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THE GENOTYPE

No. 39

1954 - 1955

STAFF

Faculty Advisor:

Dr. M. R. Irwin

Editor:

Steve Takats

Asst. Editor:

Bruce Ashman

WHAT'S NEW

Staff

Dr. Sewall Wright joined the department in January as L. J. Cole Professor of Genetics. He had formerly been the Ernest O. Burton Distinguished Service Professor of Zoology at the University of Chicago, but in December 1954 reached the retirement age. Since his arrival here, Dr. Wright has been occupied mainly with the analysis of a large amount of data gathered while still at Chicago, on the interaction of different genotypes determining coat color in guinea pigs. His guinea pig colony did not accompany him and has been disposed of. He also plans to resume the writing of a long-delayed book on population genetics.

Dr. Wright gave the Presidential Address at the meetings of the Society for the Study of Evolution, held this spring at Austin, Texas. Drs. Irwin and Crow also attended the meetings.

Several staff members will travel to Cold Spring Harbor in June to attend the Symposium on Population Genetics, where both Drs. Wright and Crow and M. Kimura will present papers.

Dr. Casida received the 1954 Borden Award in Dairy Production for his outstanding work in the field of physiology of reproduction.

Seminar

A renovation in the form of our departmental seminar was undertaken by Dr. Chapman this spring, with the object of changing the resigned attitude with which most of us had long been greeting this weekly function. It is now designed as a colloquium. Bi-monthly research reports, given by staff members, by visitors and members of other departments have been made general

enough for everyone's comprehension, while the weekly sessions of smaller groups within the department continue. Everyone seems to like this new system.

Visitors

The department register shows a most impressive procession of distinguished visitors here during the last year:

September: Dr. and Mrs. Luigi Cavalli-Sforza, of the University of Milan and Istituto Sieroterapico, Italy, spent the fall and early winter months with the microbial genetics group. Dr. Cavalli gave a seminar on the genetics of drug resistance in bacteria before leaving with Mrs. Cavalli for Cal Tech.

October: Dr. H. P. Donald, Director of the Animal Breeding Research Organization of Great Britain, visited the department. He spoke on research with cattle twins being conducted at Edinburgh and on selection experiments in sheep. Dr. Oscar Kempthorne of Iowa State College gave two lectures on methods of estimating correlation between relatives.

November: Julian Huxley spoke to a large audience at the Union on "Evolution and Human Destiny." Direct and indirect selection experiments in mice were discussed by Dr. D. S. Falconer of the Animal Breeding Institute, Edinburgh.

December: Dr. Th. Dobzhansky of Columbia University spoke to Sigma Xi initiates at their banquet and also gave a departmental seminar on recent work done in his lab on heterosis in wild populations of Drosophila willistoni.

January: Dr. Curt Stern discussed some work done at California on cubitus interruptus position effects in Drosophila. Dr. Earl Green of the A. E. C., Washington, D. C., spoke on polygenic inheritance of presacral vertebrae in mice.

February: A general talk on animal breeding research being done at Iowa State was given by Dr. L. N. Hazel. Dr. Barbara McClintock virtually upended the department during the few days she spent here. In several informal talks, she discussed her work on mutation systems in maize.

March: Dr. E. A. Kabat of the College of Physicians and Surgeons, Columbia University, described recent work on the characterization of blood group substances. The mutable T locus in the house mouse was the subject of a seminar given by Dr. L. C. Dunn of Columbia.

April: Dr. Tracy M. Someborn told us of some new experiments done at Indiana on the genetic basis of "aging" in Paramecium. Dr. S. E. Luria of the University of Illinois spoke on "Virus: Intruder or Prodigal Son," summarizing recent work on bacteriophage and transduction.

May: The genetic aspects of the transformation of solid to Ascites tumors were discussed by Dr. George Klein of the Karolinska Institute, Stockholm. Dr. P. H. Andresen of the Bispebjerg Hospital, Copenhagen, gave several talks on the human blood groups and on his findings on the Lewis system. A delegation of animal breeders from 9 European countries spent the week of May 15 here studying methods of breeding.

