian satellite countries are showing similar increases. The *Times* estimates that 401,000 students are studying engineering, science and related technical subjects in 266 institutions of higher learning in Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Rumania and Poland.

Maybe the Soviet schools are not as good as ours. On the other hand, some visitors behind the Iron Curtain claim that Soviet technical schools are comparable in quality to those in the United States. Dr. John R. Dunning, Dean of the School of Engineering at Columbia University, says that the Soviets awarded as many doctorates last year as were awarded in the United States—with one important difference. In the United States the doctorates were three to one in favor of the humanities; in Russia, three to one in favor of science and engineering.

As far as the American way of life is concerned, our ratio is more logical. However, in the face of today's cold war, the Russian ratio is significant. Dean S. C. Hollister of the College of Engineering at Cornell expresses this importance in these words: "Many persons fail to realize the impact that science, engineering and technology have had in our national life and world affairs. We can even note a desire that scientific and technological developments be curtailed. This would surely be the road to national suicide. The lack of understanding of the role of science, engineering and technology in our society is perhaps the gravest element of our present situation."



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Facts like these make this year's Founders Day Meetings highly important to all alumni interested in our University's welfare.

On February 5th, the University of Wisconsin will be 106 years old. As we commemorate this anniversary, we should keep in mind what is happening behind the Iron Curtain in the field of technical education. Every Founders Day Meeting should include plans for implementing the primary objective of the Wisconsin Alumni Association: To promote, by organized effort, the best interests of the University of Wisconsin.

Founders Day Meetings offer a splendid opportunity for alumni to develop plans for helping the University to continue its outstanding work in teaching, research and public service. It's gratifying to talk about the University's past record of achievements. However, it's more important to use Founders Day for activities that look to the University's future welfare—with a budget adequate to meet its urgent needs. It costs money to run a good university, and President Fred and his associates must have a larger budget for the coming biennium to maintain Wisconsin's leadership among American universities.



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JANUARY, 1955

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Agreement on Milwaukee Merger Is Hard to Find

IN DISCUSSING the University Policies report* of the Wisconsin Legislative Council recently, a newspaper commentator remarked that it had ignored such pressing problems as the situation of higher education in Milwaukee.

This criticism itself ignored the fact that another Legislative committee—the Committee on Higher Education, under the chairmanship of Alfred Ludvigsen for months had been wrestling with that specific problem, plus others dealing with consolidation of higher education in Wisconsin . . .

. . . and that *this* committee had been unable to come to a meeting of the minds regarding a recommendation on any merger of University Extension and Wisconsin State College in Milwaukee!

Reporting to the Legislative Council in early December, the higher education committee reported that the Milwaukee question had certainly proved a "hot potato," in the words of Senator W. W. Clark of Vesper.

* Reprinted in full in this issue of the Alumnus.

"The committee agreed that they (WSC and Extension) should be consolidated and then came to a parting of the ways," Clark said. "It is still an open question on how that should be done."

Thus it appears that there will be no interim committee recommendation before the Legislature if it considers—and it seems sure that it will—a change in the situation now existing at Milwaukee.

The committee made no recommendation, either, on any broader plan of reorganization of the higher education system in the state, although it had considered a plan which would combine University and State College Regents on one board. This idea was not discussed at the Legislative Council meeting.

The Council did endorse two proposals of the higher education committee. These were the placing of Stout Institute, Menomonie, and the Wisconsin Institute of Technology, Platteville, under the state college regents. The proposal would have the institutions retaining their present identity but the separate boards that now run them would be abolished.

Bowers New Med Dean



Dr. John Z. Bowers

After an unusual pre-Christmas telephone poll of the University's Board of Regents it was announced on December 18 that Dr. John Z. Bowers will become dean of the University of Wisconsin Medical School on July 1. Dr. Bowers is now dean of the University of Utah College of Medicine in Salt Lake City.

Unanimous agreement on Dr. Bowers was announced by Dr. R. G. Arveson, Frederic, who headed the Regent committee on the deanship. Dr. Arveson said the telephone poll was substituted for a special Regent meeting which had to be cancelled when illness and the weather prevented assembling of a quorum of the board. Evidently the Regents wanted to settle the matter before the year's end.

Dean Bowers will succeed Dr. William S. Middleton, dean of the Wisconsin school since 1935, who has asked to be relieved of his administrative duties

(continued on page 11)

Many Alumni In Legislature

HOW MANY University alumni take the opportunity to discharge one responsibility of citizenship the holding of public office?

• Not enough of them, said former Governor, now Regent Oscar Rennebohm, in a Founders Day address last year.

• On the national average only about six per cent, according to a survey of college graduates.

Yet there are dozens of Wisconsin alumni, in the state and elsewhere, who *are* doing a better-than-average job of making our democratic government function at the smoothest possible pace.

Look at the Wisconsin Legislature, for example.

Out of 33 State Senate seats now occupied in this legislative session which got under way January 12, a total of ten are occupied by former students at the University of Wisconsin.

At that, the number of alumni state senators is down from the even dozen seated in the 1953 Legislature. Half of this difference is accounted for by a vacancy that arose when Warren P. Knowles (former Alumni Association president) was elected Lieutenant Governor.

There is a small decrease, too, in Wisconsin alumni voting in the State Assembly. While this year there are 24 assemblymen who attended the University, in 1953 there were 26.

Interestingly, *all* of the five Dane County assemblymen are graduates of the University—Joseph W. Bloodgood, '48; Ivan A. Nestingen, '49; Carroll E. Metzner, '43; Carl W. Thompson, '36, and Ervin M. Bruner, '41. Senator Gaylord Nelson, '42, (unsuccessful in a race against incumbent U. S. Congressman Glenn Davis, '40), also lives in Dane County (Madison).

Evidently holding the championship for having most degrees from the University is William N. Belter, '47, of Wautoma. He has three.

Other state senators who attended Wisconsin include:

Leo P. O'Brien, '18, Green Bay; Harry F. Franke, '59, Milwaukee; Allen J. Busby, '22, Milwaukee; Henry W. Maier, '40, Milwaukee; William F. Trinke, '35, Lake Geneva; Paul J. Rogan, '40, Ladysmith; William W. Clark, '14, Vesper; Arthur L. Padrutt, '44,

Especially for Alumnus readers .

On the following pages the Wisconsin Alumni Association is pleased to reprint, in full, the report of the University of Wisconsin Policies Committee of the Wisconsin Legislative Council, with a prefacing statement by the president of the Association, Gordon Fox.

State Senator (now Lt. Gov.) Warren P. Knowles, former Alumni Association president and chairman of the Policies Committee, presented the report to the Legislative Council. He noted that it "is no catch-all answer" to the University's problems. But the committee hoped that the report would prompt lawmakers to give the problems further study and "make their own decisions," he said.

Committee recommendations are included in the first pages of the report. In the following five chapters, everyone interested in the University will find a readable and complete, though condensed, story of

. . . the University today

Chippewa Falls, and Hugh M. Jones, '14, Wausau.

Assemblymen-alumni include Jerome F. Quinn, '33, Green Bay; Reino Perala, '40, Superior; G. Helmer Bakke, '39, Menomonie; William A. Loy, '15, Fennimore; Eugene A. Toepel, La Crosse; Lawrence W. Timmerman, '33, Milwaukee; Isaac N. Coggs, '48, Milwaukee; Glen E. Pommerening, '50, Wauwatosa; Mark Catlin Jr., '33, Appleton; Warren A. Grady, '50, Port Washington; John T. Kostuck, '16, Stevens Point; David J. Blanchard, '42, Edgerton; J. Riley Stone, '07, Reedsburg; Robert G. Marotz, '50, Shawano; Harold F. Huibregtse, '28, Sheboygan Falls; Richard E. Peterson, '49, Clintonville; John S. Crawford, '50, Marshfield, and Arthur J. Crowns Jr., '50, Wisconsin Rapids.

Two other alumni are in high state offices: Attorney General Vernon W. Thomson, '27, and Mrs. Glenn Wise, '19, secretary of state. And on the national scene, U. S. Senator Alexander Wiley, '07, and Representatives Davis, Melvin R. Laird, '39, John W. Byrnes, '36, and Alvin E. O'Konski, '32, remain in Congress.

JANUARY, 1955

Compendium

Completion of the second floor of the Dairy Cattle Instruction and Research Center (November Alumnus) was approved by the Regents in December. The \$37,000 required will come from "overhead payments" on federal government research contracts that have accumulated in the past.

Educational television's first "spectacular," a performance of Euripides' classic "Medea" (translated by Prof. Walter Agard of the UW classics department), was televised and recorded at WHA-TV studios in mid-December.

Time magazine devoted half its art section of Dec. 6 to UW artist-in-residence Aaron Bohrod and his Trompel'Oeil (fool-the-eye) painting.

The Wisconsin chapter of the American Association of University Professors has urged that the present ROTC loyalty affidavit be abandoned, with substitution of "a simple, affirmative declaration of loyalty to the Constitution and laws of the United States."

A Gimbel Art Competition collection, "Wisconsin Artists' View of 1952," will be given to the University.

A group known as the Committee for Preservation of the Park in December filed suit to halt construction of the athletic practice building, now going up on Camp Randall. Meanwhile, work on the project is continuing.

Helping to ease the critical problem of certifying librarians in Wisconsin's 312 public libraries has been a classroomcorrespondence study course, "Introduction to Library Science," offered in six Wisconsin cities by the Extension Division and the Wisconsin Free Library Commission.

"Shifting Scenes," a monthly calendar listing community theater presentations in Wisconsin, may be obtained regularly by writing the Wisconsin Idea Theatre, 2026 Stadium Offices, Extension Division, Madison 6.

7

THE Wisconsin Alumnus purposes to inform its readers concerning the activities, the progress and the problems of our university. Pursuant to that objective, this issue carries, in full, a masterly report resulting from an analytical survey recently completed by the University Policies Committee of the Legislative Council.

Perusal of this report will presumably stimulate the reader to formulate his own view of the values which the university represents and the attributes which have established it in his esteem and endeared it to his memory.

Most to be desired, however, is a broader and keener comprehension of the magnitude and the urgency of the university's problem of maintaining more than a mediocre measure of adequacy in the face of an explosive expansion of requirements. As the report emphatically points out, this problem is



not peculiar to our own university. In some form or degree, it confronts nearly all of the institutions of higher learning in our nation.

But its impact falls most acutely upon a public institution which is dedicated to the service of the whole citizenry without limitation or distinction.

The demand for advanced education is not synthetic. There is little likelihood of an oversupply of graduates. The need of competence in the higher echelons of all fields of organized endeavor is growing by leaps and bounds.

POVERTY has been the normal status of the masses of mankind through sixty centuries during which the advancement of man's material welfare proceeded at snail's pace.

Nine score years ago our Revolutionary forefathers pio-

8

neered a new concept of government and of human relationships. The establishment of a favorable environment for the development of free enterprise gave birth to an era of technological advance hitherto undreamed. The consequent improvement of living standards has progressed at an ever accelerating pace. In the past quarter century the gain was 100 percent. During this period the proportion of professional and salaried employees in our work force doubled while the proportion of unskilled workers was halved.

The average workman today has at his command, in mechanical and electrical power, the equivalent of more than a hundred slaves ready at all times to perform the manual tasks associated with his operation. Drudgery is being transferred to machines while workers who formerly did the drudgery have graduated to jobs calling for greater competence and affording better pay.

This upgrading of personnel requirement extends all of the way to the top. Higher material standards demand higher mental standards and higher moral standards. The degree to which our citizenry measures up to this growing need will determine the extent to which we retain world supremacy and consequent world leadership.

In recent decades science has placed at the disposal of man tremendous potentialities for the attainment of abundance, leisure, culture and enjoyment. The accelerating pace of progress points to the attainment of goals as yet uncharted. Technological advance has no visible horizon. Its extension and expansion are imperative if we would continue to create new fields of endeavor to provide tasks for the half million new employables which accrue to the ranks of labor annually.

If we are to continue a supersonic pace of technological progress we must be prepared to complement our scientific competence with a commensurate measure of adequacy in other fields of endeavor. Our problem lies not alone in the creation of material abundance. Of comparable import is the assimilation of that abundance, in management, in organization, in distribution, in governmental relationships, in human relationships. The unrest and the confusion which presently confound us bear witness to our lagging status in these areas of endeavor. We are placing matches in the hands of children and they are proceeding to create conflagrations.

Today, two conflicting ideologies clash in a cold war. We are spending billions in preparation for a hot war which may not be. Yet we hesitate over the expenditure of millions for higher education, our bulwark in the cold war which already engulfs us. Yet we are investing less for higher education than we spend for recreation, or for refreshments or for tobacco.

Can we not perceive that dwarfed or warped minds impose a greater danger than Russian bombs, Do we not comprehend that an enlightened citizenry is the sine qua non of continued democratic survival in a complex civilization? Do we doubt that only inspired leadership can chart a peaceful course in a world beset with acute growing pains?

The major mission of mankind is to develop, in full measure, the diverse latent talents with which each individual has been, by his Creator, endowed. Thus can each of use make a maximum contribution to society. Thus can we fashion a fuller future for those who follow. Thus can we render our own lives worth the living.

There is but one way to build a better world, namely by building better men. If we would promote the welfare, or even insure the survival of our state, our nation and our way of life, our facilities for education must be given top priority.

University of Wisconsin Policies

COMMITTEE REPORT WISCONSIN LEGISLATIVE COUNCIL

Submitted to the Governor and the Legislature, December 1, 1954

Jable of Contents

Letter of Transmittal	2
Members of Council and Committee	3
Recommendations of Committee	4

THE UNIVERSITY TODAY

Introduction	9
The Student and His Instruction	10
The Role of Research	14
Serving All the State	18
Financing the University	23
Physical Plant	27

Detailed information on facts and figures used in this report are available in a series of five reports prepared by the University for presentation to the Committee. These are on file in the Legislative Reference Library.

The State of Misconsin LEGISLATIVE COUNCIL STATE CAPITOL MADISON December 1, 1954 To the Honorable Governor Walter J. Kohler and the members of the 1955 Wisconsin Legislature This is Volume I of the final report of the Legislative Council This is volume 1 of the final report of the Legislative Council submitted to you pursuant to section 13.35 (9), Wis. Stats. It represents the work of the council's University Policies Com-mittee, which we created pursuant to the 1052 Locial trade represents the work of the council's oniversity rollices com-mittee, which was created pursuant to the 1953 Legislature's Joint Resolution 31, S. Respectfully submitted, Arthur O. Mockrud Chairman

Wisconsin Legislative Council

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Recommendations

THE STATE of Wisconsin and the University of Wisconsin have grown together for more than 100 years. The State has been proud of its University and has nurtured and supported it over the years. As a result, the University has been of great value to the State in providing education, research and public service.

Wisconsin's State University ranks among the great universities of the world. Fortunately for this great agricultural and industrial state we have one university on one campus, including work in agriculture, the liberal arts, engineering, education, pharmacy, law and medicine on both undergraduate and graduate levels—all operated on the Wisconsin idea of cross fertilization among various kinds of training and research.

The University has had a brilliant past, and the Committee liked most of what it observed as to the present except the condition of some of the buildings and shortage of acceptable student housing.

But what of the future?

The Committee has been impressed with the magnitude of the task facing the State over the next two decades in the field of higher education. Student numbers in the institutions of higher education in the State will be at least 75 per cent higher in 1970 than they are today.

Unless there is a great change in the pattern of public higher education in the State, the University of Wisconsin will be expected to care for growing needs in professional and graduate education, as well as to share the load of liberal arts and teacher-training education. Moreover, during the past decade the University has experienced a large growth in its research, adult education and public service programs. The heavy demand for work in each of these fields, and the benefits to the state from these programs, indicate continued growth.

The Committee is convinced that the needs are great. But the Committee is also aware that the financial resources of the state are not unlimited and feels it must fairly face the question: "Can the State of Wisconsin afford to meet the needs of the University of Wisconsin and other state-supported institutions of higher learning?"

The problem is not peculiar to Wisconsin alone, but is apparent in every state of the Union. The United States today occupies a position of unparalleled power in the free world. Its people enjoy the highest standard of living in history. These facts bring to all of us a feeling of pride, but they also bring many responsibilities. If we are to maintain our productive capacity, our high standard of living, and our position of leadership in a free world, we must understand the qualities which brought us to the place we now occupy, and with this understanding determine our course for the future.

