

UNIVERSITY OF PENNSYLVANIA

# Almanac

## Director, Advisory Board Named For Chemical Senses Center

A physiologist who is a world authority on the sense of taste has been named director of the recently organized Monell Chemical Senses Center at the University and an 18-member national advisory council has been appointed.

Dr. Luther L. Terry, the University's vice president for medical affairs and chairman of the Monell Center's national advisory council, announced the appointment of Dr. Morley R. Kare to the director's post and as an ex-officio member of the advisory council. Council members are from the fields of medical, dental and veterinary education, nutrition, public health and governmental agencies, and industry.

The Monell Chemical Senses Center was founded last February with the aid of a \$1 million grant from the Ambrose Monell Foundation and matching funds from the Veterans Administration, other foundations and private industry.

The Center is the only institution of its kind in the United States where investigators are brought together from many disciplines in the first concerted group research approach to the chemo-reception processes. Scientists on the Center's staff include physicians, dentists, veterinarians, biochemists, behavioral psychologists, ecologists, and biophysicists.

Dr. Terry pointed out that research on the chemical senses has been a relatively neglected field, yet it is related to a wide range of public problems. The world's evergrowing population needs new sources of palatable and nourishing food. Animals and insects who depend on the sense of smell and taste to find food and mates are threatened with extinction because pollution is altering the odor of their environment. Investigation of the chemical senses may provide the know-how to preserve many important species and help maintain ecological balances in nature.

Research on the chemical senses may also aid in the treatment of such medical problems as malnutrition and obesity. Dr. Kare's studies of the loss of taste in people who are undernourished has demonstrated that this loss is related to certain vitamin deficiencies. On the other

hand, he has found that an individual's nutritive state affects his sense of taste. Taste diminishes when hunger is satisfied.

The Center is temporarily located in the Lippincott Building (25th & Locust Streets) but will move to its own building adjacent to the campus at 34th and Market Streets when construction is completed.

Dr. Kare comes to Pennsylvania from North Carolina State University (Raleigh), where he had been professor of physiology since 1961. He has also been named professor of physiology in the University's School of Veterinary Medicine.

## Grant Will Support Design of Unmanned Underwater Vehicle

The first installment of a \$228,251 grant that could give the state an important place in the development of oceanography was recently presented to the University by Governor Raymond P. Shafer.

Awarded by the newly organized Pennsylvania Science and Engineering Foundation — the Commonwealth's equivalent of the National Science Foundation—the grant will support a unique project in ocean engineering: the design of an unmanned underwater exploration vehicle that will explore the oceans in the same way unmanned space vehicles are exploring space.

"We believe this project can give the State of Pennsylvania an important role in the exploration of the oceans," explained Dr. Hsuan Yeh, director of the Towne School of Civil and Mechanical engineering, where the project will be carried out.

"Several organizations are currently operating *manned* underwater research vehicles but no other organization has announced it is developing an unmanned vehicle. The project will make good use of research facilities we already have at the Towne School and it will help us

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## College To Examine Philosophy, Purposes

A self-study of the University's College of Arts and Sciences, its "educational philosophy and the needs of the times," will be undertaken this year by a committee of faculty members, students and administrators.

At the College's 400th faculty meeting last month, acting dean Dr. William E. Stephens announced the formation of the 13-member Committee on the Goals of Higher Education in the College. Its chairman is Dr. Herbert S. Wilf, professor of mathematics.

Consideration of the socio-economic composition of future freshman classes will be one of the committee's first concerns, Dr. Wilf said, "along with the associated problem of making sure students are given sufficient help to enable them to succeed here in spite of possibly poor preparation."

The committee has been asked to define the purposes of undergraduate education and the extent to which the College is fulfilling these purposes, Dr. Wilf added.

Other questions will be the relevance, both short- and long-range, of the College's program and the role of the College in helping students to realize their individual intellectual potential.

Faculty members on the committee in addition to Dr. Wilf are Dr. Richard S. Dunn, professor of history; Dr. Albert L. Lloyd, associate professor of German; Dr. Alfred J. Rieber, chairman and professor of history; Dr. Donald Ross Jr., assistant professor of English; Dr. Ingrid L. Waldron, assistant professor of biology; and Dr. Julius Wishner, professor of psychology.

Representing the administration are Dr. John N. Hobstetter, vice-provost for research and dean of the Graduate School of Arts and Sciences; John A. Russell, Jr. vice provost for student affairs; and Dr. Roger H. Walmsley, vice-dean of the College.

Students on the committee are Andrew Clearfield, a sophomore in the College; Michael Lehr, a College senior; and Miss Amy Veroff, a sophomore in the University's College of Liberal Arts for Women.

## *Study of Chemical Should Aid In Diagnosis of Eye Abnormalities*

Ophthalmologists should have a better understanding of certain abnormalities of the eye—and may find it easier to diagnose them—when Dr. Alan Laties and Dr. David Jacobowitz complete their study of the distribution of the chemical Noradrenaline in the structure of the eye.

The project should also add some significant facts to our knowledge of the relationship between the eye and the autonomic nervous system.

Noradrenaline is the chemical that transfers the nerve impulse from the nerve to the organs controlled by one part of the autonomic nervous system; Dr. Laties and Dr. Jacobowitz are studying the chemical in the hope its distribution will tell them which structures of the eye are controlled by the autonomic nervous system.