Old Grads

Only Dr. W. F. Hollander of the Genetics Department at Iowa State College sent us information. He reports further improvement of the sex ratio, with a new son born October 9, 1954 -- Andrew. This is the Hollander's fourth child, fourth boy.

Parties and Picnics

Perhaps the increasingly heavy cost of the pre-Christmas meal has led to the noticeable decline in attendance. At any rate, the Christmas Party this year was a particularly spiritless ritual which many felt could have been dispensed with. Dr. Irwin and others made the suggestion that a picnic early in the fall could be substituted. We think this is a splendid idea, and hope it will be put into practice starting next fall.

The Genotype this time is beating the June picnic. We will bet that it rains.

Athletics

After several secret discussions with the "athletes" in the department, who for obvious reasons wish to remain anonymous, it was possible to obtain the record of the departmental basketball team and for the softball team for games played to date.

Basketball: won 1, lost 6 or 7 (minimal estimate)
Softball: won 1 (default), lost 6

While this has not been a particularly brilliant season for Genetics Department teams, we can by logic conclude that geneticists play basketball or softball only for the fun of playing. However, for those of you who are concerned over this rather unspectacular showing in the field of sports, the following points are offered for your consideration or rationalization:

1. Genetics as a field appeals to the unathletic, non-athletic, and a-athletic.
2. Genetics attracts a normal share of athletes but their interest in sports is soon lost and transferred to mink, blood, flies, pigs, germs, Modulator, and other such items of a non-athletic nature.
3. Sports at which geneticists might be adept are not included in the league.
4. The support given the teams by members of the Genetics Department has been miserable.

Scenery

Without doubt, the avocation of staff and students alike this year was watching the construction of the Biochemistry wing just behind the Genetics building. All the attendant noises, however, were rather an obligatory diversion. Lecturers and listeners in room 100 did not appreciate them. What began early in the fall as some small probings in our unpaved parking lot rapidly grew into a mammoth hole spreading over half of it, and then just as rapidly four stories of steel and concrete emerged, rising above the level of the Genetics roof. The space between the new wing and Genetics is now slightly more than a defile.

There was another change, smaller, but in its own way just as upsetting, and this was that Dr. Crow sold his venerable station wagon. It was bought by Helen Bernstein (née Byers) who claims that she finally led it into a junk yard and shot it. Dr. Crow now has a new station wagon.

RESEARCH

Corn Lab

Bruce Ashman has given us this report on everyone's activities:

Fred Valentine is studying mutable orange, an unstable P allele arising from the common sectoried form of variegated. Several mutable oranges arising from variegateds of diverse origin are being characterized and compared with the variegated from which they came. Howard Clark is piling up data on the relative stabilities of different self-red and light variegated mutations from medium variegated. He plans to finish this year. Mei Fradkin has recently completed her research for the Ph.D. degree which she will receive at the June commencement. Her research shows that Modulator increases the frequency of endosperm sectoring, in part at least, by increasing the frequency of chromosome breaks, with the resultant loss of the acentric chromosome fragment. Mei will leave this fall for Columbus, Ohio, where her husband plans to continue graduate work at Ohio State University.

Bruce himself came here from Utah last summer. He is beginning studies on the R-stipple allele and a factor modifying its expression. Elwin Orton, another newcomer, hails originally from Pennsylvania. He is trying to determine if differences exist between mutant self-reds which have arisen from medium variegated and have no Modulator in the genome. Joe Reilly is looking for Modulator effects in a series of chlorophyll mutants. He comes from Stakman's group at Minnesota.

Ted van Schaik and Nancy Worner became Mr. and Mrs. on August 25 of last year. After a honeymoon in the East Central states, they traveled by ship to South Africa, where Ted is now on the genetics faculty of the University of Pretoria.

On January 20, 1955, Micky Greenblatt accepted a position with the U. S. Army, and now has the title of Recruit Greenblatt. After a pleasant eight weeks of basic training at Camp Jackson, South Carolina, Micky was classified

as scientific personnel and transferred to Dugway, Utah - "The Paradise of the West." Micky has certainly had all the good breaks. He also just got married.