Undoubtedly no single factor is responsible for the economic strength of the United States. Rather this is the result of a variety of conditions and courses of action. Magnificent natural resources within the borders of a united nation, freedom from the wars in Europe during much of the formative period of our nation, and an industrious and intelligent population have all been important factors.

But probably the most important reason for our strength is this: the United States has made good use of its human resources. This has been no happenstance. It rests on two significant factors:

- 1. The basic law of our nation guarantees to all citizens equal opportunities and provides that they may earn rewards in proportion to their achievements, and
- The principle of public education for all—firmly established at many places in the thirteen colonies even before our nation was born—has been adhered to and expanded as our nation has grown.

The result of these two policies has been a fuller utilization of manpower in America than in most other areas of the world.

As the United States and Wisconsin look to the future, they must be on guard to see that all of the people have equal opportunities and incentives to use all their talents, and that they have full opportunity for training to develop their talents.

Wisconsin's future lies in the hands of her people.

The State of Wisconsin cannot afford to cheapen the quality of the education which she offers to her sons and daughters. This would certainly be false economy. Rather, Wisconsin must meet the competition of other states, and the United States must meet the competition of foreign nations, by stressing strongly the two basic principles which have made America great.

The University of Wisconsin, the most important single segment of the state's system of higher education, must be expected to operate economically and efficiently. It appears to the Committee that the University has met and is meeting that requirement. Evaluation of the efficiency of a University requires comparison with a different set of standards from those used in judging a commercial or industrial organization in business to make a profit. The materials of education are human materials and the demands for quality education exist each year as the student population flows past the eighteenyear milestone. It is fairer to judge the efficiency and worthiness of a university as industry evaluates its own research activities rather than as it judges its annual profit and loss account.

Continued adequate support of the University of Wisconsin and other institutions of higher learning is an investment which the state cannot afford to neglect.

DURING ITS STUDY, the Committee considered a number of broad policy questions currently facing the University. Some are "urgent;" others are continuing problems which have faced the University and the state since their founding and which probably will continue through the years ahead.

THE STUDENT AND INSTRUCTION

a.

What role should the University of Wisconsin play in furnishing educational opportunities for the greatly expanding population of college age youth?

It is estimated that in 1970 Wisconsin will have at least 65-70 per cent more students desiring a college education than is true today. This increase is predicted from a projection of the birthrate and present elementary school attendance; however, it seems almost certain that in the future a higher percentage of Wisconsin's youth will complete high school, and further, that a higher percentage of high school graduates will desire a college education.

The University must continue its predominant role in the field of higher education.

In the undergraduate field the University must be prepared to take care of a substantial proportion of the students desiring and entitled to a college education.

In addition, the University must continue to provide the major part of the State's program in professional and graduate education in the next 20 years. To a large extent, this will be a Madison campus development, although it will be assisted to a limited degree by expansion of graduate work at state and private colleges.

The growth in graduate study will be considerable. Undergraduate enrollments on the Madison campus, at Milwaukee and other extension centers, in state and private colleges, plus an increased desire by future college graduates for graduate study, will create a demand in this area greater than either projections of the birthrate or undergraduate enrollment now demonstrate. The increasing complexity of many fields of endeavor has created the need for young men and women with more knowledge than can be secured in a four-year period. The campus at Madison will have to bear the brunt of this increase in graduate study.

In general, graduate training is more costly than is undergraduate training in many fields. On the other hand, most graduate students at the University of Wisconsin render valuable service in teaching and research at low salaries.

Should the offerings in University of Wisconsin extension centers be expanded, contracted, or kept at the present level?

In areas of the state which are not served by state and private colleges, the extension center program should be expanded to the extent that definite needs are demonstrated.

While teaching costs at the eight extension centers outside Milwaukee are slightly higher than the cost of comparable teaching at Madison, the cost of securing a university education is far less for the parent and student if the student can live at home.

Milwaukee is a special case and an expanded undergraduate college program to serve this area should be the primary objective. The Legislature should study the report of the Committee on Higher Education relating to Milwaukee.

Should the University, as an educational institution, impose restrictions upon the student body in matters of freedom of press or assembly beyond those imposed by the laws of the state and nation?

In general, the University should continue its present policy of placing no restrictions on freedom of speech or assembly beyond those established by State or Federal laws. We are trying to develop self-directing mature citizens capable of making their own evaluation of truth and falsehood. A more dogmatic policy might shield the individual student so much that he would be deprived of this essential educational experience. We believe in freedom of discussion and that continued emphasis on the privileges and benefits of our government and our system of free enterprise will make the youth of Wisconsin better citizens.



To what extent should public funds be used to make educational opportunities at the university level available to all young people who may desire and profit from a university education?

Certainly public funds should be used to provide higher education at the university level so that educational opportunities are available to this and future generations. The Legislature must continue to give sympathetic consideration to the needs of the University. Unfortunately, there appears to be no definite formula to measure future conditions; rather, changing conditions demand a flexible outlook.

However, this Committee feels that the students themselves are now paying as much in fees, proportionate to the State's contribution, as they should be expected to pay. Fees at Wisconsin are now as high as those of any other state university in this region, and much higher than many. Higher fees have a deterrent effect on the equal opportunity for higher education.

One means of aiding needy students who already find fees too high is by expanding the scholarships supported by public funds. The Committee believes this course would be wise. At the same time, greater publicity of the scholarship needs of worthy students should be given to urge Wisconsin citizens with financial means to help students directly or by gifts and bequests to the University for that purpose.



How "complete" should the University's course offerings be? Should it offer training in such fields as veterinary medicine, dentistry, forestry, aeronautical engineering, or architecture?

Quality, rather than quantity, should be the main goal of the University. It is more important to do the things now being done well than to invite additional expense by going extensively into new fields. The possibility for interstate cooperation should be thoroughly explored before expansion in other professional fields is undertaken at the University. The University of Wisconsin already has a number of successful working arrangements with institutions of other states; for example, in the area of Scandinavian studies, Wisconsin concentrates on the Norwegian, Minnesota the Swedish aspects.

> Should the University depend less heavily on graduate students in assisting with freshman and sophomore students? Are the scholastic standards of the University proper?

These are questions which in detail must be answered by the University administration itself.

Graduate teaching assistants who are preparing for a lifetime of college and university work secure their practical teaching experience at the University. This practice is valuable to them—and to the University in that wider use of more mature teachers would be more expensive. In making its decisions the University must weigh all the pertinent factors, including the effectiveness of this kind of instruction, its value in the graduate program and the cost of an alternate program. The University is now putting greater emphasis on providing courses for these graduate assistants to improve their teaching techniques.

It would appear that the scholastic standards of the University are now at a reasonable level and they certainly should not be relaxed. The emphasis should continue to be on quality rather than quantity.

RESEARCH

g.

Is the State now adequately supporting a research program at the University? Should it be expanded or contracted?

The University's research program has expanded rapidly over the last decade and continuation of a strong program of research is recommended.

Well over one-half of the total cost of the research program at the University comes from funds other than state tax monies, including relatively large amounts from various federal agencies, as well as gifts and grants from individuals and industrial concerns. The use of such gift, grant and contract funds should be encouraged, but if they are not enough to maintain an adequate program, more public funds should be expended. Our present economic position as a state and our survival as a nation may depend upon scholarly research

vival as a nation may depend upon scholarly research. In accepting federal funds, the University has displayed considerable caution for these reasons: its lack of desire to engage in the more applied forms of research desired by defense and other government agencies; its unwillingness to accept more contract research than could be well administered by the regular University faculty, and its hesitancy to start large research projects with federal monies which might be suddenly terminated. These factors should continue to be given consideration.

The University's chief function in research has been to carry out fundamental or basic rather than applied research, although strong applied research programs exist in agriculture and medicine. And since basic research is a necessary prerequisite to the billion dollar applied research programs of American industry and professions, we must urge the University of Wisconsin to do more, and to do it ahead of their needs.

h. Should the University continue to be considered the research arm of the State? Or should the funds be distributed more widely to other State agencies?

While some limited research by other state agencies is being done, the University should continue to be considered by the Legislature as the chief research arm of the State. Of course, there should be full co-operation between the University and all other state agencies. It would be folly for more than one agency to "thresh the same straw."

The University's own plan of interdepartmental co-operation in term research on the campus is commendable, and makes for the best use of the funds which the State has available for research.

ADULT EDUCATION



Does the State of Wisconsin profit by the expenditures of public tax funds for the purposes of adult education? To what extent should programs of adult education be expected to be self-supporting?

Public funds are properly expended for adult education programs, both formal and informal, provided that the services offered are studied carefully each year as to whether or not they are still meeting the needs and demands of the citizens. If course offerings become self-perpetuating there is danger that the administration will "fall in love" with its own program. There might be consideration given to holding more of these specialized institutes and courses every two or three years rather than annually.

Presently, the University's adult education services are mainly administered through the Agricultural Cooperative Extension Service and the General University Extension Service, although certain schools and colleges offer separate, far less extensive programs. The Agricultural Extension is supported almost entirely by public monies; practically all the other adult education services are supported, in part or in whole, by fees from the individuals served.

While some programs are 100 per cent self-supporting, with the cost being paid by industries or organizations from which the enrollees come, not all activities can be made totally self-supporting. Restriction of programs to those which can be self-supporting would largely result in limiting adult education to those with the least need.

Yet a certain amount of self-support has an advantage in addition to its beneficial effect on the state treasury, for there is evidence that participants have a greater interest in programs in which they have a direct financial investment.

Should the University conduct adult education programs in the cultural arts field?

At present the cultural arts program in University extension work comprises but a very small proportion of the offerings in applied, professional and technical fields.

Even though such cultural arts programs may not directly contribute to the economic welfare of the state, these activities are valuable to the social welfare of the people. Where sufficient demand comes from the citizens, the University appears as the agency most properly qualified to take on the responsibility of providing these cultural arts programs.

Should University of Wisconsin funds continue to be used for preparation of WHA programs which are distributed over the State Radio Council-administered FM network?

Since the Legislature has set up the State Radio Council and is financing its expenditures, the use of Legislature-appropriated funds by the University for programming is justified. The University can supply the substance of such programs more economically to the state than could an outside program or talent organization. This entire matter should continue to be subject to biennial review by the Legislature's Joint Committee on Finance.

Are the public funds in the support of such services as the University Hospitals, the State Laboratory of Hygiene, the State Soils Laboratory, the State Geologist and the Electric Standards Laboratory sound expenditures for the State?

Although some of these activities may not be directly related to the educational program of the University, they do provide a general benefit to all citizens and experience has shown that the University is qualified and equipped to administer them.

Some of these public services are largely, if not entirely, self-supporting by the fees charged for the services performed. This practice should be continued, particularly where specific services are rendered to an industry or individual.

BUDGETING AND FINANCE

m. Is the University budget so organized and administered that the Legislature and the people of the State can determine the cost of the various programs and services of the University?

Since the budget presents the total financial picture of University operations, it is imperative that the Legislature understand the financial needs of the University as well as the administrative and accounting procedures. Budget requests should continue to be supported by data showing the nature and necessity for outlays.

The State's financial framework provides for pre-audit and post-audit procedures. In addition, the University maintains a system of internal budget controls. With these, the financial administration of the institution appears to be subject to checks adequate enough to insure honest, accurate and efficient management.

n.

What is the proper position for the University to take in regulating outside activities, such as consulting or writing, on the part of the faculty members?

While this policy should be established and administered by the University, two extremes should be avoided. Too much freedom in supplementing income may transform faculty members into outside consultants with university prestige. On the other hand, not enough freedom may force good teacherconsultants into outside work exclusively. It is true, also, that from each experience as a consultant the faculty member brings back to the University an enlarged concept of his field.

Presently the University considers this problem in relation to individual cases and feels it has held such activities to as low a level as is consistent with maintaining a first-class staff. Staff members may not use University facilities or graduate student assistance in carrying on these outside activities.

O. Should a serious attempt be made to improve the competitive position of the University of Wisconsin in regard to faculty solaries?

consin in regard to faculty salaries? Yes. The University must be in a strong position to keep

the most able teachers and scholars. A University cannot be great without such pace-setters.

In this respect, retirement benefits, insurance and leaves of absence may be more effective than the equivalent funds for salary increases. Presently these provisions at the University are generally less attractive than those at public educational institutions in neighboring states.

PHYSICAL PLANT

Is the University justified in asking the State for replacement of old, outmoded buildings which are not satisfactory but which are being used?

Too many campus buildings are so outmoded that they do not meet Industrial Commission standards. Requests for replacement are justified, in accordance with the inclusive plan of the University Planning Commission, arranging priorities based upon urgent need to replace unsafe structures and also upon requirements demanded by increased University needs.

q.

Should the acknowledged beauty of the University campus be kept intact by maintenance of free, grassy and wooded space, even though it makes necessary the purchase of additional land near the center of the campus?

Yes. Of course, part of the need for additional space can be met by constructing larger buildings on the sites of old and obsolete buildings. Further expansion of classroom buildings westward seems impracticable without a great deal of wastage of student and staff time in traveling from building to building.

If specific cases arise in which the University feels it necessary to purchase additional land for expansion of the campus, such items should be presented to the Legislature.

T. Should public tax monies be used to help build additional dormitories for the housing of University students?

Since student housing in Madison is very critical and private housing facilities are limited, it appears necessary for the State to invest in additional housing for both undergraduate and (married) graduate students. This would be an actual investment, for in the long run these projects are selfsupporting.

It is important to remember, too, that dormitories provide an educational experience which is very valuable, as well as food and lodging.

The ultimate goal in student housing should be that discussed in this report: at least one third of the student body in University housing. A goal higher than one-third may be necessary in view of coming enrollment increases unless private housing can in some way take care of the other twothirds.

Additions to the present University housing facilities should be made as rapidly as possible. Wisconsin at present is far behind most other Big Ten schools in its student housing program. The University should not turn away acceptable students because of lack of adequate housing.



Projected Enrollments

at

Wisconsin

Colleges

(Undergraduate Only)

These projected enrollments in Wisconsin colleges, compiled from 1953 figures, indicate a growing problem: that of providing higher education opportunities of increasing numbers of the State's young people of college age. And even these projections do not tell the entire story. Indications are that the figures, as estimates, are far too low. In the future there will be proportionately more high school graduates than there

were in 1953; and beyond this, a greater percentage of high school graduates probably will want to attend college. Note that undergraduate enrollment figures are given. At Madison, graduate, law and medicine enrollments totaled an additional 1,900 in 1939; 3,335 in 1950, and are projected to total 4,064 in 1965 and 4,934 in 1970. There is also likely to be more demand for graduate study in the years to come.

8

Introduction

ONE OF THE well known things at the University of Wisconsin is its "short course" for practical operating farmers.

In a period of a few months these short course students learn a good deal about quite a bit of agriculture. They don't learn as much, perhaps, as if they had spent four years on the campus, but they consider themselves considerably the wiser for having come at all.

That's much the way the Legislative Committee on University Policies feels after a series of public sessions between March and November, 1954. It doesn't feel it knows *everything* about the University of Wisconsin—but it knows much more than when it started.

We listened to and questioned closely dozens of University representatives on nearly every phase of operation. We spent some time on the campus itself. Not nearly enough to get an extremely detailed picture of facilities and functions, it was evident, but nevertheless our tour was most instructive. It was one that the Committee wishes could be taken by every citizen of the state.

In the course of its study, the Committee became increasingly interested in the University, not only as it exists today, but as it may fit into the total educational picture which greatly growing numbers of Wisconsin's college-age youth are painting for us as legislators, educators, parents, and taxpayers. The problems presented are urgent and this committee is encouraged by the fact that other committees have been directed by the Legislature to consider the over-all pattern.

THE COMMITTEE found that you can look at the state's largest single educational enterprise in two ways. You can make it a large, complicated institution which defies ready description. And from one point of view this is certainly true.

On the other hand, you can trim away some of the ivy and reveal the University in relatively simple, clear terms. This is how the Committee tried to operate.

What essentially, does the University of Wisconsin do?