If ophthalmologists know exactly which parts of the eye are controlled by those particular nerves, Dr. Laties explains, then it will be easier for them to examine an abnormal eye and decide if a flawed or damaged nerve is responsible for the abnormality. Damage to the nerves of the autonomic nervous system, he says,

### **Additional Appointments, Promotions Approved**

Last month additional appointments and promotions for this year were approved by the Trustees.

Those appointed include Dr. Robert H. Breinholt as assistant professor of industry in the Wharton School, Roy A. Schotland as visiting professor of law in the Law School and Dr. John S. Reif as assistant professor of epidemiology and public health in the School of Veterinary Medicine.

Those appointed in the School of Medicine include Dr. Carl T. Brighton as assistant professor of orthopedic surgery, Dr. William L. Dyson as assistant professor of clinical psychiatry, Dr. Stanley Fahn as assistant professor of neurology, Dr. Lawrence A. Loeb as assistant professor of pathology, Dr. Peter V. Moulder as professor of surgery and Dr. Ulf Nilsson as assistant professor of medicine.

Peter McCleary of the Graduate School of Fine Arts was promoted to associate professor of architecture while in the School of Medicine, Dr. Milton M. Cahn was promoted to associate professor and Dr. Harry J. Hurley to professor, of clinical dermatology. In the same school, Dr. Wilfred E. Fry has been designated Emeritus Professor of Clinical Ophthalmology.

can result in abnormalities such as drooping eyelids, unequal pupils, and changes in the color of the eye pigment—signs that are sometimes difficult to diagnose because they can be caused by other more serious ailments.

The two men have been working on the project for several years. They are studying the distribution of the chemical in the eye by freeze-drying the tissues of the eye and analyzing them with histochemical techniques that involve treating the tissues with chemicals which reveal the location of the noradrenaline.

They are also working on an improvement in the technique that will give researchers an important new tool—a technique that will let an eye investigator analyze one small section of an eye histochemically and then photograph an adjacent section of the same eye tissue under an electron microscope.

“At the present moment,” Dr. Laties says, “you can do one thing or the other with the same piece of tissue but you can’t do both. The techniques we use to prepare the tissue for histochemical analysis make it impossible to study it under the electron microscope, and vice versa. With the improved technique, eye investigators may be able to do correlation studies and correlate the chemistry of the eye with the fine structure that can be observed under the electron microscope.”

Dr. Jacobowitz is an assistant professor of pharmacology and Dr. Laties is an associate professor of ophthalmology. Their project is being partially supported by a grant from Research to Prevent Blindness, Inc.

### *Geometrical Patterns On View at Art Institute*

Paintings in Al Held’s new black-and-white, geometrical pattern style are now on display in the Institute of Contemporary Art. All of the twelve paintings illustrate the artist’s radical departure from the colorfield painting currently dominant in New York City.

Colorfield paintings are composed of large areas of bold color, sometimes co-terminous with the canvas, sometimes in basic geometrical shapes. Mr. Held’s new paintings instead have many interlocking geometrical shapes painted in thick black outline against a white background and are far more complex compositions than his earlier works.

Al Held has been teaching art at Yale University since 1962. His works will be on exhibit through December 26.

## **Study Hopes to Confirm That Neurons Interact**

Dr. George L. Gerstein, associate professor of biophysics and physiology, has received a \$92,672 grant from the U.S. Public Health Service for a study of the interactions between neurons in the brain.

Although it is known that information passes through the brain which cannot be transmitted by a single neuron alone, researchers have never established experimentally that information is transmitted by groups of neurons acting together.

This is one of the basic propositions Dr. Gerstein’s group hopes to verify. Some of the other basic questions they will try to answer are:

—Is there any relationship between several neurons that are close together and the function they perform in the brain? How much of a relationship is there? What is its nature?

—Do assemblies of neurons actually exist? If they do exist, are they fixed in time or do they change? Do the connections between neurons change with time?

Only a small number of laboratories are studying these questions, Dr. Gerstein points out, and such work has only been made recently possible through the development of smaller electrodes, new mathematical techniques and the use of computers.

### *Grants Help Train Students In Museum Field Work*

A \$395,000 Ford Foundation grant to the University for the training of advanced graduate students in archaeological field work at University Museum sites around the world enabled nearly fifty graduate students to participate in projects this last summer and fall.

The grant is the largest of 19 awards announced in a new \$1.5 million archaeological program of the Ford Foundation. Extending over a five-year period, it will allow three groups of students to be sent to sites outside the United States and Canada each year in the spring, summer and fall-winter seasons.

Dr. Froelich W. Rainey, director of the University Museum and professor of anthropology at the University’s Graduate School of Arts and Sciences, said the large award to Pennsylvania is probably based on the scope of its excavation program which is larger than that of any other academic institution in the U.S. or abroad.

Trainees have participated in underwater projects in Cyprus and Turkey, the excavation of the submerged harbor at the site of Halieis in Greece, and excavations in Guatemala, Ireland and Iran.

## Geology Dept. To Test Time-Measuring Method

The Geology Department of the University has received a \$44,992 grant from the Atomic Energy Commission to investigate the applications of what may be the most sensitive time-measuring technique yet developed—the literal tracking of “atomic footprints” through all the existing sands of time.