Animal Breeding Group

Art Reddon finished work for his Master's degree last July and now is Assistant Professor of animal husbandry at the University of Saskatchewan. Both Dave and Ralph Mitchell obtained their Master's last year also. Dave's work was on the heritability of body measurements in Holstein cattle; Ralph's dealt with the influence of inbreeding on udder palpation and type, and the association of these factors with milk and butterfat production. Ralph is continuing on for his Ph.D. degree. He is working jointly with Dr. W. J. Tyler of the Dairy Husbandry and Genetics Departments and Dr. Chapman, using the records of the Emmons Blaine, Jr. Experimental Farms in a study of the effects of inbreeding.

Eric Bradford is completing his study of the effects of inbreeding and selection in swine and the performance of inbred lines in linecrosses and topcrosses. Eric will be leaving shortly to assume duties as Assistant Professor of animal husbandry at his old Alma Mater, Macdonald College in Quebec.

Chin Sik (Jim) Chung passed his prelims last January and is continuing his work with rats. Jim is studying the interaction between effectiveness of selection and environment, the environment being level of feed intake and level of protein.

Francis Wolfe, a graduate of Oklahoma A & M, arrived last summer and for his Master's degree is working on the relationship between efficiency of feed utilization and carcass merit in swine.

Walter Neville is studying the combining ability of mutton type rams with western ewes under farm flock conditions. Walt is an animal breeder on the staff of the Georgia Agricultural Experiment Station. He is on sabbatical leave to work toward his Ph.D. degree.

Cecil Hartung, a recent addition to the group, comes to us from River Falls State College by way of the U. S. Army. Cecil is working jointly with Dr. Hauser of the Animal Husbandry department and Dr. Chapman on heritability estimates of economic traits in beef cattle. He is using identical twins for this work and succeeds Elmer Kohlstedt, who took his Master's degree last year.

-- Francis Wolfe

Drosophila

J. F. (as he is affectionately known around the autoclave) reports that he is continuing work on population genetics, insecticide resistance in you know what, and developing an ulcer, "the hallmark of the successful man," type O. He has also been attending conferences: Christmas in California, spring in Texas, and this June at Cold Spring Harbor, where he is to be a "synthesizer." Ah - the confining life of the ivory tower.

Dr. Ed Schwartz has spent the year working on insecticides and trying to raise house flies (ugh). This latter project has been responsible for some of the more unappetizing smells diffusing over the second floor. Ed is leaving us for Mayville College in North Dakota, where he will be the biology department.

Newt Morton is completing his Ph.D. with a dissertation on a sequential test for detection of linkage. He has received a grant from the National Cancer Institute for studies on human linkage, and will spend one year here and, he hopes, one in England. News item: There are no new children this year in the Morton household.

Motoo Kimura has spent the year producing publications. Watch for coming issues of Evolution and Biometrics (on random genetic drift with multiallelic and triallelic loci, respectively) and the June Cold Spring Harbor Symposium ("Stochastic Processes and Distribution of Gene Frequencies"). Kimura has passed his minor exam in mathematics ("very easy") and now faces his major ("very difficult").

Mitzie Schurin hopes to finish a Master's degree this summer and has spent the year working on possible overdominance of some mutants, and discussing movies with K. Motoo and politics with J. Crow.

Cindy Jackson will obtain her B. S. this June, a husband this July and is entering Rutgers next fall for graduate study. She has spent the last year changing stocks and working on the offspring of a nasty orange-eyed fly found in a Madison grocery store.

Bill Lee is still busy with dominant lethals in the honeybee. He is using the Chemistry Department's Co⁶⁰ gamma-ray source in studying dosage response and fractionation effect. Lately he has been all smiles: he just passed his prelims.

We, collectively, have had 3 colds, 1 back ailment, 1 virus infection, and numerous unassorted children's diseases plus 21,649,783 deaths ($\pm .002$). Laura Crow won a bicycle in a slogan contest but otherwise life goes on pretty uneventfully.