At the outset, as provided in the Wisconsin Statutes, "the object of the University of Wisconsin shall be to provide the means of acquiring a thorough knowledge of the various branches of learning connected with literary, scientific, industrial, and professional pursuits." So teaching—from freshmen to doctors—is a basic function of the University.

Yet, the University of Wisconsin is more than just a big college. To its basic job of teaching the Legislature added the duty "to encourage scientific investigation and productive scholarship." So the University has become the State's Research Center.

And the University is more, too, than a teaching and research center at Madison. Through a wide range of public services, the resources of the University are extended throughout the state. As much as any other single characteristic, this "Wisconsin Idea" of state-wide service has distinguished the University of Wisconsin for many years.

Teaching, searching, and serving, the three main jobs of the University are carried on in each school and college. They are closely integrated. Each one leans on the other for maximum effectiveness.

HOW IS THE University organized? The University provides on its Madison campus three basic colleges— Letters and Science, Agriculture, and Engineering; five independent professional schools—Medicine, Law, Education, Commerce, and Pharmacy; the Graduate School which includes staff from all of the colleges and schools; and the Extension Division which serves as the extension arm for all of the University except agriculture. The Extension Division and its sister Cooperative Agricultural Extension Service have their outposts in every county in Wisconsin.

Government of the University, as provided by the Statutes, is vested in the Board of Regents, and the Regents have delegated large responsibilities to the faculty, the deans, and the president. Recommendations on curricular matters, for example, originate in academic departments, are carried through schools and colleges to a faculty curriculum committee, thence to the faculty itself, and finally are submitted by the president to the Regents for final action.

The organization of the University, in short, appears designed to support its functions. So the Committee decided the best way to analyze the University is to examine in detail its core functions. The chapters of this report coincide with the sequence followed in Committee investigations:

- The Students and Their Instruction;
- Research and Scholarly Effort;
- Adult Education and Public Service;
- Finances;
- Building Program.

This approach gets at the heart of what President E. B. Fred told us are "the basic needs of the great State University:

First, qualified and deserving students, drawn from all segments of our society;

Second, *distinguished and devoted teachers*, dedicated to teaching, research, and service;

Third, adequate facilities and equipment; and

Fourth, an intelligent, resourceful, and provident people who fashion, nourish, and sustain it, convinced of its value and confident of its purpose."

9

CHAPTER ONE

J he student and ■ his instruction

WHAT KIND of person is the "average student" at the University of Wisconsin?

This Committee, of course, can't scramble 14 thousand students like so many eggs and come up with a portion of omelet containing one individual who is:

- Three-fourths resident of Wisconsin, one-fourth nonresident, with minute traces of origin from 50-odd foreign countries and all but two states;
- Two-thirds man, one-third woman, and one-fifth married; and
- One-fifth veteran, studying under the "GI Bill."

Choose at random any man on Bascom Hill, however, and chances are he is Badger-born and one of the 43,000 Wisconsin youths who are attending college within the state's borders. (Almost 11,000 go outside the state to study, and the state in return teaches some 8,500 non-residents.) His family's income is about \$5,000, although it could be much higher and may be under \$3,000.

He's a high school graduate, probably in the upper twothirds of his graduating class. If he's in the lower third, he's on probation and has been warned of possible rough times ahead. This is more consideration than he'd get as a nonresident—an out-of-stater must have been in the upper half of his class to enroll at all.

Should he happen to be a transfer student from another institution, he'd have needed at least a "C" average to enter the University. In the latter instance, chances are that all or most of his previous academic work would be honored at Madison.

His Academic Life

Our average student may be in any one, or several, of three basic colleges, 86 departments or five professional schools. Percentagewise he's apt to be in the College of Letters and Science, whose undergraduate enrollment in 1953–54 was 5,527. (That year there were 1,194 undergraduates in the College of Agriculture, which includes 589 in the School of Home Economics, and 1,489 in the College of Engineering.)

Many of his courses are in his chosen field, whether it's journalism or genetics, and mostly he sees a lot of other students with similar interests. But many fields do overlap to a large degree in their requirements, and he's quite possibly sitting next to students who major in pre-medicine and philosophy—a mingling that broadens the background of them all. There is a greater similarity in requirements in the first two years in any major field than in later years, when courses become more specialized. (The trend is toward broader, less specialized courses; interest in the social sciences is increasing, while enrollment in the humanities is decreasing and in the physical and biological sciences appears constant.)

He Learns to Earn

No matter in which field he finds himself, our average student has two main purposes, in the words of President E. B. Fred: "To learn how to earn a living, and to learn how to live a better life."

Classically, and practically, our student gets his basic instruction in classroom work.

This classroom work in a given course may take any one of seven forms. It may be three-a-week lectures by a series of prominent faculty members in the Contemporary Trends course; in Economics 1a it might be three lectures a week by a leading professor in that field and, in addition, one quiz section—which involves both quizzing, or testing, and discussion; in Engineering 72 it would mean spending three hours

Socio	-Econ	òmic	Back	around	1
of	Unive	ersity	Stua	lents	
Occupatio	ns of Wi	sconsin	Fathers	of Student	s

9 of Type Occupation in	6 Fathers Freshmen Occupation	% All Wis- consin Men in Occupation
Professional and semi-professional _	19%	6%
Managerial and official	31%	10%
Clerical and kindred	4%	6%
Sales and kindred	9%	5%
Domestic service	3%	5%
Agricultural	13%	22 %
Skilled-unskilled labor	21%	46 %

a week in a laboratory learning how to operate various testing machines. In Chemistry 1a it would involve all three lectures by the professor in charge, a quiz section, and laboratory work.

In courses like foreign languages and mathematics, individual dass sections of perhaps 10-30 students ordinarily meet several times a week (usually one hour for each credit allowed). Then there are seminars, courses largely in the Graduate School, where a very few students pursue advanced work under a closely supervising professor. And finally there is some individual instruction, such as that in the Medical School involving only teacher, student, and patient.

All University classes are not large. Nearly two-thirds of student hours are spent in classes with less than 39 present. Only about 18 per cent are in classes larger than 100, and these are generally survey courses of the lecture and quiz variety. In 1953–54 there were 14.4 students to each teaching faculty member. Back in 1946–47 that ratio had soared up to 18.9 to one, and the University feels the present ratio is workable and probably as good as can be expected.

The prevalence of greater individual instruction at higher grades makes it evident why graduate and professional instruction is more expensive than undergraduate instruction.

Who Does the Teaching?

Odds are great that our student's teacher in laboratory or quiz sections is one of some 550 graduate teaching assistants. There has been much argument about the wide use of these budding scholars and teachers who themselves are students working toward advanced degrees. Certainly they are cheaper than full professors from the state's standpoint. Yet, the University doesn't rest its case on cost. It feels, it says, a duty to train college teachers, and considers this method a good one. The graduate assistants get close supervision from senior departmental professors and also enjoy a relatively close association with their students. The University reports that it is now developing an intensive program of in-service teacher training for these assistants. There's no arguing the fact, of course, that experience is still the *best* teacher.

Most teaching, however, isn't done by part-time graduate assistants. In 1953–54 there were 725 faculty members with the rank of assistant professor, associate professor, or full professor. There were also 266 instructors—occupying a step between graduate assistant and assistant professor. The term "assistant," by the way, doesn't mean the professor is another's assistant—his responsibilities and duties, in fact, are much like those of the full professor . . . although he is younger and he is in a probationary status.

Home Town Campuses

While we found our average student on the campus at Madison, we could have looked elsewhere and found a University undergraduate, too. At eight Extension Centers in cities where other adequate college opportunities are not close at hand, and at Milwaukee, the University offers freshman and sophomore instruction.

Experience indicates that a completely isolated center should have at least 200 students for efficient, economical operation. Thus, Wisconsin's system has three geographic areas of operations within which two or more centers are served by a single staff; Racine-Kenosha (400 students), Green Bay-Marinette-Sheboygan (250 students), and Wausau-Menasha (200 students).

Extending as it does from the instructional program at

Fields of Endeavor

Actuarial Science Agricultural Economics Agricultural Education Agricultural Engineering Agricultural Journalism Agronomy Anatomy Animal Husbandry Anthropology Applied Mathematics and Mechanics Art Education Art History Astronomy Bacteriology Biochemistry Botany Chemistry Child Development Classics Commerce Comparative Literature Comparative Philology and Linguistics Dairy Husbandry Dairy and Food Industries Economics Education Engineering-Chemical Engineering-Civil Engineering-Electrical Engineering-Mechanical Engineering-Mechanics Engineering-Mining Engineering-Metallurgical English Entomology French Italian Genetics Geography

Geology German **Hispanic Studies** History History of Science Home Economics Horticulture Iournalism Library Science Mathematics Medical Microbiology Meteorology Music Oncology Pathology Pharmacology and Toxicology Pharmacy Philosophy Physical Éducation Physical Medicine Physics Physiological Chemistry Physiology Plant Pathology Political Science Poultry Husbandry Psychology **Regional Planning** Rural Sociology Sanitary Chemistry Scandinavian Studies Slavic Languages Social Work Sociology Soils Spanish and Portuguese Speech Veterinary Science Wildlife Management Zoology

The University of Wisconsin offers a broad range of opportunities for study in the various fields of human learning. Sixty-eight departments provide training for master's degrees. Forty-seven of these also have programs which lead to the doctor of philosophy degree. Joint programs are often given by two departments in combination, if the fields of study are related to one another. In addition to the programs formally established, the Graduate School can administer special programs leading to both master's and doctor's degrees.

Madison, the Center instruction is of University caliber, although educational offerings are not so varied as those available on a large campus, particularly in extra-curricular activities. Extension Center students transferring to Madison do well during their campus residence.

The direct cost of Extension Center instruction is higher than that at Madison, largely because of smaller classes and faculty travel. But indirect costs are lower because the state has no investment in buildings and grounds; and, of course, through the opportunity it provides to study while living at home, Center instruction represents a substantial saving to students and their parents.

(Milwaukee Extension is a separate case because there are other college opportunities available in the city; however, it does provide two years of University of Wisconsin work in the large metropolitan area and serves as a focal point for an extensive program of adult education.)

(this section continued on following page)

11



Figures representing alumni living in various Wisconsin counties are plain. Circled figures are numbers of students on the University campus from these counties. Note steady relationship in most counties.

Outside the Classroom

Besides going to classes, our average student engages in another phase of his total educational experience—extracurricular activity.

Ideally, this non-classroom work provides wholesome recreation, cultural stimulation, training in democratic principles and techniques, and development of a desire to contribute to community welfare. Such activities, too, further help to break down a large community into more comprehensible segments for the student.

Extra-class experiences may come in student government, in athletics (where last year 3,618 participated in intramural and 1,085 in intercollegiate sports), music, academic department clubs, forensics, dramatics, publications, religious organizations, political and social action groups, or in group living.

All student organizations have faculty advisers and must be recognized by the University—although this recognition does not mean, or imply, approval of any group's aims. The impossibility of "approval" is evident upon considering the existence of many types of political or religious groups, representing many shades of opinion. Altogether there are 183 organized activity units—exclusive of 18 Memorial Union student committees and numerous subcommittees devoted to such varied programs as photography, sailing, and lectures by visiting personalities in many fields.

The Memorial Union—the most used extracurricular center—was built by alumni and student subscribed funds and is self-supporting, largely through operation of its eating facilities and membership fees.

Living With Others

Chances are about two in five that our average student lives in an organized house of some kind. Yet not the least

Where Students Come From; Where Alumni Live In Wisconsin

> valuable among extracurricular experiences is the personality and social development encouraged by group living in dormitories, or residence halls, or in fraternity and sorority houses. Here the student has to learn how to get along with others. At present about 2,540 students (20 per cent) are housed in University dormitories, some 1,515 live in fraternities and sororities, and 1,297 more women live in "approved" private halls or residences. Surveys show that private housing near the campus is disappearing, and present high building and maintenance costs do not invite capital to invest in new private housing. The University would like to have at least one-third of its students housed in residence halls. To reach this goal, space for 2,500 more students must be furnished in the next 10 years, at a cost of \$10 million.

Making Ends Meet

No matter where he lives, our average student likely has a part-time job to help make both ends meet and to give him a further stake in his own education. He is encouraged in his endeavor by the University, which maintains an employment bureau for the benefit of the 57 per cent of the men and 28 per cent of the women who work part time while in school. In 1952–53, 1,083 men reported they were 100 per cent self-supporting.

To such individuals, particularly, even limited scholarship aid—such as that covering tuition and fees—can be most important. Sometimes one such \$180 scholarship means the difference between a higher education and none for some industrious young person. In 1953–54 the University administered 1,310 scholarships in varying amounts—and had to refuse 1,105 applicants.

To get back to our average student, altogether he gets \$613 toward his yearly expenses from his own work, \$58 from loans, \$105 from scholarships and other sources, and \$345 from his family.

Meeting Problems

Money problems aren't the only ones some students face. If he has educational problems—the wrong kind of study habits, for instance—or occupational problems, or if he needs some social and emotional adjustment, the student may use the services of the University's Student Counseling Center. Here, as in many other areas of endeavor within the University, the initiative is largely up to him, although he may get some specific suggestions from his faculty adviser. Also standing ready to assist him are staff members of the 17 religious centers located near the campus.

If he has a health problem he goes to the Student Health Department. His fee of \$4.00 a semester entitles him to clinical consultation, admits him to the Infirmary if his condition so warrants, and covers ordinary infirmary charges.

Should a student have done something to create a disciplinary problem, the first stop is the Office of the Dean of Men or Women. And if the matter is very serious, his problem goes to a faculty committee. Much the same procedure is followed where academic deficiencies are concerned.

In line with the state's tradition, the University allows no discrimination in race, religion or color within its jurisdiction.

More Education . . . ?

After eight semesters or so of higher learning, and accumulating upwards of 120 academic credits, the undergraduate will receive a bachelor's degree. He then faces a decision: (a) get a job . . . or (b) continue his education. The men, of course, may also be concerned with military obligations.

If he decides to continue his education, and his scholarship record is good, he enrolls in a graduate school, either at Wisconsin or elsewhere. Many graduates prefer to get their advanced training at institutions other than their original alma mater. That helps account for the fact that 58 per cent of the Wisconsin Graduate School enrollment of 3,043 in 1952–53 was non-resident.

As indicated earlier, graduate training is expensive, but it's hard to measure accurately the graduate student's contributions in teaching and research: The University feels that its over-all educational program is greatly benefited by the existing balance of graduate and undergraduate work, and says it would like to maintain that ratio.

A university's reputation is often measured by its graduate program, and Wisconsin regularly ranks among the top two or three in doctorate degrees awarded. The University expects bigger enrollments in the Graduate School in the years to come—first because of increasing demands for specialists, and second, because there'll be more students in the nation's colleges in the future.

... Or a Job?

If our average student leaves the ivied walls to go job hunting, he'll have at his disposal the University's Placement Service. While some colleges and schools in the University find it advisable to maintain their own special placement systems, they all co-operate wth the co-ordinated service set up two years ago at the request of talent-hunting employers. Coordination of this service saves the time of both employers and faculty people—and this year no less than 1,082 employers came to the campus to interview graduates-to-be, and another 1,471 phoned or wrote. Primarily set up for students, the Placement Service is receiving increasing numbers of job requests from alumni, and has, to some extent, branched out into job counseling.

Regardless of what course the new graduate follows, he'll become an alumnus of the University. In fact, he's considered an alumnus if he has left the University after attending one semester or more, and his name and address, together with other pertinent information, will be on file in the Bureau of Graduate Records. Incidentally, many former students who have attended the University only a year or two and who left without winning a degree have been outstandingly successful in their fields.

As an alumnus, the chances are 50–50 he'll stay in Wisconsin, where many Wisconsin alumni have made significant contributions in all phases of the state's life. It would be difficult here to try to point out by name all eminent alumni in their respective fields. For they are counted by the tens and hundreds in business, agriculture, education, government, industry, the professions, entertainment, and virtually every line of human endeavor. The earning power of these and other university and college alumni is considerably above the national average. This was brought out recently in a United States Chamber of Commerce report which emphasized the "direct relationship between education level and . . . buying power in our total American economy."