The project, under the direction of Dr. Henry Faul, chairman of the Geology Department, involves the study of the phenomenon of spontaneous fission of Uranium 238 atoms in natural crystals and glasses. While this phenomenon happens rarely, it does so often enough, and with sufficient force, to make a valuable ‘nuclear clock’ for measuring the ages of the most ancient to the most recent rocks and for tracing the activities of early man as well.

Because of the widespread presence of Uranium, even if in very small amounts, fission-tracking techniques can be applied to almost any crystal or glass.

Thus, a Uranium fission ‘clock’ has distinct advantages over previously used dating methods, including the famous Carbon-14 system which not only destroys the sample, but works only on organic, or previously living materials, up to 50,000 years old.

The smallest particles, such as tiny mica flakes or grains of Zircon which cannot be seen with the naked eye, can be dated by fission-tracking. And the method’s effectiveness in tracing human pre-history has already been demonstrated by a General Electric research team which verified the 2-million-year-old hominid remains in Olduvai Gorge in Tanganyika.

Dr. Faul says his project will concentrate on applying fission-tracking techniques to a suite of rocks of various ages and thermal histories (periods of heating and cooling) to obtain a more perfect understanding of both the system and its limitations.

## New Film Depicts One Day In Life of Penn Campus

“One Day,” a 16-millimeter sound motion picture about the University of Pennsylvania, is now available for showings before University and off-campus audiences. The color film runs 26 minutes and two seconds, and reflects the kaleidoscopic variety of the University’s activities in the course of a typical weekday.

Arrangements for booking the film should be made with Motion Picture Services, 3451 Walnut Street. There is no charge.

## Effort to Measure Income, Production Levels Jointly Sponsored by UN, University

The United Nations and the University began in September a joint project which should fill an important gap in the statistical knowledge of the world economy.

Dr. Irving B. Kravis, professor of economics, is directing an effort to measure income and production levels and the purchasing power of currencies of various nations. These data are needed to accurately plan the allocation of aid to underdeveloped countries, international regional economic integration, and, within a particular country, economic growth.

The University has received a \$350,000 grant from the Ford Foundation to finance the establishment and operation for three years of an “International Price and Income Comparison Unit” to carry

## Computer Model To Aid Artificial Heart Study

Dr. Abraham Noordergraaf of the Moore School of Electrical Engineering has received a \$94,211 grant from the U.S. Public Health Service for research that should be of fundamental importance in the development of an artificial heart.

The grant will provide support for the next step in Dr. Noordergraaf’s development of a computer model of the human circulatory system. When the model is finally completed—in about two years—it may speed up the development of an artificial heart by several years.

Engineers and medical personnel working on the artificial heart will be able to use Dr. Noordergraaf’s model in the same way aeronautical engineers now use computer models of airplanes when they are designing new planes. The model will simulate the action of a real human circulatory system and the designers of the artificial heart will be able to try out different designs without actually building each possible model.

The use of this technique in the aircraft industry has saved millions of dollars and thousands of man-hours and it should have the same effect on the development of the artificial heart.

Dr. Noordergraaf has been working on his computer model for the last three years aided by eight full-time graduate students. He already has a model of the systemic arterial tree and the pulmonary arterial tree. The part of the computer that will simulate the action of the heart is now under construction and the part that will simulate the veins is now being designed.

forward the project. The Unit will operate with the sponsorship of the United Nations and, if the project appears successful at the end of the initial three-year period, the U.N. will assume responsibility for carrying on the work. At that point, the University Unit will be dissolved.

Dr. Kravis said the Unit has been established due to the lack of accurate data on comparative levels of output and income in different countries. “As any traveler knows, the official exchange rates often do not reflect the true relative purchasing powers of different currencies, and thus unknown margins of errors are introduced into the comparison,” he explained.

He pointed out that reasonably accurate comparisons of inter-country differences in production, incomes, and purchasing power of currencies are required for a wide variety of purposes. They are very useful in any effort to understand the process of economic growth and development, and can be also useful for policy purposes at the international and national levels.

“An appreciation of the differences in the level of income is, for example, of importance in the allocation of aid and in judging its efficiency. It is relevant also to international burden-sharing whether for development or military objectives,” he explained.

## Henry Bryans, Life Trustee Honored by LRSM Building

A plaque naming the first floor of the Laboratory for Research on the Structure of Matter for Henry B. Bryans, former president of the Philadelphia Electric Co., was unveiled recently at a special luncheon and dedication ceremony for the LRSM Building.

Mr. Bryans was graduated with a BS in Mechanical Engineering in 1907, and has been a University trustee since 1942 and a life trustee since 1955.

## Board Chairman of Time, Inc. Awarded Wharton Gold Medal

Andrew Heiskell, chairman of the board of directors for Time, Inc. has been accorded the nineteenth Gold Medal Award of Merit from the Wharton School Alumni Society. The Gold Medal has been awarded annually since 1950 “for distinguished leadership in the promotion of public understanding of business” and “personal contribution to the progress of American Business.”

## Vehicle Could Stay Down Indefinitely . . .

(Continued from page 1)

establish the nucleus of an ocean engineering center in this area, a center that could have a very beneficial impact on Pennsylvania's economy."