-- Mitzie Schurin

Microbial Genetics Group

The strange thing about the microbial genetics lab these days is the relative quiet at night. This is explained by the absence of Tom Nelson who, with his entire record collection, left to work with Wacław Szybalski at Rutgers. He is studying Actinomycete phages as a U. S. Public Health Service Fellow.

Larry Morse, recently Dr. Morse, is still busy with transduction and position effects in E. coli. He says only that it is easier to do the experiments than to write them up. Dorothy Gosting continues her studies on Agrobacterium. Helen and Aleck Bernstein will leave for England in July, Aleck going to the Central Enteric Reference Laboratory of the Public Health Laboratory Service, and Helen to The Lister Institute, both in London. Helen

will work with Bruce Stocker; during this last year she has been studying mating types in a number of crossable E. coli strains. Aleck has been working and hoping for recombination of antigenic characters in E. coli. Lysogenicity, transduction, and compatibility factors in E. coli occupy Dr. E. Lederberg's time, while Dr. J. Lederberg is keeping the bacteria in line with a micro-manipulator. He is making single-cell pedigree studies of mating in E. coli and also is studying "chain inheritance" of a flagellar character in Salmonella.

There are several newcomers. Gaylen Bradley is an Eli Lilly postdoctorate Fellow from Northwestern University. He is using multiple biochemical mutants in studies on recombination mechanisms in Streptomyces. Bob Wright, an Australian more recently immigrating from the Biochem. Department, is working on yeast genetics -- cytoplasmic factors and heterocaryosis. His wife Mari is the new chief cook in the lab. Ruth Zloten has a joint major between Genetics and Vet Science, and at present is working with Dr. Berman in Vet Science on the biochemistry of streptomycin resistance in brucellae. Tetsuo Iino arrived from Japan early in the winter, and is studying linked transductions in E. coli and phase variation of flagellar antigens in Salmonella. He is on leave from the National Institute of Genetics.

Cytology and Cytogenetics

Dr. Cooper continues his study of stomatal abnormalities, with experiments in progress to test if these abnormalities can be induced by etiolation. He and Harold Hawk of Dr. Casida's group have made some preliminary counts of chromosomes of cattle. Steve Takats has not yet been able to decide what he is working on (it's not a fixation artifact). He has cut a few hundred feet of paraffin ribbon, with no end in sight.

The potato section comprises Dr. Kay Beamish and John Lee, working under the direction of Drs. Hougas and Cooper. Diploid Solanums of South America and Mexico are being used as bridge species in crosses with the hexaploid S. demissum, to incorporate late blight resistance of the latter into the cultivated tetraploid potato. Testing of the primary hybrid selections shows them to be highly resistant, and crosses with S. tuberosum have been successful. In addition, work is being pushed on the colchicine-doubling of diploid hybrids, with a view to their direct use in crosses with cultivated varieties. Kay is doing this, and is also studying compatibility relations within the Solanum collection. John, a new student from Korea, is busy with hybridization studies of the wild and cultivated diploids.

Immunogenetics

This year seems to be a year of translocation for the Blood Lab. First of all, Joy Palm received her Ph.D. in November and immediately left for New York, and a position at the Sloan-Kettering Institute for Cancer Research. If present plans continue, by September we will have lost three others. Dr. Wilmer Miller tentatively plans to leave this fall to take up a position at the University of California at Davis, where he has received an offer as Assistant Serologist in cattle blood group studies with Dr. Clyde Stormont. Both Connally Briles and Martin Bacharach are finishing up their Ph.D. requirements this summer. Con's research covers genetic and serological aspects of alleles at four loci for blood groups of chickens, as well as possible correlations between blood group factors and physiological characteristics. Martin,

now having thesis blues, has completed his studies on normal antibodies in cattle serum for cellular antigens of chickens and chick embryos.