About one-fifth of all alumni are members of the Wisconsin Alumni Association, whose avowed aim is to interpret the University to alumni and to the state, and which has been especially active in trying to attract top Wisconsin high school students to the campus.

What of the Future?

While we have been discussing the University of Wisconsin student as he "averages up" today, it is possible—even probable—that the near future will bring a change in his statistical significance.

In the first place, a vast increase in college age youth is just around the corner, thanks to the continuing high postwar birth rate that is now seriously affecting elementary schools.

Again, the chances are good that a higher percentage of Wisconsin's youth will seek higher education in the future. Presently Wisconsin as a state is far down the list in this respect, in 26th place. University officials believe that recently tightened standards of compulsory high school attendance will help Wisconsin improve this position.

Almost inevitably, these factors will be reflected in the student enrollment at the University in one way or another. If the various colleges in the state, public and private, continue to share undergraduate enrollment in the same proportion that they did in 1953, the University would have to be prepared for an undergraduate enrollment of more than 21,000 by 1970; more than 16,000 of these undergraduates would be at Madison and graduate enrollment would add nearly 5,000 more students to that campus.

No one can predict with certainty what changes may take place in this distribution of enrollment among the various colleges in the state. Any redistribution, however, would probably mean changes in the load, and perhaps the program, of the University of Wisconsin.

Certainly one fact stands out, particularly in view of the coming waves of college students: the University can't stand still.



On a large campus, students meet people from all over the world, and mingle daily with individuals possessing well-trained minds.

THE "AVERAGE" Wisconsin student, as an undergraduate, is likely to be little concerned with one of the University's major functions—the uncovering of new knowledge through research.

Not directly concerned, that is.

For his professors *are* active in research and scholarly effort. They have to be, just to keep up with their fields.

And with a constantly freshened outlook, teachers engaged in research can bring to their students a depth of teaching that is invaluable to both.

It may even be said that some of our "average student's" best professors are teaching at Wisconsin largely because of the research freedom that's offered to them. The drawing and holding power of this "intangible," together with availability of such research facilities as libraries and laboratories, is often as instrumental in keeping top professors contented as are the "practical" considerations of salary scale and housing conditions.

Probably the undergraduate's unfamiliarity with the wide scope of research activity at the University of Wisconsin is shared by most of the state's citizens. Certainly as this Committee approached its task, it viewed research work in many fields as something of a rather nebulous nature. But we discovered many unsuspected things in our tour of University research facilities and in interviews with research people ranging from deans to graduate assistants.

What Is Research?

Research has been defined simply as "an effort to do things better and not be caught asleep at the switch." That's probably an apt definition, and translated into Wisconsin research it means such things as—

- Successful identification and isolation by University biochemists of a substance in floral sweet peas that causes a disease when eaten by humans or animals —a project instigated at the request of medical men who now see in the discovery the makings of an attack on arthritis and hardening of the arteries;
- Development of a new natural cheese, produced with almost no hand labor and therefore will be cheaper for the housewife;
- A new legal code for the state emerging from a cooperative effort among state government, bar association, and University research workers;
- Greater efficiency in school administration and in teaching techniques;
- More chance of winning the battle against cancer; Wisconsin has the third largest cancer study center in the world—or
- Better understanding of the reasons behind political and economic trends in Wisconsin.

Research is often broken down into two types—basic research and applied research. It's the job of *basic research* to establish the basic facts of nature and human behavior that may be used as a launching platform for the more spectacular and more easily evaluated *applied research*. Often there is but a thin line between basic research and

Orten there is but a thin line between basic research and that called applied. Not only is the former fundamental to applied research; many "practical" discoveries are made by scientists with no definite intention of finding anything of the sort at all. (Scientists have a name for this art of finding things one is not looking for—serendipity. Some folks possess the art to a greater extent than others.)

In the University exists a further breakdown of research.

CHAPTER TWO he role of research Research Public Health

Jypical Research Projects at Wisconsin

By W. T. Bandy, French: Poe's European reputation

By G. Bohstedt, P. H. Phillips and A. L. Pope, Animal Husbandry and Biochemistry: Investigations of anemias in animals and the relations of parasites and minerals to these anemias

- By M. Clagett, History of Science: Seventeenth Century mechanics
- By Farrington Daniels, Chemistry: Measurements of energy efficiency in photosynthesis
- By E. A. Farber, Mechanical Engineering: Heat transmission and studies of solar engines
- By O. R. Goodman, Commerce: Case studies in sales forecasting
- By A. D. Hasler, Zoology: Studies on sensory orientation in fishes
- By R. G. Hitt and R. A. Brink, Genetics: Genetic improvement of forest-tree planting stock

By W. R. Marshall, Chemical Engineering: Spray drying and atomization

By K. B. Raper, Bacteriology: Studies on fungi

By R. F. Schilling, Medicine: Test for pernicious anemia

There is budgeted research, supported specifically by funds from state appropriations, gifts, federal aids, and contracts. Most of this is scientific in nature.

Then there is related research, which the University expects of all its teachers. Funds for these projects (all closely related to their teaching function) are not reflected in the research budget, but are a part of the instruction budget. By far the greatest percentage of this is basic research or scholarly effort.

Yet there is often a relationship between budgeted and this so-called related research, particularly in the natural sciences. A professor spending his allotment of related research time may be engaged in work similar to that which he is following in budgeted research.

Why Research?

While the University feels strongly that good research pays off in good teaching, there are other strong arguments the University offers to point up the importance of research.

Probably it's not even necessary here to elaborate on the vast contributions that organized research has made to technological progress and our American way of living. It was research, for example, that brought down the price of penicillin so that one hundred dollar's worth in 1943 would cost only a nickel today. As a matter of fact, it was hours and years of pure research that in the first place made it possible to discover the beneficial effects of that drug.

The State of Wisconsin has long recognized the importance of research and, by statute, Wisconsin specifically designates research as one of the functions of the University. It has gone further than this, and since 1919 has consistently appropriated money for general unspecified University research. The University declares that these appropriations (\$2 million in all) have been largely instrumental in building up a research tradition at the institution and in attracting more funds in the form of gifts and grants. The University feels, too, that in order to carry on an informed mission of public service in agriculture and in other areas, continuing research is necessary to solve the practical problems facing the people of the state—not only through its own Extension services but through other state agencies and private practitioners in various fields.

The How of Research

Research at the University doesn't "just happen." This is becoming more and more evident as research projects become more complicated and call for assistance and knowledge from workers in various fields. The value of the close physical relationship between various colleges on the Wisconsin campus became apparent to this Committee as it studied the interchange of resources among specialists in various fields—a process the University calls "cross-fertilization."

Of course, there does have to be a starting place for research—the idea. After this comes an investigation—for while duplication in research effort is commonly supposed by the public to occur, upon analysis it's clear there's little to be gained by any investigator in repeating work done by others, except where duplication for checking purposes is desired. So the research worker maintains close ties with other workers in the field, through technical journals, meetings, and personal correspondence.

There are further questions: Is time available for investigating this new idea? And money? How does it stack up against other ideas in apparent importance? If these first questions each get a "yes," the answers are still only tentative, because the project must be reviewed by department heads and deans if appropriations are needed. If no cash outlay is required, the chain is not so long.

It is the dean's task to pass judgment on the various requests and he then tries to keep his own fund requests at a reasonable level—that being defined as the most he can expect to get. What he actually gets, of course, is up to the University President, the Board of Regents, and the Legislature.

Probably most budgeted research funds go toward salaries of research assistants, who offer minds as well as hands in providing the equivalent of the "technical assistants" used in industrial research. Some technical assistants are employed in the University, too, where the work is routine and not particularly associated with a learning experience. It is possible, University officials say, that more money spent on stenographic help—one form of technical assistance—would be of considerable value in relieving professors of routine detail.

In some instances, equipment costs represent a major outlay in a series of research projects. In many cases, however, researchers use joint facilities like the electron microscope, the Numerical Analysis Laboratory, or farm plots. The University feels that the availability of these general-use facilities represents an important saving.

Ordinarily the University's role in research stops short of the development stage—that's left to commercial agencies. The same is true to a large extent in diagnostic work; there is no particular desire on the part of the University to compete with private agencies.

No single individual or group solely benefits from University research. All research findings—regardless of the source of supporting funds—are public property (excepting, of course, certain classified work undertaken for the federal government). They are given as wide distribution as possible —through the University News Service and over the State



Research in genetics

Broadcasting Service stations and on WHA-TV, as well as in professional journals and at meetings. Occasionally they find an outlet in books published by the University of Wisconsin Press.

AS FAR AS the individual professor is concerned, there's not much gold in the hills of research. It's usually not worth the effort of a scientist to take out a patent on a discovery; he would have to worry about establishing it legally, selling it, and waging a constant struggle to keep it from being infringed upon. And for what? Only four or five out of more than 50 Wisconsin Alumni Research Foundation (WARF) patents have brought in substantial sums, and only a dozen more have broken even with patent and developmental costs. The research worker also is aware that any development probably has been made almost entirely on state time. Occasionally, WARF assumes a patent, and allows the researcher, or research team, about 15 per cent of net returns —if any. With all this, it has become traditional at Wisconsin that discoveries should be made public and no individual patents be taken out.

The average faculty member is much more apt to make some extra money as a consultant to some commercial firm than as an inventor. The University takes the position that a man's recreational time is his own—and if he wants to spend some of it in work, that's all right as long as it doesn't interfere with his University work. The whole subject, however, is considered a constant problem all over the nation and an American Association of Universities committee is presently studying it (under the chairmanship of President E. B. Fred). University officials declare that "the Wisconsin faculty has shown remarkable restraint in consultative work."

It is understandable why the University feels it's at a disadvantage in ruling on extra income sources; in many cases, professors are making considerable financial sacrifices to remain in teaching and research. And it is natural that usually the *best* staff members receive the most opportunities to do private consulting.



Research in business

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Disease Fight A University of Wisconsin pa-thologist said Friday that chemi-cals being devised by Wisconsin biochemists to combat a disease Federal Coi known as lathyrism may eventu-ally be found to show promise against diseases of bone and blood vessels.

<text>

Cross-Jertilization

Research Money

About \$222 million is spent in this country every year to finance research in institutions of higher education. Of this amount, the federal government supplies on the average of 60 per cent of the funds (and earmarks 95 per cent of this for developmental research)

At the University of Wisconsin, the ratio of federal support of research is considerably less than the national average, standing at 25 per cent. University officials see two main disadvantages to federal support:

1. Federal support could easily turn into federal controlthere is less danger when reliance is placed on a variety of fund sources; and

2. Should national legislative policy drastically reduce research appropriations, a federally-supported research program would be left high and dry.

So at Wisconsin, less than one-half of budgeted research funds is state appropriated (75 per cent of these funds go into agricultural research). The other half comes from gifts and grants.

One-half of these gifts and grants funds earmarked for research comes from federal monies. One-fourth comes from the Wisconsin Alumni Research Foundation, and the balance comes from other gifts and grants.

The grand total for all budgeted research in 1952-53 was \$5,595,694.

Since 1928 the Wisconsin Alumni Research Foundation has given more than \$8 million to the University, of which nearly \$6 million has gone directly into natural science research. (The other \$2 million has been used for special equipment, building amortization, fellowships, and the support of symposia.) Most WARF income has come from the vitamin D discoveries of Dr. Harry Steenbock, but the foundation also administers and develops other patents and conducts product testing. It would be difficult to overestimate the important part WARF has played in developing the University's research program.

Regardless of the source of research gifts and grants, professorial salaries are rarely paid from these funds. If the University is to have control over the research, it feels it must pay the salary of the principal investigator. There is also the chance that cutting off of any substantial amount of gift and grant funds would mean a very difficult adjustment in the faculty.

The Future of Research

Indications are that the stockpile of basic knowledge is running low. The need for this country to keep up with the rest of the world in discovering this knowledge is obvious. Traditionally, and successfully, the universities of this country -both private and public-have played a vital role in the over-all research pattern. Now, of all times, Wisconsin, and other states, will have to share the burden, or the federal government will be forced to step in to fill the gap.

A large percentage of Wisconsin research, of course, is directed at problems of particular consequence to this state. The University is pushing ahead steadily, and once in a while dramatically, in such fields as milk marketing, cranberry processing, statutory code revision, educational counselling, and sewage disposal. The list of research projects now underway runs into the hundreds.

In most fields research is becoming more complex than ever. In medical research, for instance, it requires a team of scientists to make any substantial progress in the treatment of heart disease. The Enzyme Institute (which is financed almost entirely from gifts and grants) is proving valuable as a site for training scientists even beyond the doctoral level. There is every indication that post-doctorate training of this type will become increasingly important as time goes on. While the University estimates it can continue to conduct this post-doctorate training and allied research from gifts and grants, the institution feels it important that the state should give at least tacit approval to expansion in this area.

Need for expansion of research effort in the social sciences and humanities, too, is a conviction of the University. The logic here seems evident upon considering that many of the world's problems are of social rather than technological nature. Fortunately, social science research techniques probably will become more efficient-although more expensive-with more use of electronic machines and other mechanical arts.

Too Much or Too Little?

Presently about 20 per cent of the University's total budget is used for research. The administration considers this a good balance from the point of view of stimulating instruction, and would like to have this ratio maintained-even in the face of a great increase in undergraduate enrollment. The point, it says, is this:

"It's easy to say 'transfer funds from research to instruction' but that takes into account neither the financial structure of research, the need for the development of basic knowledge, the close relationship between research and teaching, nor the detrimental effect on the future standing of the University.'

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T F IT WAS difficult to define an average on-campus student at Wisconsin, it is even more impractical to arrive at a composite of all those who participate in the University's adult education and public service programs. The "Wisconsin Idea" of public service has reached people of virtually every community and farm in the state.

They range from the hometown physician attending a refresher institute at the University Hospitals, to the woman's club president planning a program with the aid of the Bureau of Information and Program Services, to the 4–H boy or girl raising a prize heifer.

Their common denominator is their reliance on the University as not just a place, but as an instrument—an instrument to help people to help themselves.

Although there are four main divisions of the University directly concerned with public service and adult education the Agricultural Extension Service, general University Extension Division, radio station WHA and allied State Broadcasting and Television Stations, and University Hospitals the work of the University in these fields is closely associated with both teaching and research in nearly every department. In addition, all the University's professional schools carry on a limited program of institutes and post-graduate training in such fields as medicine, law, commerce, and education.

For Farm and Home

In virtually every instance, the service the University provides reflects varying degrees of cooperation between the University and other agencies, both governmental and private.

Such is the case with the cooperative Agricultural Extension Service. The cooperation here is among the U. S. Government through the U. S. Department of Agriculture, the State of Wisconsin through the University and the State Department of Agriculture, and each county through county boards, county agricultural committees, and farm advisory groups on the local level. Each year the latter groups meet and decide what activities should get attention. This program is sometimes changed when new conditions or emergencies like drought or insect infestation demand immediate attention.

Currently the federal government contributes about 39 per cent of Agricultural Extension funds, the counties provide 38 per cent, and 23 per cent is appropriated by the State of Wisconsin. And all three must be in agreement as to how these funds should be spent before they *are* spent.

Of the 297 persons in Wisconsin whose work currently is supported by these funds, 96 work out of Madison as technical specialists, personnel trainers, or administrators. The larger group works in the counties, and includes agricultural agents, home agents, erosion control agents, 4–H Club agents, and special agents in dairying and forestry.

The role of these workers can be outlined like this:

- Recognize problems on which action is needed;
- Look at possible solutions, whether by individual or group action;
- Get the necessary facts (here the research activities in the College of Agriculture fit into the picture very closely);
- Fit these facts into a workable program—which might take the form of field work, group action, individual action, publication of bulletins, etc.

As the Agricultural Extension Service has developed, its field of work has broadened into towns and cities. Right now in Milwaukee County more people are getting special service in homemaking, soils, insect control, etc., than there are farms in the whole State of Wisconsin.