Dr. Yeh pointed out that although manned vehicles have reached the lowest depths of the ocean—about 36,000 feet—they have been cumbersome vehicles with limited maneuverability; the best maneuverable manned research vehicles—research submarines—can only go down a couple of thousand feet and stay there about twelve hours. The Engineering School hopes to develop a vehicle that can reach 30,000 feet and that can stay down indefinitely and maneuver over large areas.

### University Museum One of Nine Involved In Internship Program

The University Museum is one of nine museums in the country participating in a new Museum Internship program. Sponsored by the National Endowment for the Humanities, the program enables curators of small museums and historical societies to study for a year at large teaching museums. During this period they are to learn techniques of preservation, restoration and display of artifacts entrusted to their institutions.

### Grant of \$2½ Million Awarded to LRSM

The Laboratory for Research on the Structure of Matter has been awarded an additional grant of \$2½ million dollars from the Advanced Research Projects Agency of the Department of Defense. The Laboratory has now received a total of \$19 million from the Agency.

Dr. L. A. Girifalco, director of the laboratory, describes it as an interdisciplinary laboratory that brings together physicists, chemists, metallurgists and engineers, providing them with equipment that can be found in only a few laboratories in the United States.

Some of the research now being conducted at the laboratory includes work on super-conductivity in thin films; research on fundamental constants that should have important implications for electrical standards; research on the structure of organic materials and their interaction with radiation; research on fracture in materials—why do things break?—and even research on biological and dental materials involving both dentists and metallurgists.

Unmanned vehicles will have many practical uses, Dr. Yeh said. "They can be used to explore the bottom of the sea for petroleum and minerals and they can be used to gather information that will be useful if we ever start farming the sea. An unmanned vehicle could follow a school of fish indefinitely, for example."

He points out that unmanned vehicles can probably be used for underwater cargo transportation, too—a technique that should become very important in the future, "because of the advantages in eliminating the wave drag associated with surface craft. And unmanned vehicles could also be used in the search for missing submarines, if we ever have another disaster like the accident that recently destroyed the *Scorpion*," Dr. Yeh explained.

Engineers and scientists at the Towne School are already working in several fields that can be applied to the development of the proposed vehicle, Dr. Yeh said. Towne School investigators have worked on the dynamics and control of unmanned space vehicles, and the Institute for Direct Energy Conversion at the School is working on unconventional power sources, such as fuel cells.

The Towne School also has an international reputation for its work with composite materials, Dr. Yeh said, an important subject when you are designing a vehicle that will have to stand up under huge pressures.

The project will also include studies of the interaction between water and underwater vehicles and structures, an aspect of the problem that will make good use of the Towne School's expertise in Fluid Dynamics.

The Director of the project, Dr. Maurice Brull, is professor and chairman of the Graduate Division of Engineering Mechanics.

Two other senior professors participating in the program besides Dr. Brull are Dr. R. P. Kroon, chairman of the graduate division of mechanical engineering, and Dr. Sidney Shore, chairman of the graduate division of civil engineering.

### Penn Nostalgia Revisited: Glee Club Album Available

The University of Pennsylvania Glee Club has recently recorded an album, entitled *Afterglow*, which includes twelve Penn songs plus additional all-time glee club favorites. The albums are available at a cost of \$4.45 and may be ordered by writing the Musical Activities Office, Irvine Auditorium, University of Pennsylvania, Philadelphia, Pa. 19104.

### Minicar to Cut Down on Pollution, Parking Problems

A preliminary mock-up of "Minicar," a hybrid vehicle aimed at cutting down air pollution, parking problems, and traffic jams, was on view last month in the University's Information Center.

The car is part of the demonstration urban transportation project now being conducted for the U.S. Department of Transportation by an interdisciplinary team of University investigators.

The project is headed by Dr. Manfred Altman, director of the Institute for Direct Energy Conversion. Its goal is to demonstrate the economic, social and technical feasibility of implementing such a vehicle in the congested central business districts of Philadelphia and other major U.S. cities.

Other University units involved in the project include the Electrochemistry Laboratory, the Department of Economics, the Department of City and Regional Planning, the Institute for Environmental Studies, the Department of Civil Engineering and the Management Science Center.

Additional state-of-the-art data on small vehicles, power trains, and hybrid engines (engines that can switch easily from one power source to another) has been furnished by the General Motors Corporation.

The project was initially financed by a \$299,955 grant from the U.S. Department of Housing and Urban Development. According to Dr. Altman, after the switch-over in support from HUD to the Department of Transportation takes place, an operating prototype can be running as early as January, 1969.

### Veterinarians' Conference Set for February 3, 4

The 69th Annual Conference of Veterinarians, sponsored by the School of Veterinary Medicine, will feature sessions for both small and large animal practitioners. The conference will be held February 3 and 4, 1969, at the Bellevue Stratford Hotel, Philadelphia.

On February 3rd, the program will feature aspects of medical and surgical treatment of abdominal problems. The following day's theme will be parasitology. On both days there will be general sessions, as well as special simultaneous sessions on small and large animals.

A dinner on February 3rd will follow the scientific program.

Conference chairman is Dr. Lawrence R. Soma, associate professor of anesthesiology. Program and housing information may be obtained by writing to: Miss Helen Jarrett, assistant to the Dean, School of Veterinary Medicine.