At least we are not all leaving. Dr. Bill Stone, now Assistant Professor in the Department, is still head of the cattle blood group work and will continue his studies on the J substance of cattle and immunochemical studies in association with Dr. Link of the Biochemistry Dept. Dr. Sam Scheinberg plans to continue his research on serum antigens of bison, cattle, pigeons, and doves in addition to work on cellular antigens of chickens. This will be Sam's second year under a grant from the National Institutes of Health. Jack Stimpfling is presently pursuing his work on erythrocyte antigens in doves. Dr. Henry Gershowitz is working on a blood typing system for hogs and will remain here this fall. Josh Patel continues his graduate work and is at present working with J substance of cattle. There are two newcomers. Don Shaw, from California, joined the group last fall and is interested in embryological aspects of the immunogenetics of pigeons and cattle. Miss Carol Popelka, Laboratory Assistant, is helping with the cattle blood grouping program, and is considering a graduate degree.

-- Don Shaw

Physiology of Reproduction

Old faces left and new faces arrived during the summer and fall of 1954. Lou Baker, H. L. Self, and Bill Kidder received Ph.D.'s and went to work. Lou joined the Animal Husbandry staff at Massachusetts, where Wally Black is also working after a year at Nevada. H. L. stayed on in the Animal Husbandry Department here at Wisconsin to specialize in swine work. Bill Kidder is with the Animal Husbandry Department at West Virginia.

New men in the lab are Warren Foote, Fred Rilling, Roger Short, Charlie Kiddy and Don Waldorf. Charlie is from Massachusetts and Roger is a veterinarian from England. These two have teamed up with old-timers Harold Hawk and Jim Wiltbank in various studies concerned with repeat-breeding in cattle. Warren, from Utah, and Don, from Purdue, have been working with H. L. Self on age at puberty and embryonic death in swine. Warren is also engaged in some endocrine studies with sheep and swine. Don and Roger have also been devoting part of their time to some very interesting immuno-sterility studies. Fred Rilling is a New York boy who studied at Colorado. He is a beef cattle enthusiast and is studying factors concerned with reproductive performance in beef cattle.

Ahmed El Sheikh finished his Ph.D. in February of this year with a study of the effect of some environmental factors on fertility. At this writing he is serving as "consultant" in the lab, waiting for details of his return to Cairo to be worked out. Clarence Hulet is working on his thesis and hopes to finish up this summer. He presented a paper on his sheep studies at the last meeting of the American Society of Animal Production in Chicago. Jim Wiltbank will also be getting his Ph.D. this summer. He is putting the finishing touches on his thesis and eagerly scanning the horizon for a job. Harold Hawk just passed his prelims, and is carrying on his work with the dairy cattle. He is making some interesting studies of chromosomes in cattle embryos. N. C. Buch is studying freezability of bull semen from different inbred lines of Holsteins and various factors affecting length of service period in dairy cows.

Dr. and Mrs. Casida spent a few weeks touring the west last summer and brought back some beautiful 3-D photographs of the scenic west. These were enjoyed by all in the lab as they highlighted a wonderful gathering at the Casida home in the fall.

Another memorable event took place at the home of Warren Foote as we all wished Ahmed well in a rollicking farewell party emceed by Roger Short. Ahmed is still here -- must be holding out for another party.

-- Charlie Kiddy

Potato Breeding

The breeding program for resistance to Virus X is now in full swing. Doug Johansen and Don Young have rigged up a spray gun for the mass inoculation of potato seedlings and they report it is a tremendous time-saver. Two new potato varieties have been released by Dr. Rieman. Red Beauty, which was developed jointly by the Wisconsin and North Dakota Experiment Stations, is smooth-skinned, of excellent shape and resistant to Verticillium wilt. Antigo is a white potato, with a russet skin, and is resistant to common scab.

Two new students are working jointly with Dr. Larson of Plant Path and Dr. Hougas. Both are interested in virus problems. Gene Easton, from Idaho, is studying resistance to virus X in the tuber-bearing Solanums. Francis Pelet, newly arrived from Switzerland, is doing serological work on virus X and Y.

Fur Animal Research

The fur animal laboratory added a new member to its ranks in Ehard (Pete) Nutting, a veteran of the Korean war with a B. S. in Zoology from Utah State College. He is presently making a study of the factors influencing growth and fur production in mink. Bob Cochrane is working on the effect of stilbestrol on reproduction in mink and factors involved in the delayed implantation phenomenon in mink and marten. Besides these projects, extensive genetic studies are being carried on by Dr. Shackelford to establish linkage groups among 30 genes for qualitative differences in mink.