Here is the statistical summary for the Cooperative Agricultural Extension for 1953:

Attendance at meetings	1.465.380
Farm and home visits	69.939
Office calls	146.776
Telephone calls to County Extension Offices _	209,819
News articles or stories prepared	18.419
Broadcasts made or prepared for radio	8.073
Telecasts made or prepared for television	195
Bulletins distributed	1,004,126
(Equivalent of 7 bulletins per farm)	
Adult result demonstrations conducted	1.037
4-H Club members enrolled	42,836
Farms and farm homes changing practices as	
a result of extension program	160,711
Non-farm families changing practices as a	
result of extension program	59,600

In practice, the University draws no strong line between instruction, research, and extension activities of the College of Agriculture, and declares that "research is fertilized and instruction stimulated by continuing contact with farm people and farm problems." In many respects the Agricultural Extension Service serves as the "connecting link" between farmer and College, and virtually every resident faculty member is drawn into this relationship.

Where the Money Comes From

It is partly because of the three-way financing of agricultural extension work that the Service's policy of *free* service has come into being.* Short courses, conferences, and field days are offered to all who will take advantage of them on the theory that increased farm production and better living conditions will pay off all citizens of the state—rural or urban. The growth of Wisconsin's prosperity as a state would seem to bear this out.

However, this policy of service at minimum cost to the individual for the common good *has* been somewhat embarrassing to other University divisions concerned with public service. University administrators who have been urged to economize by requiring the individuals receiving the imme-

* Not all services are free, of course. Users pay, though not always at full value, for soil testing, the foundation seed stocks distributed by the University, etc.



Note that shaded areas represent extension center instruction, which is largely of formal, undergraduate nature. diate benefits to pay a substantial share of the cost through higher fees find it difficult to explain why there should not be uniformity of either principle. They further find that when fees are increased, the participation in many programs goes down—sometimes to the point where it is not feasible to conduct them. Chances are the same would hold true in the agricultural picture. The task of calculating the "point of diminishing returns" is a difficult one, varying as it does from one activity to another.

General Extension

Established in 1907 as the first organization of its kind in the country, the University Extension Division is dedicated to the idea that a "broad educational opportunity is a cornerstone of democracy," and that education does not cease upon conclusion of formal schooling.

While much general Extension teaching is grounded in residence departments, the University's program has been so large that the regular staff can't carry the entire load, as it did in earlier years. There are now about 264 full-time faculty members in the division (plus 204 civil service employes), whose responsibility lies in a wide variety of areas outside those served by the Agricultural Extension Service. These two agencies work together to determine the best means of making the total services available to the most people, and there is no duplication of effort.

University Extension work can be broken down into three major sections:

- Direct extension of University academic work through Extension Centers, special classes, correspondence study and professional institutes;
- Adult education programs through non-credit correspondence courses, special classes, institutes and conferences (the fastest growing type of activity at present), lecture and concert programs, consulting services and publications;
- Cooperative services with other state and local agencies, as in the locally-directed high school correspondence-study program, package library, film distribution for schools and groups; cooperation within the University in duplicating services, educational film services, photographic services, and lecture-concert bookings; and cooperation with federal agencies in the United States Armed Forces Institute (USAFI) worldwide correspondence study and class programs, similar work for the U. S. Veterans Administration and special activities for the Atomic Energy Commission and the Civil Defense Agency.

This work is implemented through 25 division academic departments, seven division bureaus, seven applied studies units (industrial psychology, education, engineering, etc.), eight Extension Centers, a field organization, the Milwaukee Extension Division, and six administrative service departments.

This was the statistical picture of University Extension activities in 1953–54:

90,000 correspondence-study students (80,000 of these for USAFI);

13,000 special class students;

2,400 Extension Center students;

30,000 institute participants;

700 Wisconsin communities reached by special services.

Virtually all non-agricultural University extension activities carry fees and the program is 50-60 per cent self-supporting over-all; some activities have been paying their way 100 per cent. Among the latter are the duplicating services (paid for by University departments requiring the work), bookstores, the Industrial Management Institutes, and the Bureau of Lectures and Concerts.

Better than 50 per cent self-supporting are the Photographic Laboratory (here again various University departments pay according to services rendered), the Bureau of Audio-Visual Instruction, and correspondence study. State appropriations furnish 50 to 85 per cent of the support for the School for Workers, the Wisconsin Idea Theatre, general institutes (there were 44 in seven departments for 3,950 persons in 1952-53*), Milwaukee and other Extension Centers, and special credit and non-credit classes. Less than 10 per cent self-supporting are the Bureau of Community Development, the Office of Music Specialist, and the Bureau of Information and Program Services.

Administrative services in the Extension Division are performed centrally and these include activities involving general administration, the business office, field organization, editorial services and the library, in addition to the Photographic Laboratory and duplicating services mentioned above. Leaving out the latter two, about a dozen faculty members and 21 civil service employes work in these administrative offices.

Education on the Air

University of Wisconsin Radio Station WHA is recognized as "the oldest station in the nation" and by 1919 was providing a regular schedule of farm information, crop reports, and weather forecasts. Since 1941, the University's department of radio education, operating under a faculty committee broadly representative of all University schools and colleges, has been operating WHA, and furnishes much of the programming for the eight FM stations and the one other AM station which make up the State Radio Council Network.

The State Radio Council, which controls the State FM Network, has two University representatives, three governorappointed citizen members, a governor's office representative, the superintendent of public instruction, the secretary of the Board of Regents of State Colleges, and the director of the State Board of Vocational and Adult Education. Several administrative appointments are shared jointly by the University and the council. Television station WHA-TV is also under the council, although it uses the experimental studios and equipment of the University's closed circuit television laboratory and the laboratory's programs.

It is the policy of the University and the State Radio Council to provide programs which would not find an assured place on the air on commercial stations because they appeal to less than the mass audience demanded by sponsors, or because the stations lack the educational resources to produce them. Sometimes, however, commercial stations pick up State Radio Council broadcasts at no cost to them. In 1953, 49 different commercial stations took advantage of this service. This service has been particularly valuable to stations rebroadcasting University athletic events such as football and basketball, because it has saved them considerable money in toll charges; the result has been a widened audience for these events.

"Talent" for University radio and television comes from many sources, with faculty and staff members supplying the

Education by Radio

Typical Schedule

Station WHA, WLBL, and FM Network*

Friday, September 3, 1954

MORNING

Weather Roundup—Direct from transmitters Farm Feature—College of Agriculture personnel giving latest in farm-ing. V. G. Rowley, Dairy and Food Division (also often from State Department of Agriculture.) Band Wagon—March Music News—United Press news Weather—Direct from Madison weather station Morning Melodies—Classical music: Faure—Music from his Suite Pelleas and Melisande Piano Music—Classical selections: Sonata for Two Pianos by Stravinsky Markets—To farmers from capitol Homemakers Program—U. W. Home Economics personnel in daily talks

AFTERNOON

Noon Musicale—Light classical music News—United Press Farm Program—University and State Department of Agriculture report to farmers; 4-H Club activities Chapter a Day—Daily readings from books Afternoon Concert—Classical music: Symphony No. 1 in E Flat Major by Alexander Borodin The Lively Arts—Series by author-lecturer Gilbert Seldes

* This schedule does not indicate the fifteen weekly broadcasts of the Wisconsin School of the Air, which has a course enrollment of 639,864 in the state:

639,864 in the state: People and Places—social studies, grades 5-10; Let's Draw—creative art, grades 3-8; Let's Find Out—science, grades 1-3; Visitons Mimi— French language, grades 2-4; Let's Write—creative writing, grades 4-8; Journeys in Music Land—group participation in singing, grades 4-8; News of the Week—daily news broadcasts, grades 5-10; Music Time —music appreciation, grades 1-3; Rhythm and Games—fun with a purpose, kindergarten to grade 3; Book Trails—leisure time reading stimulation, grades 3-8.

major contributions-without additional compensation. Others active in programming come from state and private institutions, agencies, and groups; some programs come from the National Association of Educational Broadcasters' program exchange center. The program service is divided in time about equally between music (mostly of the "non-popular" variety) and the spoken word. The latter includes the Wisconsin School of the Air for in-school use by 235,000 children, the Wisconsin College of the Air, adult courses, farm programs, homemakers' programs, literature, news, health science and government operation. The WHA program bulletins are sent to about 14,000 persons each month at their request. The first three regular courses presented over WHA-TV for adult listeners enrolled about 200 serious students who ordered study packets at two dollars each.

The chief difference between the uses of educational television and educational radio reflects the cost of operation. WHA-TV operates on a schedule of from only 12-15 hours weekly. The higher costs of television have led to proposals that commercial stations be used to broadcast educational programs. Some educational broadcasters contend that popularity is the big criterion in a business-type broadcasting operation, and that educational programs would probably find it difficult to get any preferred time. In any event, educators likely would still have to prepare the programs, and this forms a substantial part of the cost of broadcasting.

(In addition to their public service roles, WHA and the television laboratory serve as training grounds for students, and as centers for research into the educational uses of these communication media.)

^{*} These are in addition to special institutes budgeted in activities of the Industrial Management Institute (113 institutes), the Music Specialist (45 institutes), etc.

The University Hospitals

Some 16,000 patients are admitted to University Hospitals each year. More than 1,100 people are employed by the Hospitals as nurses, dieticians, etc., but the medical care is essentially dependent upon the teaching faculty of the University Medical School.

The public service role of the Hospitals is measured not only in statistics (e.g., an annual load of 44,000 X-ray examinations, 3,600 blood transfusions, 5,500 major surgical operations, 240,000 laboratory procedures), but in the vital part they play in providing hospitalization and medical care not ordinarily available to recipients who couldn't purchase it even if it were. One-quarter of the Hospitals budget comes from the counties of the state, another quarter from the state treasury, and the other half from payments by individuals who are able to pay for the services rendered them.

Probably in no other field is the integration of public service, instruction, and research more evident than in the University Hospitals—they are so closely interwoven, in fact, that it is almost impossible to separate one function from another.

Among the teaching hospitals of the University are: The State of Wisconsin General, the Mary Cornelia Bradley Memorial, the Student Infirmary, the Wisconsin Orthopedic Hospital for Children, the Cardiovascular Research Center, the McArdle Memorial Cancer Research Laboratory.

Also located on the campus of the University is the State Diagnostic Center, a 76-bed short term psychiatric observation hospital under the administration of the State Department of Public Welfare. The State Laboratory of Hygiene, under the State Board of Health, assists the state's physicians by performing those laboratory procedures which cannot be obtained in the local area; a similar function is performed by the Wisconsin Psychiatric Institute in the treatment of such diseases as syphilis and diabetes. Both of the latter laboratories are also on campus.

Professional School Extension

Above and beyond the service it provides in the University Hospitals, the *Wisconsin Medical School*, like other professional schools, engages in post-graduate training activities designed to keep physicians informed on day-to-day developments in the medical field. During 1953, more than 600 physicians attended at least one of the "extramural" circuit courses that bring faculty members out to state communities. And 222 physicians in one recent year attended five "refresher" courses, which are usually three days in length, offered on campus. The Medical School also conducts an "Observation Course," especially valuable for training specialists-to-be, and maintains the Medical Extension Library, which supplies physicians throughout the state with standard medical periodicals and textbooks as well as packets of published materials relating to problems encountered in the field.

The College of Engineering renders public service through operation of the Engineering Experiment Station, the Motor Vehicle Research Laboratory, the A-C Network Calculator Laboratory, the Electric Standards Laboratory, and the Gage Laboratory—as well as in its cooperation with the General Extension Division, research, and publication of research findings.

So it is, too, with the *Law School*, which assists state agencies and the organized bar in law revision and reform, by publishing the Wisconsin Law Review, and by conducting Extension institutes for lawyers.

The School of Education maintains the Psycho-Educational Clinic, the Reading Clinic, the Learning Laboratory, Instructional Materials Center, Statistical Laboratory, Graduate Extension Program for Wisconsin teachers, Teacher Placement Bureau, and consulting services for local schools in such areas as administration and curriculum planning.

The School of Commerce has developed its program of adult education through the use of institutes, conferences, short courses, and seminars in various lines of business and industry. The School of Banking is a growing and highly successful example. Generally, these are held under joint sponsorship with the University Extension Division and various private organizations. In 1952–53, there were 140 such conferences. The Bureau of Business Research and Service, which was established in 1945, has instituted an extensive program of research and service for Wisconsin business and industry.

The School of Pharmacy operates a special laboratory to analyze samples of medicines submitted by the State Board of Pharmacy to assure the high quality of all drugs dispensed in Wisconsin, and conducts extension institutes for the practicing pharmacists of the state.

Natural science departments of the *College of Letters and Science* work closely with allied departments in the professional schools on extending campus resources to the boundaries of the state. Similarly, the economists, sociologists, and other social scientists in that College are often called to aid Wisconsin communities. In the humanities and the arts, faculty members of the College are active in state-wide music projects, in helping galleries and art groups throughout Wisconsin in judging and presenting art works, and in other cultural extension work. The professional schools within the College—Journalism, Library Science, Music, and Social Work —have complete public service programs, most of them operated in cooperation with the Extension Division.

And the University of Wisconsin Press makes possible the publication of theses, books, and papers resulting from the research work carried on by staff and graduate students.

Moreover, the University is closely associated with many separate public service units provided by government or private groups. University staff members collaborate in research and service in such activities as the Forest Products Laboratory, the Arboretum, Wisconsin Geological and Natural History Survey, State Crime Laboratory and the Wisconsin Alumni Research Foundation program.

In addition to all these specific instances of public service, staff members of the University in nearly every department are often called upon for formal and informal consultative work. These requests may originate from a private citizen wondering about some specific point in economics or they may deal with the problem of an industry as related to some phase of engineering practice.

Engineers attend an institute in the New Engineering Building.



Source of Junds for University Junctions

(1954-55 Estimated)



22

CHAPTER FOUR

J_{inancing the} university

HERE IT WOULD be just as well to take leave of the "average student" we have mentioned earlier.

For the average student at Wisconsin doesn't have much more knowledge of the University's financial problems than what he sees in the newspapers. In this respect he is like most other state citizens.

When students and citizens did look at the headlines a few months ago, they discovered that the:

UNIVERSITY BUDGET

FOR 1954-55

NEARS \$35 MILLION

Yet, this Committee has learned that the cost of instruction and services for students at Madison in this regular school year (1954-55) is estimated at \$11,011,654.

Both figures are accurate. The disparity between them indicates one of the University's problems of presenting an understandable budget to the Legislature each biennium.

And the picture is further complicated by the fact that much less than one-half of the University's budgeted income, including that for Hospitals, comes from state appropriation of general funds (\$15,616,358 in 1954-55). How does the "basic" instruction and service cost of about

How does the "basic" instruction and service cost of about \$11 million build up into the total budget figure of nearly \$35 million?

- Add \$1-1/3 million for Extension Center operation;
- Add \$2/3 million for Summer Session operation;
- Add \$7 million for research;
- Add \$4-3/4 million for adult education and public service;
- Add \$5-1/4 million for self-supporting auxiliary enterprises;
- Add \$4-3/4 million for the University Hospitals;

And there you are, close to \$35 million.

For none of these operations do funds come from a single source, as may be seen in an accompanying table.

Moreover, there is a series of relationships between the various sources of funds. In research, for instance, the number of gifts and grants received is greatly dependent on the University's "basic core" of state-provided research funds investments are usually made where reputations are established and the pay-off possibilities are greatest.* Somewhat similar is the situation in adult education, which, except in the field of agriculture, is on the average more than 50 per cent self-supporting. If state support of the Bureau of Audio-Visual Instruction (Extension Division) were withdrawn and the activity abolished, for instance, the annual state appropriation to the University might be \$50,000 less; yet, since the bureau has its own annual income of \$160,000 apart from state funds, the total University budget would be reduced by more than \$200,000.† This is not true of all adult education services, but they follow this general pattern.

Even more apparent is the relationship between instructional, research, and public service functions with those auxiliary enterprises like Residence Halls, the Union, and Intercollegiate Athletics. Operational receipts from dining rooms, admission tickets, room rentals, etc., almost completely support these functions.

What is true of the sources of University income is also true of expenditures—virtually all are related to one another in varying degree. Three areas, in particular, where only arbitrary allocations of costs may be made are in general administration, in general services like the library or snow removal, and in physical plant maintenance.

All these relationships—along with a few more—are what make the University budget difficult to follow; there is no simple way of explaining it in detail.