## Human Organ Preservation Object of Research Study

A grant of \$290,989 for continued research in the preservation of human organs has been awarded to the University Hospital by the John A. Hartford foundation of New York City.

Principal investigator in the project is Dr. Herndon B. Lehr, associate professor of plastic surgery, whose ultimate goal is the establishment of transplant banks—similar to blood banks—of human hearts, lungs, kidneys, parathyroid glands and gastrointestinal tracts.

Under a previous John A. Hartford Foundation grant, a University Hospital research team successfully froze and preserved skin, small bowel and parathyroid glands. They also achieved short term preservation of hearts in an organ culture apparatus and believe it will soon be possible to freeze hearts and lungs, preserving them for long periods.

Though efforts in kidney preservation so far have not been successful, Dr. Lehr believes that the acquisition of equipment to permit rapid thawing of large organs will lead to a method for successfully preserving both the kidney and the liver.

Dr. Lehr's work has already enabled the University Hospital to maintain the nation's first skin bank, making skin grafts readily accessible to patients with burns, ulcers or large wounds where healing is a problem.

## Faculty Lounge Dedicated In Fine Arts Building

The new William Cramp Scheetz Faculty Lounge in the Fine Arts Building was dedicated in October. The second-floor lounge is the gift of Mr. and Mrs. William Cramp Scheetz, Jr., of Bryn Mawr and is named in memory of the architect William Cramp Scheetz, who graduated from the University in 1896.

## Credit Union Membership Open to University Staff

For a 25¢ fee, University faculty, staff and their immediate families residing with them, can apply for membership in the University of Pennsylvania Federal Credit Union.

In addition to helping members make regular savings, the Credit Union is a convenient source for obtaining low-interest loans and may even pay dividends up to 6 percent when the income is available.

Those interested in learning more about the Credit Union should visit its office at the rear of 3439 Walnut Street or phone Ext. 8539.

## Center For Ancient History To Develop New Materials For High School Teachers

The University's youthful Center for Ancient History, established in 1967 by a grant from the National Endowment for the Humanities, has received an additional grant of \$19,890 from the Endowment to continue its three-part program. The Center will concentrate its effort on a project to develop new materials and programs for the teaching of ancient history in secondary schools.

Working with representative Philadelphia schools—city, suburban, public and private—several members of the Center are meeting with teachers of various subjects that deal with aspects of the ancient world. The four cooperating schools are Germantown High, Germantown Friends School, LaSalle High School and Abington High, North Campus.

Dr. Michael H. Jameson, director of the Center, said that the goal is to make available to secondary schools the new information and approaches produced by work at the university level. A number of devices, from supplementary reading materials to audio-visual equipment, are being considered as possible teaching aids.

The two other aspects of the Center's work are a doctoral program in ancient history, the first such program in the United States, and a colloquium series. For each presentation, two guests are invited to discuss different aspects of a subject. The theme of this year's colloquia, to begin in the spring semester, will be "The Influence of Ancient Iran."

## Pennsylvania Press to Publish 15 Plays In *MLA Shakespeare Variorum Series*

The University of Pennsylvania Press has been commissioned by the Modern Language Association's Shakespeare Variorum Committee to publish authoritative new texts for fifteen plays.

Seven of the plays have never before appeared in the Variorum series. The contract also calls for publication of six bibliographies to accompany the republication of texts established in the series but currently out of print.

It was Horace Howard Furness who began the Variorum series in Philadelphia and in 1871 published the first play in the Edition, *Romeo and Juliet*. Mr. Furness, followed by his son, continued the editorial work, and twenty volumes were published before the death of Mr. Furness, Jr. in 1930.

Since that time, the department of English at Pennsylvania has played a vital role in the publication of the Vari-

## The University Guarantees \$2½ Million in Mortgages

The University of Pennsylvania has guaranteed approximately \$2½ million in mortgages since 1965 to help its personnel buy and restore homes in the University's West Philadelphia neighborhood.

Set up both to stabilize a declining residential area and to reattract the University's families to the city, the plan has enabled 110 families to buy property, with individual mortgages averaging \$22,720.

Under an agreement with the First Pennsylvania Banking and Trust Company, the University guarantees long-term mortgages at the going rate for qualified personnel, covering up to 100% of the purchase price (as determined by appraisal) plus the cost of necessary repairs and rehabilitation.

Only homes in the area designated as University City—roughly between 32nd and 52nd Streets south of Haverford Avenue—are covered by the plan, and all property must be residential. If the buyer sells his house or ceases to live in it for more than four months without special agreement with the University, the entire mortgage falls due.

Most full-time employees of the University are eligible for the guaranteed mortgage plan after three years' employment, and two categories of personnel may apply immediately on appointment to the University: fully-affiliated, fully-salaried faculty members of assistant professor rank or above and full-time statutory and senior administrative officers.

orum Edition. In 1932, three University of Pennsylvania professors, together with a Yale University professor, first petitioned the Modern Language Association to establish the Shakespeare Variorum Committee to carry on the editorial work.

The MLA has directed the publication of the Variorum since 1933, although the department of English at Pennsylvania has continued to exercise the right to approve the names of editors—a right bestowed on it by the heirs of Horace Howard Furness, Jr. in 1930.