Another member of the fur ranks is "Chuck" Fox and he is making a thorough study of a method to save his fur coat--from the furrier that is.

-- Bob Cochrane

Clover and Alfalfa

Kuell Hinson has forsaken sweet clover for soybeans. He is now down at Gainesville, Florida, beginning studies on the genetics of soybeans. The control of photoperiod is particularly interesting. Dr. W. K. Smith is still interested in low-coumarin sweet clover; several lines are being increased for release. Hans Petersen came here last fall from Denmark. He is working

jointly with Drs. Smith and Cooper on polyploidy in red clover, and in addition is making a study of factors responsible for exceptionally good seed set in several lines of alfalfa.

Forest Trees

The forest tree genetics research was initiated in 1948 to improve the genetic quality of the planting stock used for reforestation in Wisconsin. The emphasis initially was placed on work with red pine, although more attention is being given each year to additional species including jack pine and white and black spruce. Individual tree selections have been made. Seedlings grown from open pollinated seed have gone into progeny tests in various parts of the state. The first of many seed orchards has been established in southeastern Wisconsin. Tests will be conducted to determine the most satisfactory measures to be followed in the management of these orchards to insure an abundant and continuous supply of seed for the forest industry. As field tests indicate which are the most promising lines they will include in the seed orchard material.

Each fall new seed lots of native and exotic material are sown at one or more of the several state nurseries. The development of an adequate summer research center in northeastern Wisconsin is under way and plans call for its use during the 1956 season. New greenhouse facilities acquired during the early winter of 1954-55 in Madison have greatly stimulated research on vegetative propagation. Flower induction studies have been in progress for several years. The results of these studies will be of importance in the management of the seed orchards mentioned earlier.

During the first part of January, R. G. Hitt attended the Third Southern Forest Tree Improvement Conference in New Orleans. Hitt and R. R. Hartig, project assistant, made a 4,500-mile seed and scion collecting trip into Ontario during the first three weeks in March. They also attended the second Canada-wide Forest Tree Improvement Conference in Ottawa.

The unusually early spring this year has kept project personnel on the run. Approximately 30,000 trees went into new field trials in central and northern Wisconsin. The controlled pollination program planned for this spring suffered because of the early season and a lack of abundant female flower production in northern areas. Fortunately some "good" news can be slated to the early spring, namely this report. Had the season not been an early one, the writer would at the moment undoubtedly be up a pine tree with his females somewhere in northern Wisconsin.

-- R. G. Hitt

ENTRIES IN THE HERD BOOK

Jim	}	Rachel Wiltbank, August 15, 1954
Trudy		
Warren	}	Rebecca Foote, October 2, 1954
Blanch		
Con	}	Scott Conrad Briles, November 25, 1954
Jewell		
Bill	}	Debra M. Stone, November 27, 1954
Elaine		
Gaylen	}	Philip Alden Bradley, December 2, 1954
Lois		
Pete	}	Ron Dell Nutting, February 14, 1955
Shirley		
Don	}	Sandra Lee Kichefski, March 8, 1955
Juanita		
Bruce	}	Lewis James Ashman, May 2, 1955
Maxine		
Jack	}	Karen Helene Stimpfling, May 6, 1955
Helene		

SEX LINKAGE

Don Young and Donna Signer
Aleck Bernstein and Helen Byers
Bob Wright and Mari Lund
Boris Rotman and Raquel JudaLevitch-Shapero
Bert Schurin and Mitzie Fields
Ted van Schaik and Nancy Worner
Allen Vertein and Marie Gschwendner
Micky Greenblatt and Gloria Fertig