Nevertheless, the University is faced with the taskannually for itself, biennially for the Legislature-of presenting an over-all picture of its finances. These budgets are perhaps the most comprehensive documents dealing with the University. Still, there is a definite limit on the amount of detail a budget can disclose; in itself, it can't justify the need for, say, two stenographers in a certain department.

How the Budget Is Prepared

While top administrative and governing officers set the broad general pattern of expenditures, it is usually on the departmental level that many decisions are made—e.g., whether

^{*} About 75 per cent of state appropriations for research go toward agricultural research.

^{+ 1952-53} figures.

those two stenographers are as necessary to efficient operation as another full professor. Helping to form the basis for these decisions are anticipation of future needs on the basis of enrollment predictions, and past experience. One measure of this past experience lies in the newly-developed Academic Staff Scholarly Activities Report, on which all faculty members list the time they have been devoting to actual class instruction, paper grading, research, committee meetings, and other activities. These reports are particularly valuable to top administrators in analyzing departmental staffing requirements and in generally plotting the University's direction.

Before tentative budgets are prepared in the offices of the various deans, bringing together the departmental requests, a number of conferences involving departmental personnel usually have been held. The deans' tentative budgets are then forwarded to the president and the business office for review. Next come conferences between dean and president. Almost invariably, the University says, the deans' tentative budgets must be readjusted to fit into the over-all University budget pattern, and maintain the academic balance. The president then presents the complete budget to the Regents for approval, and every two years the Regents submit the biennial budget to the Legislature.

"Trouble Spots"

The University feels that there are several points on which more than ordinary confusion exists in connection with its budget presentation to the Legislature.

First, there has been a general tendency not to break down

ACADEMIC STAFF SCHOLARLY ACTIVITIES REPORT

the total budget into its various parts when estimating the "costs of education." And certainly no figure with any meaning can be obtained by dividing the total budget by the number of students. Even dividing only the instructional cost by the number of students has its dangers-one being that it costs much less to teach freshmen and sophomores (who take mostly information courses, which demand less-experienced teachers) than to teach upperclassmen (who need more specialized courses). By the University's reckoning-on which there isn't unanimous agreement even in the University-one could reasonably say it spends \$535 per year on instruction and service for each first and second year student, and \$1,019 for each upperclassman and graduate student. This, of course, varies from college to college and from course to course. At Extension Centers, even though all students are freshmen or sophomores, the cost per student is higher, \$625. In Summer Session, the cost per student varies between \$61 and \$122. (Part of these amounts is paid by the students in the form of fees-during the regular session, these come to \$157 for residents, \$477 for non-residents.)*

The University emphasized that the cost of instruction includes such items as expenditures for library service and the related research by faculty members discussed earlier in this report.

Second, the University has no hidden "free balances" from which funds may be used for any and all purposes. Some

How the Faculty Charts Its Time

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1. Activities for Which Compensation in Addition to Regular Salary Has Been Received From The University

Report of Professional Accomplishmen

2. Publications

3. Completed Research not reported under (2)

4. Research in Progress (List Each Project or Program)

5. Professional or Scholarly Association Activities

6. Important Unbudgeted Community and Public Servic

Other Activities of Nore

DATE

SIGNATURE

APPROVED - DEPARTMENT CHAIRM (If additional space is required for any item use additional sheet and attach)

^{*} Actually the resident pays \$180, the non-resident \$500, but in each case \$15 of the figure is for Wisconsin Union membership, and \$8 for infirmary fees.

balances are present-for example, in the Hospitals, where accounts must be kept on an accrual basis-but these are not available for general use.

Third is a problem which should cease to exist after the next biennial budget presentation. Before 1953, it was the practice of the University to carry over the previous biennium's savings, listing these as a resource and using them as a cushion against such contingencies as unforeseen enrollment drops. These savings, and estimated savings, for the three years previous, together with a carry-over veterans books fund, came to roughly \$3 million in 1953.† In that year the Legislature

directed the University to expend that \$3 million during this present biennium, and to that end appropriated \$3 million less than it would have had there been no such balance. The net result is that the University must get \$3 million more in appropriations the next biennium to stay where it is financially.

Along with this in the new budget-making picture was the understanding that the University should anticipate its savings and spend them. These "savings" are usually relatively constant in over-all size, but since they usually result from deaths or sudden shifts of personnel, it cannot be predicted just where they will come.

Fourth is the operation of the University Hospitals, or "Wisconsin General Hospital." The University is maintaining special accounting records to keep the Hospitals' budget separate when presenting the over-all budget to the Legislature. While there is a close relationship between the Hospitals and the University's Medical School, the University separates the two in preparing its budget. The Hospitals' cost to the state is essentially that expended for the care of public patients.

Compared to Others

How does the University of Wisconsin compare with other institutions in its cost of operation?

Since there is no agreed-upon yardstick, and no uniformity in budget practices, there can be no real comparison with other universities. Only by applying the same criterion to the

Year)

Average Faculty Salaries at Neighboring Institutions

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4,046 3,993 763

DUWBGC

25

⁺ This is somewhat more complicated than indicated above. When the University presented its budget request for the 1953-55 biennium, savings to carry over were estimated at \$988,000 in the 1-E Student Fee Fund, \$722,000 in the 2-AB Extension Division Fee Fund, and \$253,000 in the 2-BM Extension Books and Supply Fund. This latter fund had been built up from a \$120,000 Emergency Board grant in 1946-47 to finance purchase of books and supplies for veteran students, and since no longer needed, it was to be returned to the State General Fund. The balances in the other areas result from normal turnover of staff through deaths, resigna-tions, leaves of absence, and from overrun of receipts. The total savings in the three funds was \$1,962,000. Of this, the University proposed holding \$288,000 in the 1-E Fund and \$122,000 (a total of \$410,000) in the 2-AB Fund as a buffer against loss in receipts or other contingencies, leaving a balance of \$1,553,000. This was for the contingencies, feating a balance of \$1,55,5000. This was to be applied to reduce the appropriations requested from the state for the first year of the biennium. (These realized savings in-cluded only the first year of the 1951-53 biennium since the savings to be realized in the second year would not be definitely known until the year had closed.) However, when appropriations were established for 1953-55, the Legislature added to the \$1,553,000 the \$410,000 the University had scheduled as an operating reserve, and in addition the estimated saving in the second year of the biennium (1952-53). This departure from the previous method

of accounting for savings thus applied a three year "savings" of roughly \$3,000,000. While this total seems large, it covers both savings and overrun of receipts of a budget for the three years of approximately \$60 million.

measurement of costs at other institutions (as in overhead, administration, research, etc.) could valid comparisons be made. Wisconsin officials, however, hazard a guess, based on a quick look at somewhat similar figures, that neighboring institutions have higher instructional costs than Wisconsin. One difficulty in reaching a conclusion stems from the practice at Wisconsin of intermingling students in all divisions and colleges. While the University strongly feels this is desirable both economically and educationally, it is not the rule at many other institutions.

The University has compared its instruction costs with those of several city high schools in the state and found them not out of line. In some of these high schools the cost-per-pupil is between \$400-\$500 a year, just a little lower than the \$535 figure for University students in their first and second years.

If the cost of instruction is lower than at some other institutions, the same is not true of the price tag for students. Wisconsin and Michigan, with \$180, have the highest resident fees in the Big Ten, and Wisconsin's non-resident fee of \$500 stands as the highest. University officials, however, feel that the high non-resident fee (about the same as tuition at many private colleges and universities) discourages nonresidents, particularly women, less than does the shortage of residence halls accommodations. They report few complaints about high resident or non-resident fees, but feel that some "marginal" students have probably been kept away from the University by the size of fees.

As far as faculty salaries are concerned, Wisconsin has been about mid-way on the list of Big Ten universities. As much serious competition for teaching and research talent, salarywise, comes from outside the teaching field in industry, commerce, and federal employment. It is undoubtedly true that, other things being equal, the institution with the highest salary scale will have the advantage in attracting teachers of the highest caliber.

The Present Operating Level

The University's operating level—what it actually is doing —is now \$1 million a year below what it was in 1952–53. The faculty has been reduced by 77 full-time positions, and civil service ranks by 50. Effects of the 1953–55 budget were felt to some degree in every activity where state appropriations are a direct factor. Some public service functions have been reduced, some classes have been enlarged, and the teacher-tostudent ratio has gone up.

But, the University says, whether or not the loss was "substantial" is a matter of opinion . . . probably largely opinion as to just how valuable the various functions are. There likely will always be argument as to the comparative value of any activity, whether it is the Wisconsin Idea Theatre, research in glacial geology, a student housing bureau, an alumni records office, or the lecture-quiz method of imparting knowledge.

It is safe to say, though, that there must be some point, however indefinitely defined it is, below which a university ceases to be first-rate. But to measure that point at any given time, and to be certain of one's ground, appears to be impossible. The reputation of a university (and Wisconsin's reputation is a fine one) is built on quality. And the reputation of a university, like that of an individual, can be broken down more easily and more quickly than it can be built up.



A view of Bascom Hill in the 1800's. All the buildings in sight are still standing.





CHAPTER FIVE

THIS REPORT spoke earlier of "trimming away some of the ivy" at the University of Wisconsin.

J_{he physical}

If one were to do that trimming literally, the Committee finds, he would likely find an old, mellowed building under the foliage.

That is not to say that all buildings on the Wisconsin campus are old and decrepit. Quite a few, in fact, are brand new. But these are too new to have developed a growth of ivy—and there are relatively few academic structures whose age falls between the very old and the very new. Buildings constructed between 1910 and the end of World War II comprise only about one-fourth of the academic plant at the University. This contrasts with 37 per cent built before 1910 and a similar percentage constructed after World War II.*

Going, Going-Gone

The University, like other institutions and enterprises, has three major factors to consider in its planning for future changes in its physical plant. First, a substantial number of buildings are obsolete.[†] These include Music Hall (built in 1879), the Law Building (1893), the central part of the Chemistry Building (1905) and altogether about 18 per cent of the academic area on the campus. In a few instances, as in Science Hall, the buildings are still sound structurally, but are poorly laid out, nonfireproof, and would require an uneconomical amount of remodeling to correct these deficiencies. All these obsolete buildings must eventually be replaced . . . and, inevitably, others will be added to the list as time goes on.

Second, there are the buildings which need reconditioning and remodeling to be made suitable for current use. Building experts say that extensive revamping of any building should be undertaken every 25 or 30 years, since a certain amount of disintegration is to be expected, even with the best maintenance (and the University declares that limited funds have

^{*} Including buildings now under construction or financed.

⁺ In 1950 the State Architect and University officials made up a list of 19 units recommended for razing as soon as possible and included, plus those mentioned above, Chadbourne Hall (1871), the Observatory (1878), 600 N. Park St. (1888), Journalism Hall (1888), Radio Lab (1888), Science Hall (1888), Hiram Smith Hall (1892), King Hall (1894), Gymnasium (1894), Agriculture Bulletin Bldg. (1900), Boat House (1903), Administration (1906), Poultry Bldg. (1910), Gym Annex (1911), Temporary Buildings (mostly 1947, although one dates back to World War I) and Quonsets (1947).

Buildings on Madison Campus



28

prohibited doing an adequate job in this respect). Some buildings have been rather thoroughly overhauled in recent years (e.g., the Education Building). Among the older buildings are three which the University desires to maintain for historical reasons. These are Bascom Hall, the main building on the campus, and North and South Halls, all of them nearly a century old. These were the buildings which comprised the campus in its early years. Since none of them is of "fireproof" construction, the University gradually is turning over their use from classroom to office space.

Third, there are those buildings which are necessary to take care of increasing enrollments or to provide up-to-date facilities in a fast-changing world. When the new academic buildings now under construction, or financed, are completed, the University will be in a reasonably good position to take care of its present enrollment, University officials maintain.**

Altogether, the net usable area of the academic plant totals about two and a half million square feet. (This will be increased by 288,000 feet in the near future). This space includes classrooms, auditoriums, instructional and research laboratories, libraries and reading rooms, and shops (about 63% of the total), office space, including offices for adult education extension services (13%), gymnasiums (5%), farm services (8 per cent), general services (6 per cent), and miscellaneous (5 per cent).

A ratio of building space to students developed from these figures shows the proportion to be 195 square feet per student (including farm buildings).^{††} This compares favorably with minimum requirements (180 square feet per student) estimated some years ago by the United States Office of Education. But, as with the student-faculty ratio, the value of such a measurement is questionable; much of the space involved is heavily concerned with research, public service and adult education, and an exact breakdown is virtually impossible.

The University feels it is now making maximum use of its available space, and officials point out that the average classroom use of 30 hours per week is higher than at many other institutions, and even higher than many experts consider practical. Although classrooms are occasionally not in use, there are a number of valid reasons that make 100 per cent scheduling impossible.

The current building plans of the University, and its needs for the immediate future, fall largely in the "classroom" category, as differentiated from the predominantly laboratory-type buildings constructed recently. However, since current building largely replaces either temporary or obsolete buildings, it will not substantially alter the student-space ratio. The University estimates that about 15 new classrooms will be needed for every increase of 1,000 in enrollment, and somewhat less of laboratory space in proportion. In the latter instance, equipment available is often a greater factor than actual space.

Not Strictly Academic

Not all University buildings are classified as "academic." A total of 1,829,582 square feet (plus 208,414 square feet now financed) includes such buildings as the Residence Halls, University Hospitals, intercollegiate athletic facilities, the Memorial Union, and a few rental residences acquired in anticipation of future expansion. In contrast with academic plant acquisitions, more than one-third of these buildings were constructed in the decade from 1921–1930. Another 20 per cent of the buildings were built from 1931–1940 (some with the help of PWA funds), and most of the others have been built since.

Much of this "non-academic" building probably owes its existence to the Wisconsin University Building Corporation, organized in 1925 as a non-stock, non-profit corporation to "buy, sell, lease, and otherwise acquire and convey real estate, and to construct, equip, and furnish buildings and other permanent improvements thereon, for the exclusive uses, purposes, and benefits of the University of Wisconsin." Members and officers are University employes, and corporation activities are supervised by the Regents of the University.

This Building Corporation, together with several similar ones in Wisconsin, has been defined either as "a scheme to circumvent the Constitutional decree that the state may not go into debt," or as a method of "compensating for the shortcomings of the Constitution." However defined, the Wis-



One new building is the Memorial Library.

consin Building Corporation has been responsible in great degree for most existing dormitories, the Field House, the Stadium, the Enzyme Institute, the McArdle Memorial Cancer Research Laboratory, the Wisconsin Union Theater, and a number of other very useful structures.

Here's how the Building Corporation arrangement generally works: the University leases land to the Corporation, then the Corporation builds with funds from loans and state appropriations (if available). Subsequently the Corporation leases the building back to the University at a rent sufficient to amortize the loans. When the building becomes debt free, it becomes the property of the University.

In other instances, the Building Corporation has bought property for the University with the understanding that future appropriations would finance the purchase. It was in this manner that several pieces of "expansion property" south of University Avenue were acquired. However, no property has been purchased by the Corporation since 1951.

The 1953 Legislature passed a measure which says the Regents may lease land to the Building Corporation only for projects concerning "dormitories, commons, field house, stadium, or memorial union." . . . in short, only definitely self-supporting enterprises.

(A Wisconsin Supreme Court decision in 1954 made illegal the securing of loans by mortgaging of state buildings and land; however, the decision did not condemn the other parts

^{**} If the buildings can be heated, these officials add, emphasizing the importance of their current request for additional central heating facilities.

⁺⁺In 1948, Look magazine said: "The ratio of work to marble is higher at Wisconsin than at any other university."

of the leasing arrangements between University and Building Corporation. This being the case, University officials feel that in some cases it probably will be possible to borrow money for self-supporting construction even if no mortgage is offered to the lender.)

Currently the University Building Corporation's outstanding debt is about two and a half million dollars, around .0026 per cent of the state's equalized property holdings of about \$12 billion. This debt includes \$61,800 on non-income producing land in the originally-planned expansion area south of University Avenue.

Living Space

Of primary concern to the University presently is the shortage of dormitory space for students at the University. (See Chapter One, page 12). There are fewer private rooms in the campus area than there were 10 years ago, and only a few more dormitory rooms. Many students are living in substandard quarters. The University estimates that at least 700 more students would have enrolled in 1953 had adequate housing been available.