With financial assistance from the American Philosophical Society in 1934 and from the Carnegie Corporation of New York in 1936, and with the cooperation of the J. B. Lippincott Company of Philadelphia and New York, the MLA Variorum Committee has published seven additional volumes.

## Alfred Rieber Receives E. Harris Harbison Award

Dr. Alfred J. Rieber, chairman of the department of history, is one of ten faculty members of U.S. colleges and universities selected by the Danforth Foundation to receive the 1969 E. Harris Harbison Award for Distinguished Teaching.

The national award, named in honor of the late Princeton University history professor and Trustee of the Foundation, seeks to honor teacher-scholars who excel in the art of teaching, in the significance of their scholarly contribution, and in their concern for students as individuals.

Each recipient of the award is provided with a \$10,000 cash grant to use in whatever study or preparation he deems most helpful to his teaching and scholarship, either in his own field or in related areas.

Dr. Rieber, a specialist in modern Russian history, received his BA magna cum laude in 1953 from Colgate University. At Columbia University, he earned his MA and a Certificate from the Russian Institute in 1954 and his Ph.D. in 1959. He joined the University of Pennsylvania faculty in 1965 as professor of history.

Travel fellowships have taken Dr. Rieber to France and the Soviet Union several times. He spent the academic year 1965-66 on a leave of absence in France and the Soviet Union continuing his studies of Russian political history of the nineteenth century.

Dr. Rieber is the author of several books, including *Stalin and the French Communist Party* and *The Politics of Autocracy*. He is now completing a forthcoming book, *Railroad Politics and Modernization*.

## Kimble Methodology Award Given to Dr. Harry Morton

Dr. Harry E. Morton, professor of bacteriology and chief microbiologist at the William Pepper Laboratory of the University Hospital, has been chosen the winner of the 1968 Kimble Methodology Award.

Consisting of a cash prize of \$1,000 and a sterling silver plaque, the award is made annually by the Conference of State and Provincial Public Health Laboratories to give financial and public recognition to outstanding contributions to the development of new and better procedures in the field of public health.

Dr. Morton was honored for contributions to medical technology that include the development of media and techniques for growing Mycoplasma, improved laboratory equipment—such as glass filters and culture tube closures—and visual aids for teaching methodology, such as films and slides.

## APPOINTMENTS:

DR. OTIS H. GREEN, professor of romance languages, has been elected a member of the Board of Trustees of the Hispanic Society of America; Dr. Green has for some years been a corresponding member—and now member—of that organization.

PRESIDENT GAYLORD P. HARNWELL has been reelected Chairman of the West Philadelphia Corporation and was also elected to a three year term as a director. LILLIAN G. BURNS, planner for the Coordinated Planning Office, was elected Secretary.

DR. SAUL GORN, professor of electrical engineering, is currently serving on the Council of the Association of Computing Machinery.

EDMUND N. BACON, visiting lecturer in the Graduate School of Fine Arts, has been named Development Coordinator for the City of Philadelphia; Mr. Bacon is currently Director of the City Planning Commission.

DR. HERMAN P. SCHWAN, professor of electrical engineering, has been named a consultant on Radar Hazards to the U.S. Naval Weapons Laboratory. Dr. Schwan is currently a member of the NIH-National Advisory Radiological Health Council and member of the Board of Directors of the new Biomedical Engineering Society. He has also contributed a book chapter entitled "Microwave Biophysics" for the text *Microwave Power*

## University Council News

November 13, 1968:

● The Steering Committee was authorized to appoint a committee on University City education to examine the magnitude and complexities of the problem, to explore alternative solutions and to make recommendations with respect to these solutions. The committee will include representatives of University residents of the area but will consult frequently with non-university members of the community. An interim report is expected by April.

● The chairman of the Council's ad hoc committee on student membership, Dr. John Brobeck, reported it will recommend that 30 students join the present 85 member Council as full voting members. The 30 would include undergraduates and 16 graduate students, apportioned among the various schools on the basis of one representative for each 600 students, with some minor variations. Representatives would be selected by student organizations in schools where they exist and by election elsewhere.

*Engineering* edited by E. Okress and to be published by the Academic Press.

DR. DANIEL HOFFMAN, professor of English, was appointed to the Supervising Committee of the English Institute during its September meeting at Columbia University.

DR. STEVEN C. BATTERMAN, associate professor of engineering mechanics, was appointed Vice Chairman of The Plasticity Committee of the American Society of Civil Engineers and was also elected to the Executive Committee of the Mechanics Division of the American Society for Engineering Education.

DR. HELEN O. DICKENS, assistant professor of obstetrics and gynecology and head of the Teenage Pregnancy Clinic, was recently appointed President-Elect of the Pan American Medical Women's Alliance. Dr. Dickens was program chairman for their recent 11th Congress held in Philadelphia in October.

## AUTHORS:

DR. ALVIN Z. RUBINSTEIN, professor of political science, is the co-author of *Soviet Works on Southeast Asia* published by the University of Southern California Press. He has also been appointed to be the first Director of the newly established Anspach Institute for Foreign Affairs and Diplomacy.

DR. ROBERT F. EVANS, associate professor of religious thought, is the author of *Four Letters of Pelagius*, just published by the Seabury Press of New York and by A. and C. Black of London.