RECENT ADVANCES IN GENETICS

Finals and Thesis Titles

Larry Morse: Genetic Transduction in Escherichia coli.
Branch Howe: Crossing-over and Interference in the Sex Chromosome of
Neurospora crassa.
Newton Morton: Sequential Tests for the Detection of Linkage.
Mei Fradkin: Effect of Modulator on Endosperm Sectoring.
Lou Baker: Parental Effects on Litter Size and Fetal Development in Swine.
H. L. Self: The Effect of Various Sequences of Full and Limited Feeding on
the Reproductive Phenomena in Chester White and Poland China Gilts.
Bill Kidder: Studies on Fertilization Failure and Embryonic Death: Effects
of the Male and Preovulatory Environment of Ova.
Ahmed El Sheikh: The Effects of Level of Feeding, Shearing, and the Ambient
Temperature on Body Temperature and Fertility of the Ram;
and the Effect of Level of Feeding on the Reproductive
Capacity of the Ewe.
Jim Wiltbank: Some Factors Concerned with Lowered Fertility in the Cow.

PRELIMS

Martin Bacharach (last year)
Nancy Worner
Harold Hawk
Clarence Hulet
Mei Fradkin
Howard Clark
Jim Chung
Aleck Bernstein
Bill Lee

MASTERS

Micky Greenblatt
Art Reddon
Bob Cochran
Ralph Mitchell
Dave Mitchell
Elmer Kohlstedt

ACQUIRED CHARACTERS

Elwin Orton	M.S. Ohio State University	Brink
Bruce Ashman	M.S. Utah State College	Brink
Joe Reilly	M.S. University of Minnesota	Brink
Motoo Kimura	M.S. Kyoto University	Crow
Mitzie Schurin	B.S. University of Wisconsin	Crow
Francis Wolfe	B.S. Oklahoma A & M	Chapman
Walt Neville	Georgia Agric. Expt. Station	Chapman
Cecil Hartung	B.S. River Falls State College	Chapman
Bob Wright	M.S. University of Wisconsin	Lederberg
Tetsuo Iino	M.S. University of Tokyo	Lederberg
Gaylen Bradley	Ph.D. Northwestern University	Lederberg
Ruth Zloten	M.S. University of Winnipeg	Lederberg
John Lee	M.S. Marquette University	Cooper-Hougas
Hans Petersen	M.S. Royal Veterinary & Agric. College, Copenhagen	Cooper-
Don Shaw	B.S. Univ. of Calif., Santa Barbara	W. K. Smith
Charlie Kiddy	B.S. University of Massachusetts	Irwin
Warren Foote	B.S. Utah State College	Casida
Roger Short	D.V.M. Bristol University	Casida
Fred Rilling	B.S. Colorado A & M	Casida
Don Waldorf	B.S. Purdue University	Casida
Pete Nutting	B.S. Utah State College	Shackelford

TRANSLOCATIONS

Tom Roos	U. S. Army
Bill Moore	Peshtigo, Wisconsin
Joy Palm	Sloan-Kettering Inst. for Cancer Research, New York City
Kuell Hinson	Florida Agricultural Expt. Sta., Gainesville
Lou Baker	Animal Husbandry Dept., University of Massachusetts
H. L. Self	Animal Husbandry Dept., University of Wisconsin
Bill Kidder	Animal Husbandry Dept., West Virginia University
Betty Williams	Whitewater College; Whitewater, Wisconsin
Branch Howe	Dept. of Biology, Union College; Barbourville, Kentucky
Tom Nelson	Dept. of Microbiology, Rutgers Univ.; New Brunswick, N. J.
Micky Greenblatt	U. S. Army
Ted van Schaik	Univ. of Pretoria; Pretoria, Union of South Africa
Nancy van Schaik	Pretoria, Union of South Africa
Art Reddon	Animal Husbandry Dept., University of Saskatchewan

Department Papers

Anyone wishing a list of the papers published in the last year should write the College of Agriculture for a copy of "What's New in Farm Science."

* * *

Epilogue

For the lack of cover and editorial we plead lack of inspiration. There is precedent for each of these things.

We are especially grateful to the people who wrote the research reports. Several others not mentioned have helped in supplying information: we wish to thank Dr. Esther Lederberg, John Lee, Dr. Hougas, Don Young, and Dr. W. K. Smith.

As usual, the jobs of stencilling and mailing fell to the secretaries. To Bette Schotten, Marie Vertein, and Jane Wenzel, many thanks.