Moreover, the need for more dormitory space is not only related to food and shelter, drastic as that need is. University officials argue forcefully that experience in group living can and should be a rewarding part of the total educational experience.

The University maintains that if dormitory costs to students are to be kept within their present levels (\$600-\$700 a year) any further building will require some sort of subsidy. This might be in the form of state funds, or private donations, or a combination of both. Except for the Agriculture Short Course Dormitories, the state has provided no dormitory funds since 1914. Yet all present University housing has had help from the outside, including gifts from the Tripp estate and PWA grants before the war.

While housing for single students is a major problem, the University also expresses concern for the married graduate students who are so essential to research and teaching activities at the University, and whose training is so valuable to an increasingly complex society. About one-fourth of all students at the University are doing advanced work in graduate or professional schools. These students are generally at the "marrying age," and in recent years more and more have been getting married. There is considerable competition among educational institutions for top-notch advanced students, so many universities are trying to see that adequate housing is available—no matter what the student's marital status is. The University says that if it is to meet this competition it seems evident that here, too, a certain amount of subsidization is required to make adequate quarters available at a price these students can afford to pay. (Madison apartments may range from \$75 to \$100 or more a month.)

Whither Expansion?

Mentioned several times earlier has been the "expansion area" south of University Avenue. This area has figured in the long-range planning of the University for some time although there has been some pause in this consideration since various groups expressed doubts regarding this movement a few years ago.

The lake-shore location of the University, while scenically superb, does pose certain building and traffic problems. Any substantial expansion on the lake frontage is virtually impossible, and the little proposed has met much opposition. Eastward movement into a congested section of living units is impractical, as is very much expansion westward into open areas on that end of the campus. Buildings should be placed close enough to the center of the campus to permit walking between all buildings within the 15-minute class change periods. So those in the University particularly concerned with long-range planning (the University Steering Committee, the University Campus Planning Commission, and the Regents) some time ago began looking southward, where, in fact, much of the original land granted to the University was located (it was sold for operating funds a century ago).

The degree of physical expansion of the Madison campus will, of course, be related to the role the University plays in the entire organization of higher education in the state. It seems evident, however, that virtually no reorganization would enable the University to escape a certain amount of expansion to meet the demands of the critical years ahead.

The value of a consistent ratio between graduate and undergraduate students—both from the points of view of economy and of good teaching and research—seems to make this expansion desirable.

Yet, as indicated earlier, the impact of increasing enrollments will probably have less effect on future building needs at the University than will the necessity of replacing obsolete and outmoded buildings that ceased to be in fashion when the hitching posts were removed from their "parking lots."



In looking at these comparisons, the size of the communities in which the institutions are located must be taken into consideration. In general, the larger the community, the more private housing is available.

1954-55 Academic Year





Within a decade, these children will be part of a tremendous increase in college-age youth. Wisconsin must do its share in providing them with opportunity for higher education. The qualifying basis for leadership and service will increasingly include training for a broad appreciation of the best things in life, a mind that penetrates beyond the obvious, and a high sense of values.





Cagers Have Ups and Downs

OUR 1954-55 basketball Badgers make up a team of surprises. Who would have expected, for instance, that this squad would be one to break wide open the Wisconsin team scoring record?

Granted, Coach Bud Foster predicted early in the season that the new free throw rule (a bonus attempt if you put your throw through the nets) might add ten points or so to a team's score.

But when the Badgers, up against Julisiana State in the Wisconsin fielduse, went a full twenty-five points ove the previous scoring record by a Wisconsin team, it was a little too uch to attribute to any new rule.

The score of that game was 107–68. Two nights later, the Badgers dropped a game to another deep-South quintet, Tulane, and fell far short of the hundred mark in doing it, 69–66. So was the 100-plus night strictly a one-time flash in the pan—or has this Wisconsin team got more than promised at the beginning of the season? Well . . . it shouldn't take much of the Big Ten season to find out!

Certainly during the pre-conference campaign the Wisconsin courtmen had the earmarks of an up-and-down outfit. They lost to Notre Dame, beat Western Michigan; beat Oklahoma, 77–66, lost to Missouri, 67–56; beat LSU, lost to Tulane, then in a Madison clash with Princeton, they nosed out the Ivy Leaguers 66–64.

The record to date hasn't been all inconsistency, however. A steady, bright light shining through good fortune and adversity has been the play of Dick Cable, senior letterman and the only starter back from last year's team. Of course, Cable's play has never been anything but good. This year, though, the lean blonde sharpshooter from Stevens



When Alan (The Horse) Ameche received the prized Heisman Memorial Award Trophy for his football achievements at a New York Down Town Athletic Club dinner in December, a sizable contingent of fellow Wisconsinites was on hand. On the far left is the chairman of the Heisman Award committee, J. C. Kennedy. Then—Lt. Gov. Warren P. Knowles; UW backfield coach Robert O'Dell; Mrs. Ameche; head coach Ivan Williamson; Ameche; Lawrence J. Fitzpatrick, WAA vice-president, and A. L. Tierney, N.Y. Athletic Club president.

JANUARY, 1955

Point is shooting more. And when Dick shoots more, he *scores* more. Going into the Princeton game he had averaged just under 25 points per game. His big nights came against Tulane and Notre Dame, when he popped in 31 points each time. At the same time, the entire Wisconsin team was shooting at a better than average clip both from the floor (.406) and the free throw line (.673).

Center John Parker was helping along considerably with 97 points in six nonconference games. Guards Dick Miller and Bob Badura were near the half-hundred mark. At that point the output slipped, on an individual basis, because Foster has been substituting freely at the other forward post (and to a lesser extent at guards and center).

Ringmen Get Ready

At the conclusion of the two traditional intra-university boxing tournaments (the Contenders Tourney on Jan. 12 and the All-University Finals on Feb. 11) a better estimate of Badger ring potential this year may be made.

Even considering the strong nucleus around which Coach John Walsh will be building his 1955 squad, the various pre-intercollegiate competitions will have to reveal some mighty promising material if Wisconsin is to come through a tough schedule with its usual success.

To illustrate: Michigan State, always a tough customer, is on the schedule twice—Feb. 18 at East Lansing and Mar. 26 at Madison. That first date is the season opener, the latter comes just a week before the NCAA tournament March 31–April 2 at Idaho State College. Here's the complete schedule:

- Feb. 18 Michigan St. at East Lansing 26 Virginia at Madison
- Mar. 5 Idaho St. at Madison
 - 11 Washington St. at Pullman
 - 21 Louisiana State at Madison
 - 26 Michigan St. at Madison

Returning lettermen include Bob Hinds, heavyweight, Ev Chambers, 165, Terry Tynan, 132, and Charles Magestro, 139. The latter two veterans will act as co-captains.

WRESTLING ROUNDUP—Coach George Martin's wrestlers comprise the only winter sports team beside the basketball squad to get into action before the first of the year. And they went into 1955 undefeated, having brushed past Illinois Normal 25–3, Wheaton 21–3, and Kansas State 24–5.

9

Founders Day Coming Up

WISCONSIN Alumni Clubs next month (and at least one this month) will again be celebrating the birthday of their University with a round of celebrations designed to kindle old memories and to stimulate new affection.

All over the world where there is any organized Badger activity alumni will get together. In many cases they'll hear distinguished faculty men and women deliver messages from Madison. In many other instances they'll hear from one of their own —an alumnus successful in his field.

At the "home base" in Madison, the latter will be the case. Scheduled to speak before Founders Day celebrants in the Memorial Union is Dan Mich, editorial director and vice president of *Look* Magazine.

Out on the west coast it was a leading faculty member who inaugurated the 1954 Founders Day season with the Northern California Alumni Club. He was Fayette H. Elwell, dean of the commerce school. (Dean Elwell will retire this summer, by the way, but it's hoped, and expected, that he'll continue to be one of the top notch representatives of the University even after he steps out of his official status.)

The *Alumnus* is looking forward to presenting reports on these—and all—Founders Day celebrations in the months to come.

CLUBS

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CLUBS

CLUBS

A Night For Ivy

In appreciation for work well done, the Milwaukee "W" Club and the Wisconsin Alumni Club of Milwaukee joined hands in holding a gala "Night for Ivy" dinner on Dec. 2.

Flanking Ivy was his wife and the football coaching staff and their wives. (The wives, as usual, were lending moral support at an event where they too received tangible recognition for their sacrifices during the football season, when their husbands may have been a little hard to live with.)

The old "master of repartee," Lloyd Larson, kept the gang in line and the program moving. He called on Joe Cutler of the Athletic Board which selected Williamson seven years ago. He introduced coaches Fred Marsh, La Vern Van Dyke, George Lanphear, Bob Odell, Paul Shaw, and Milt Bruhn. They were followed by Athletic Director Guy Sundt and Lieutenant Governor Warren P. Knowles.

Professor Albert C. Kalvin, New York University representative of the National Collegiate Athletic Association, was called upon for a few remarks.

The wind-up of a very successful evening came when "Squeaks" Larson called upon Ivy's former college coach,

10

Harry Kipke of Michigan. Harry was All American in his days at Michigan and he interestingly reminisced about Ivy and himself (Ivy was an end and captain in his senior year) when Michigan won 24, lost 1, and tied 2.

Saginaw Valley ls "Tour Conscious"

The Saginaw Valley Alumni are tour conscious. Three beautiful new churches in Midland, Mich., were visited prior to the club meeting there, December 5, 1954.

The idea continued when Robert Reinker, who had just returned from Japan, gave an illustrated talk on his travels in that country.

Club President F. W. Koerker, in telling of plans for a Founders Day program in Flint, Mich., suggests—you guessed it—tour of an automobile plant.)

Chicago Honors Grid Squad, Coaches

The football minded alumni in Chicago honored Wisconsin's 1954 football squad members, living in the Chicago area, at a luncheon meeting, November 26. President William A. Nathenson reports that Amundsen, Bridgeman, Kolian, Konovsky, Murphy, Stensby, Ursin, and Thomas really cut loose on the viands. After unbuckling their belts, the boys sat back and watched themselves in movies of the Minnesota-Wisconsin game. Good natured banter greeted certain game acts of either omission and commission as Konovsky gave the play by play commentary.

Again on December 6, Marty Below, a former Wisconsin football great, called the loyal fans together for the year's biggest football banquet when the Chicago high school football stars were entertained.

Athletic Director Guy Sundt, Ivan Williamson, and his great football coaching staff were added features of the evening.

The "Galloping Ghost", Harold "Red" Grange told of some of his interesting experiences on and off the football field.

New Officers Elected In Denver

Clifford W. Mills, '05, newly-elected president of the Denver (Colorado) Alumni club, is a practicing attorney in Denver. He was for 22 years a member of the Board of Regents of the University of Colorado, and also has taught at Westminster Law School, Denver.

He says "I'm honored to serve as Alumni club president in 1955, golden anniversary of my class at Wisconsin."

Mrs. Oscar A. Klovstad (Julia Moyer) '19, was re-elected vice president. Other 1955 officers are: Mrs. John A. Schwengels (Luella Barber) '41, secretary, and Dr. Leonard Elkind, '42, treasurer. Elections were held at the club's

Elections were held at the club's annual banquet on Dec. 4. Dr. Raymond H. Barnard, PhD '30, highlighted the banquet program with a group of humorous and satirical readings, closing with a thought-provoking article by Max Otto.

Planning the banquet were outgoing officers Leonard Wenz, '36, president; Mrs. Klovstad; Arthur Gervais, Jr., '39, secretary, and Mr. Mills, treasurer. Working with them were A. F. Krippner, '04, banquet invitations, and Mrs. Loran A. Johnson (Elizabeth Coleman) '36, press. Old-timers were happy to see a sizeable increase in banquet attendance over that of recent years, and especially to welcome so many enthusiastic recent graduates.

New Med Dean

(continued from page 6)

so that he can devote his full energies to teaching and research.

At the age of 41, Dr. Bowers has built a wide reputation as administrator and radiobiologist, has been dean at Utah since 1950, and has directed some of the nation's important research into effects of radiation. He has represented American scientists in a number of international projects, the latest of which has been work in India.

Born in Catonsville, Md., he received his bachelor of science degree from Gettysburg (Pa.) College in 1933 and his M.D. degree in 1938 at the University of Maryland.

He served as chief of the medical branch, biological and medical division, of the Atomic Energy Commission in Washington, D. C., in 1947–48 and as deputy director of the division from 1948 to 1950. Since his appointment as dean at Utah, has been a medical consultant to the director of the AEC. As commander in the Navy from 1941–45, his service earned him the Purple Heart and the Legion of Merit.

The author of articles in scientific journals, ranging from studies of irradiation injury to the use of TV in medical education, he has been in demand as a public speaker and a scientific consultant for a number of foundations. He is married and has three children: John Clapp, Mary Imogen, and David Warren.

Gifts and Grants Accepted by UW

Gifts and grants accepted by UW Regents in December brought the total amount received so far during the fiscal year to \$1,387,093.52. The gifts accepted last month totaled \$39,564.10, and grants totaled \$170,474.27.

Included were 15 grants varying in amount from \$2,613 to \$16,740, for basic research in medicine and fields with medical application.

From one of the earliest members of the University's "W" club came a "Living Memorial" fund of \$3,000 to aid the University's research battle against cancer. He is DeWitt S. Clark, '88, prominent resident of Duluth, Minn., who died last summer at the age of 87. Born in Eau Claire in 1867, Clark, in 1884, earned his major "W" as a member of the varsity baseball squad.

Clark received his bachelor's degree in the modern classical course, entered

New WARF Lab Assures More Effective Insecticides



An entomologist in the WARF Insecticide Testing Laboratory gives a dose of carbon dioxide to cockroaches prior to testing.

The insecticide testing laboratory of the Wisconsin Alumni Research Foundation is now in full operation in its new quarters. In operation since 1948, this division at present includes a staff of five entomologists and technicians.

The laboratory not only conducts routine checks for insect killing potency on commercial products such as household insecticide bombs and agricultural insecticides for industry and control agencies, but also carries out special project work to aid in the search and development of new insecticides.

When the insecticidal potential of a new compound becomes apparent under laboratory conditions, it is then applied to several agricultural crops to determine its performance under field conditions.

Before new insecticides are approved for general use they must be subjected to many tests. It must be demonstrated, for example, that no detectable amount or no more than a specified level of the compound is present in foods raised on treated fields. In some cases, sufficiently



sensitive and specific chemical methods are not available, so delicate bio-assays employing insects are used for determining the insecticide residues on food crops.

Additional information on the Foundation's activities will be supplied on request.

ISCONSIN ALUMNI RESEARCH FOUNDATION

P. O. BOX 2059

MADISON 1, WISCONSIN

the banking business in Eau Claire, and in 1891 he went to Iron River, Wis., where he engaged in the lumber business for 10 years. He went to Duluth in 1901, where he formed the Waters-Clark Lumber Co., the Zenith Box and Lumber Co., and in Superior, Wis., the Superior Box Co. He served as president and manager of these companies.

Gifts

Anonymous contribution of \$40; \$5 to be added to the Harry L. Russell Memorial Fund; Sauk County Farm Bureau, \$200; Dr. J. G. Rosenbaum, Cleveland, Ohio, \$100; faculty of the UW chemistry department, \$225; C. L. Egbert, Eau Claire, \$100; Willard L. Momsen, Milwaukee, \$100; J. Lowell Craig, Milwaukee, \$100; Frank R. Horner, Madison, \$250; Stuart H. Koch, Appleton, \$100; Smith, Kline and French Laboratories, Philadelphia, \$11,000; \$200 to be added to the Pi Lambda Theta Award Fund; A. T. Benner and associates, Marschall Dairy Laboratory, Inc., Madison, \$1,500; anonymous, \$250; Wisconsin Easter Seal Society for Crippled Children and Adults, \$7,500; Farmers and Merchants Bank, Rudolph, Wis.; Prof. A. L. Masley, Madison, \$200; Kohler Foundation, Inc., \$2,000; J. W. Hewitt Machine Co. Inc., Neenah, \$1,200; Neco Foundation, Inc., La Crosse, \$500; anonymous \$900; Wisconsin Public Service Corp., Green Bay, \$3,120; New York Life Insurance Co., \$5,000; anonymous \$20; \$3,823.60 to be added to the William H. Kiekhofer Memorial Fund; \$125 to be added to the Frank O. Holt Memorial Scholarship Fund; \$56 to be added to the Arboretum Trust Fund; American Society for Metals Foundation for Education and Research, Cleveland, Ohio, \$400; Miss Nettie E. Karcher and Gilbert A. Karcher, Burlington, Wis., \$100; General Electric Co., Schenectady, N. Y., \$250; Mr. and Mrs. A. E. Rumsey, Waterloo, Iowa, \$94.50 plus 37 shares of Clark Equipment Co. common stock.