DR. ROBERT F. LUCID, assistant professor of English, has edited *The Journal of Richard Henry Dana, Jr.* for Harvard Press; the three-volume work is prefaced with a 25-page introduction by Dr. Lucid.

*A Passion for Sicilians: The World Around Danilo Dolci* is the most recent book written by JERRE MANGIONE, professor of English. Based on material that Professor Mangione gathered while in Sicily in 1965 on a Fulbright Research Fellowship, the current book has been published by William Morrow Co.

*Nasal Vowels in Contemporary Standard Polish, An Acoustic-Phonetic Analysis*, written by DR. MARIA ZAGORSKA BROOKS, associate professor of Slavic languages, has been published by Mouton and Co., The Hague.

The book, *Medieval and Renaissance Studies*, containing eight lectures presented at the third session of the Southeastern Institute of Medieval and Renaissance Studies in 1967, has been published by the University of North Carolina Press. In it, DR. ROBERT M. LUMIAN-

(Continued on next page)

SKY, professor of English, analyzes themes in medieval Arthurian literature.

SOL WORTH, associate professor of communications, is the author of two articles, "Navajo Filmmakers" in *The Journal of American Anthropological Association* and "The Development of a Semiotic of Film" in the *International Journal of Semiotics*. Professor Worth is also a consultant to the Division of Medical Communication, Department of Community Medicine, Mt. Sinai Hospital in New York; a member of the Board of Directors of the Flaherty Film Seminars; and a consultant to a project setting up a U.S. National film and ethnic film archive and training institute, sponsored by the National Science Foundation and the Wenner-Gren Foundation.

(It was incorrectly reported in the October issue that "Late Paleozoic and Mesozoic Continental Sedimentation, Northeastern North America" written by Dr. George de Vries Klein was an article; it is a book.)

#### HONORS:

A plan for a memorial in New York City commemorating the Six Million Jewish Martyrs has been designed by LOUIS I. KAHN, Paul Philippe Cret Professor of Architecture, and was on display at the Museum of Modern Art in New York.

#### STAFF APPOINTMENTS:

DOUGLAS C. GEARY has been appointed Senior Development Officer of the University. Geary, a graduate from the University in 1954, served as Associate Director of Medical Development of Pennsylvania from 1964 to 1967. He was Director of Development at William Penn Charter School previous to that and this last year was Director of Development at Germantown Academy.

WILLIAM J. DRYE, JR., has been appointed an assistant comptroller of the University. A graduate of the Wharton School, he has been with the University since 1957 and prior to his recent appointment was assistant to the University's Business Manager.

JAMES E. BEERMANN has been appointed Sponsored Scholarship Officer in the Office of Student Financial Aid. Mr. Beermann, who received his BS from Morningside College in Iowa, comes to the University from Syracuse University where he received an MS in Student Personnel Administration.

Two others have been appointed assistants to the Directors of Financial Aid. These are SUSAN R. CROLL, a 1968 graduate of the College for Women who is currently working toward a MS degree in Student Personnel Services and WILLIAM J. BESTIMT, who received his BA from Hiram College and is now a candidate for the MBA in the Wharton School.

#### TRAVELERS & SPEAKERS:

JOHN HONNOLD, professor of law, gave the opening paper and chaired and participated in panel discussions at the Conference on Comparative Law held at McGill University in Montreal in September. This scholarly setting provided a sharp contrast from the meetings in Chicago in which Professor Honnold had just participated as a McCarthy delegate to the Democratic National Convention.

DR. JOHN W. CARR, professor of electrical engineering, attended the International Federation of Information Processing Societies Congress in Edinburgh, Scotland where he was joint chairman of one of the sessions.

DR. S. D. GOITEIN, professor of Arabic, read a paper at the Congress of Arabists and Islamists in Lisbon and studied Cairo Geniza documents at the libraries of Cambridge, Oxford and the British Museum.

DR. ENOS E. WITMER, associate professor of physics, presented a paper, "Interpretation of Quantum Mechanics and the Future of Physics," at the biennial meeting of the Philosophy of Science Association held in Pittsburgh in October.

#### Community Action Project Descriptions Requested

Those faculty and department chairmen who have not yet forwarded descriptions of the Community Action Projects in which they are engaged are requested to do so as soon as possible.

They should be sent to Mr. Donald K. Angell, Vice President—Assistant to the President, 101 College Hall.

ROBERT LEWIS SHAYON, professor of communications, spent three weeks in major cities of West Germany at the invitation of the German Federal Republic, observing television and radio broadcasting operation; he then went on to observe broadcasting operations in Italy and England. Prior to his European trip, Mr. Shayon spent two days at Syracuse University as Guest Professor of Television. He is currently busy on a new editorial of the "You Are There" radio broadcasts, to be released by Columbia Records, and has accepted an appointment for a three-year term as a member of the Audio-Visual Committee of the National Conference on Social Welfare.

DR. MORTON J. SCHUSSHEIM, professor of city planning, opened the Community Leadership Seminar in Wilkes-Barre with a talk on "Planning Methods and Values." Earlier, he presented a paper on "Housing Goals and Programs" to the Urban Policy Conference of Memphis, Tennessee, conducted by the Brookings Institution.