Grants

National Institutes of Health, \$5,454; \$10,260 for research in the department of oncology; \$8,154 for studies in the departments of bacteriology and veterinary science; \$12,258 for studies in the department of oncology; \$16,740 for research in the department of oncology; \$6,112 for research in the department of physics; \$2,613 for research in the department of biochemistry; \$15,000 for research in the department of bacteriology; \$9,612 for research in the department of physiological chemistry; \$6,000 for research in the department of medicine; \$6,912 for research in the department of veterinary science; \$4,968 for research in the department of biochemistry; \$6,480 for research in the department of medicine; \$6,886 for research in the department of history of pharmacy; \$5,400 for research in the department of physiology; \$8,920 for research in the department of oncology; National Science Foundation, Washington, D. C., \$17,000; Squibb Institute for Medi-cal Research, New Brunswick, N. J., \$2,500; State of Georgia Geological Survey, \$3,000; Ohio Chemical and Surgical Equipment Co., Madison, \$1,250; Ben S. McGiveran Foundation, Milwaukee, \$1,268; Nutrition Foundation, Inc., New York City, \$3,500; Shell Chemical Corp., Agricultural Chemicals Division, Denver, Colo., \$3,000; Squibb Institute for Medical Re-search, New York City, \$3,020; Armour Laboratories, Chicago, \$4,166.67.

Campus Chronicle

ALWAYS WILLING to try, University students have formed a new organization for the promotion of better citizens for better living. Called the Committee on Inter-Racial Living, it grew out of the Anokijig conference on discrimination held this fall. Represented on the committee are the Inter-Fraternity Council, Pan-Hellenic Council, Green Lantern Eating Co-op, International House, Rochdale Co-op and Groves Co-op.

One of the first activities sponsored by the new group was an exchange dinner, first of several in a planned program of such events, held early in December between International House and Green Lantern Eating Co-op and several fraternities and sororities. The dinner was to "bring about contact and understanding of mutual problems by Greek and co-operative organizations and to acquaint fraternities and sororities with inter-racial living in co-ops."

Also at Anokijig, which gave birth to the Inter-Racial committee, another development along the same line was initiated. Thirty-eight delegates drew up a resolution which would push to 1965 (or as first recommended, even beyond 1965), the deadline for ending discrimination in fraternities and sororities. Contended one of the student senators when the resolution came before the Senate: it is "unfair" for the University to decree that a fraternity which has tried its best to eliminate discrimination and failed should not be given approval.

Student Senate rejected the resolution, 22-8. Two abstained.

The Madmoiselle from Madison (Parlez-Vous)

The good ol' *Octy*—that lovable deep-sea monster that every so often emerges from dry-dock to catch University students in a good humor—almost got its feet wet last month. Awfully fond of taking off on other publications, the Octopus seemingly got a little far from port in attempting a parody issue entitled "Mademoismelle." Seems the editors and publishers of another magazine didn't care for *Octy's* spelling. But when, after a letter exchange, the good fish compromised and dropped two letters, which didn't improve its spelling, but did quite a bit for public relations. Who sez octopi can't go to college?

Christmas Spirit—Everywhere

In the midst of 12-week exams, University students didn't forget the Christmas spirit . . . Sigma Alpha Epsilon fraternity gave its third annual party for Dane County old folks Dec. 15, with 2500 invitations extended . . . The Wesley Foundation gave a Christmas banquet Dec. 9 for foreign students . . . Gamma Phi Beta sorority and Phi Sigma Delta fraternity gave a party for 25 children from the Methodist Orphanage of Stockholm Dec. 12 . . . Kappa Sigma fraternity and Delta Delta Delta sorority gave a party for Madison children Dec. 14 . . . Gregory House and Badger Club entertained patients at the Veterans Hospital. . .

Cordially Invite Soviet Editors to . . .

The University Student Senate has voted to invite 15 Soviet student and youth newspaper editors to visit the campus here. This was in reply to a letter from the Student Council of Swarthmore College, Pennsylvania, requesting Student Senate to extend the invitation. Similar letters were sent to most of the other colleges in the U. S.

So far those voting yes include Swarthmore, Wayne University, Haverford College and Oberlin College.

The editors must be granted visas from the U. S. Department of State before they can come. Meanwhile, Prof. Ralph O. Nafziger, director of the University School of Journalism, said an exchange could be "good, clean fun."

P. S.

The Union Council voted approval Dec. 8 for the wearing of Bermuda shorts in the Union cafeteria next summer.

By Char Alme, '55



Search is exciting!

Scientists are constantly probing deeper into the secrets of nature -bringing new and better things to you

AS THE PROSPECTOR thrills to the search for treasure, so does the scientist as he searches out the secrets of the earth, air, and water.

THE TREASURE that the scientist seeks is better understanding of nature, and ways to bring better living for all of us. To find them, he is constantly probing, taking the elements apart, putting them back together in different ways—always looking for something new and promising.

How important is such research? Today, more than one-third of the work of the people of Union Carbide is in providing products and processes that did not exist in commercial quantities 15 years ago. Each new product, each new process, was born of intensive search.

FROM CHEMICALS TO METALS—The results of these achievements are serving all of us today—chemicals

for life-saving medicines and many other uses...a wide range of carbon and graphite products...oxygen for the sickroom and industry...a variety of wonderful new plastics...alloying metals for stainless and other fine steels.

SEARCH ... RESEARCH? To the scientists of Union Carbide, search and research are the same—an exciting key to a brighter future for all.

STUDENTS AND STUDENT ADVISERS: Learn more about career opportunities with Union Carbide in Alloys, CARBONS, CHEMICALS, GASES and PLASTICS. Write for booklet M-2.



SYNTHETIC ORGANIC CHEMICALSELECTROMET Alloys and MetalsHAYNES STELLITE AlloysUNION CarbideLINDE OxygenEVEREADY Flashlights and BatteriesLINDE SiliconesDynel Textile FibersPRESTONE Anti-FreezeNATIONAL CarbonsBAKELITE, VINYLITE, and KRENE PlasticsPREST-O-LITE AcetylenePYROFAX GasAcheson Electrodes

* With the Classes

1943–1944

The new manager of the cost department of Morton Packing Co., in Louisville, Ky., is James J. FIELD, '43.

Dr. Donald L. BENEDICT, '43, has been appointed director of physical sciences research at Stanford Research Institute, Stanford, Calif.

Pakistan is the current home for Mrs. Dorothea SCHALLER Bonavito, '43.

The rank of major in the Army has been awarded to Frank GABRHEL, '43.

Working in the advertising department of the Prange Store in Green Bay is Mrs. Patricia RYALL Krueger, '43. Warren H. FRISKE, '44, is a senior engi-

neer with the Westinghouse Atomic Power Division in Pittsburgh, Pa.

1945 W

Mr. and Mrs. William WENZEL, '45, are now living in New London where he is principal of one of the city's two public grade schools.

Charles W. DECKER, '45, has been appointed executive assistant to the Vice president in charge of sales of the Le Roi Co., Milwaukee. The firm is a subsidiary of the Westinghouse Air Brake Co.

The Gosin Clinic, Green Bay, has an-nounced the addition of Dr. George W. IWEN, '45, to its medical staff. After graduating from the University Medical School in 1947, Dr. Iwen spent five years at University Inequilibrium at University Hospital, Iowa City, Iowa, where he interned and had a residency in surgery. He then served for two years as assistant chief of surgery at an Army hospital in Germany.

Marcia METCALF, '45, is in Germany where she will teach at Nuremberg for the next two years.

Dr. Arpad Louis MASLEY, Jr., '45, and Evelyn Lois Larkin were married recently in Seattle, Wash. They are living in Bremerton, Wash.

1946 W

Patrick J. LUCEY, '46, has been granted a real estate broker's license by the Wisconsin Real Estate Board. Lucey is now in business in Madison as the Lucey Realty Service.

La Crosse's newest real estate service,

Gerrard Realty Co., is being operated by William GERRARD, '46. A University College of Agriculture graduate, George E. NETTUM, '46, recently completed bic first year or tobace prescili completed his first year as tobacco specialist with the Vernon County extension office. Before moving to Viroqua last year, Nettum

was teaching agriculture at Stoughton. Roger McINTYRE, '46, has been appointed assistant counsel for the Northwest-

ern Mutual Life Insurance Co. in Milwaukee. Dr. Gregory C. Smith, '46, sends his greetings from Phoenix, Ariz., where he is now practicing medicine. Dr. Smith, who finished his medical training at the UW in 1950, says he will enjoy reading about Wis-consin's first cold spell while he is in the

swimming pool or on the tennis court. Jane Lois SCHMITZ, '46, became the bride of Carl R. BURKARD, '51, in a recent ceremony in Manitowoc. Burkard is associate editor of the American Surgical Trade Association Journal in Chicago, while Mrs. Burkard is an editorial associate with the National Furniture Review, also in Chicago.

Named to the formula feeds division staff at Doughboy Industries, New Richmond, is I. Russell SOLHEIM, '46. Prior to accepting his new position, Solheim was a dairy effi-ciency expert in Barron County.

Miss Dolores Ann Szymarek and Dr. John Anthony PALESE, '46, were married recently in Milwaukee.

1947 W

Robert D. ROSENBLUM, '47, has moved from New York City to San Diego, Calif., where he is with the American Housing Guild

Head football coach at Milwaukee Extension is Bill RITTER, '47, who also handles the swimming and baseball teams.

The first woman president of the Society of Industrial Editors of Colorado is Miss Jessie Palmer, '47. She lives in Denver, where she is woman's editor of the Monitor. publication of the Mountain States Tel-ephone and Telegraph Co.

Dr. Francis J. JOHNSTON, '47, is teaching at the University of Louisville, Louisville, Ky., where he has the rank of assistant professor of chemistry. He formerly was with the Du Pont Co. hydrogen bomb plant Joyce DOMKE, '50. Marcia ROSEN Cohen, '48, and Elias COHEN, '47, became the parents of a son,

Peter Louis, on Oct. 22.

Mr. and Mrs. George Wilber, became the parents of a daughter, Nancy Olivia, on Oct. 27. Little Nancy has a 17-month-old brother. Mrs. Wilber is the former Helen DUR-BROW '47.

BROW 47. Wedding bells have been rung for: Eleanor Chesney Miller and Robert Theo-dore HOLTZ, '47, Cleveland, Ohio.

Marion BELARDI, '47, and Lawrence Mattelig, Beloit.

Alcina Ruth Groskreutz and William N. BELTER, '47, Wautoma.

Doris GNAUCK, '47, and Donald L. WHITE, '52. Both Mr. and Mrs. White are completing work on a Ph. D. degree at the University.

Our Mistake

Correction, please!

Appreciative as I am for your running my photograph and the news item on page 37 of the November 15th issue, I do wish that your reporter had gotten the basic facts more correctly; and in the interests of the Association that I head I feel that some correction is desirable to avoid the confusion that now exists.

The Associated Business Publications is a national organization made up of more than 150 leading business papers, all paid cir-culation-ABC-audited publications; whereas it is the Case-Shepperd-Mann Publishing Corporation, New York, that publishes FIRE ENGINEERING, WATER WORKS ENGINEERING, WASTES ENGINEER-ING and ELECTRICITY ON THE FARM magazine.

Does that straighten it out for you? Thanks for your cooperation.

Karl M. Mann, '11 New York, N. Y.

Charles A. McCOTTER, '47, and George PAPAGEORGE, '47, have received the high-est award given life insurance underwriters, designations as Chartered Life Underwriters.

1948 W

The highest academic achievement for life insurance underwriters, designation as Chartered Life Underwriter, has been earned by Robert B. QUALY, '48.

Extension agronomy specialist at the University of Minnesota is Rodney BRIGGS, '48. Mrs. Briggs is the former Helen

RYALL, '46. Dr. W. E. MEISEKOTHEN, '48, has joined the group practice of Drs. C. G. Reznichek, R. J. Hennen, and E. E. Skroch at the East Madison Clinic.

Sales representative of the International Business Machine Corp. in Rockford, Ill., is Norman B. ANDERSON, '48.

Spending a year with the primitive people of New Guinea will be Robert MAHER, '48. His trip, financed by the Ford Foundation, will be under the supervision of the University sociology department.

Now living at Spokane, Wash., is Mrs. Ruth RYALL Gleeson, '48.

Mrs. Howard R. Ross, the former Marilyn LUCAS, '48, is in Hawaii where her husband is a captain with the 25th Army infantry division.

Oleg D. KONRAD, '48, is now an artist in Paris He has taken trips to Algeria, Morocco, Tunisia, Norway, Sweden, and Finland to date this year.

A daughter was born recently to Mr. and Mrs. Warren Preeshl, '48, St. Paul, Minn.

Mr. and Mrs. Arthur MEHL, '48, became the parents of their third child and third son recently. Mrs. Mehl is the former Lee BALDWIN, '48.

Joanne Roslyn and Jerry Milton KROOT, who were married recently in Milwaukee, are now living in Chicago.

After being married in Racine, Leona D'ACQUISTO, '48, and Khemo M. Shahani, '50, are now residing in Columbus, Ohio, where both are on the faculty at Ohio State University.

1949 W

Mr. and Mrs. Guenther HOLTZ, '49, are now living in Cedarsburg. Mrs. Holtz is the former Dorothy ANDERSON, '49. Mr. Holtz is associated with a patent law firm in Milwaukee.

The slogan, "Together We Live-Together We Give," won a \$600 bedroom suite as first prize in a United Givers Fund slogan contest at Nashville, Tenn., for Charles BRANCH, '49, former Alumnus editor.

In his second year as Viroqua superintendent of schools is Donald E. DIMICK.

Dr. and Mrs. Ward C. Coffman, Jr., nee Patricia Delphine SAYER, '49, are now living in Zanesville, Ohio. The Coffmans have a son, two-years-old.

Miss Nancy NORRIS, '49, again is teaching in the physical education department in the Tucson, Ariz., schools.

Dr. and Mrs. Alf F. BORGE, '49, will soon be in Madagascar where they will serve as missionaries for the Evangelical Lutheran Church

Now a member of the faculty at the University of Kiel in Germany is Henry M. TRUBY, '49.

Donald E. Williams, '49, is doing per-sonnel work with the State Department of Public Welfare.

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BADGER BOOKSHELF

WISCONSIN HERITAGE, By Bertha Kitchell Whyte, '12. Charles Branford Publishing Co. (Price \$6.50).

This is a fascinating account of the beginnings of Wisconsin. It tells how a new life and culture surged into the state. Illustrations, including photographs, number over 350. Many are rare and seldom seen pictures from historical archives or private collections. The size of the book, $81/2'' \times 11''$, makes it a big, distinguished book which will be treasured through the years.

THE SPANISH BRIDE. By Walter O'Meara, '20. Putnam. (Price \$3.95).

This is a colorful tale of Spanish adventure in the Southwest of 200 years ago. A vanished period is brought to vivid life in this novel by O'Meara historical novelist, who only a short time ago published "Tales of Two Borders."

Note: Two Wisconsin graduates recently received medals and awards from the Ohioana Library Association at Columbus, Ohio. This society presents awards every year to Ohio born authors.

Clarence Edward Macartney, '01, received the award for being the author of the best book in the field of history in 1953-54, "Grant And His Generals." For a number of years, Dr. Macartney has been studying, traveling, and writing in the field of the Civil War. Among his books dealing with that period are, "Lin-coln And His Generals," "Lincoln And His Cabinet," and "Lincoln And His Bible."

Another Wisconsin graduate receiving an award was *Joseph H. Friend*, '32. He is one of the editors of Webster's New World Dictionary of the American language, published in 1953. Mr. Friend is associate professor of English at Western Reserve University.

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JANUARY, 1955

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