EUGENE MICHELS, instructor in physical therapy, presented a paper on management of low back problems at the first annual Institute of the California Chapter of the American Physical Therapy Association. Mr. Michels is currently President of the Association.

DR. SAUL GORN, professor of electrical engineering, attended a committee meeting on computer languages at the International Federation of Information Processing Societies which was held in Copenhagen.

DR. ROBERT J. NELSON, professor of romance languages, was Distinguished Scholar in Residence at Queens College of the City University of New York for a week in October where he delivered two public lectures, "French Classicism: A Baroque View" and "Dieu Caché, Dieu Visible: Le Théâtre Classique." In addition, he conducted an undergraduate seminar and one graduate seminar in his field of special interest, the literature and thought of seventeenth-century France, and met informally throughout the week with students, faculty and administrators.

DR. LEONARD NANIS, associate professor of chemical engineering, attended the fall meeting of the Electrochemical Society in Montreal, Canada where he participated in a Symposium devoted to the zinc-silver oxide battery.

DR. DON YODER, graduate chairman of folklore and folklife and associate professor of religious thought, delivered a paper on "Folklife Studies and Local History" before the American Association for State and Local History in Washington, D.C. in September, and a paper on "Sectarian Costume Research in the United States" at the Summer Conference of the American Folklore Society held at Utah State University in Logan. The paper will be published in the conference symposium, *Forms Upon the Frontier*.

DR. JOHN PAUL BRADY, professor of psychiatry, visited a number of psychiatric facilities in London and environs in October and lectured on behavioral approaches to the treatment of psychiatric disorders at Maudsley Hospital and St. Bartholomew Hospital in London and at Cambridge University.

JAMES O. FREEDMAN, associate professor of law, spoke on "The Financial Liability of Welfare Recipients and Their Relatives" at regional conferences of legal services attorneys in New Orleans and in Chicago conducted by the National Institute for Education in Law and Poverty.

DR. IRAJ ZANDI, associate professor of civil engineering, presented a paper on "Viscous Stresses on Turbulent Shear Flow" to the Fifth International Congress on Rheology which was held in

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### Among other things . . .

Kyoto, Japan in October. He also chaired a session on "Theory-Fluid Mechanics." Earlier, in September, he presented a paper to the National Conference on Atmospheric Turbulence of the American Meteorological Society in Boston.

DR. ANTHONY JENSEN, associate professor of physics, attended the Eleventh International Conference on Low Temperature Physics which was held in St. Andrews, Scotland last August. He was later in Prague, Czechoslovakia to attend a Low Temperature Experimental Physics Conference which was cancelled because of the political situation.

Two other members of the department, DR. WALTER SELOVE, professor, and DR. GINO SEGRE, assistant professor, attended the XIVth International Conference on High Energy Physics in Vienna, while a third member, DR. DAVID H. SHARP, assistant professor, attended the Fifth International Conference on Gravitation and Relativity which was held in Tbilisi, Russia.

BRUCE MONTGOMERY, director of musical activities at the University, lectured on "The Composer Looks at Off-Broadway" at the Cheltenham Adult Evening School, "Gilbert and Sullivan, The Satirists" for The Friends of Hebrew University and "The Works of Bela Bartok and Hans Werner Henze" at the Today's Concert Lecture Series of the Philadelphia Orchestra.

DR. J. O'M. BOCKRIS, professor of chemistry, organized the Electrodeposition Symposium at the meeting of the International Committee of Electrochemical Thermodynamics and Kinetics at Detroit. Professor Bockris also gave a plenary lecture at the Electrochemical

Society symposium on "Preparation and Purification of Pure Metals" and addressed the meeting on "The Mechanism of Electrodeposition."

DR. GEORGE T. WOHL, professor of clinical radiology and chairman of the department of radiology at Philadelphia General Hospital, and Dr. William Green read a paper at the annual meeting of the American Roentgen Ray Society in New Orleans dealing with the use of angiography in acute abdominal emergencies.

DR. ROBERT L. PFALTZGRAFF, Jr., assistant professor of political science, in July lectured to Foreign Service Officers at a Seminar on Contemporary Political Sciences at the Foreign Service Institute; in September he presented three additional lectures to mid-career Foreign Service Officers at the Institute. He is the author of two articles, "Ecology and the Political System" which appeared in *American Behavioral Scientist* in its July-August issue and "Britain and The European Community, 1963-67" which appeared in *Orbis*. He is also the co-author of "ELDO and European Technological Collaboration: The Experience of the European Launcher Development Organization" in the September issue of the *Journal of Common Market Studies*.

DR. JOHN R. SENIOR, associate professor of medicine, was invited to address the Flemish Royal Academy of Medicine in Brussels during its 30th anniversary with a lecture "Bile Salt Alterations and the Malabsorption of Fat." During his visit he also presented lectures and seminars in London, Utrecht and Louvain on mechanisms of normal fat absorption, clinical assessment of maldigestion by glyceride output and alterations in small intestinal pyrimidine precursor synthetic activity in celiac disease.

DR. RICHARD KAPLAN, associate in orthopedic surgery, addressed the International College of Surgeons at its 16th Biennial International Congress in Tokyo in October.

JAMES R. TAYLOR, lecturer in communications, supervised a student summer project to teach television to a group of disadvantaged youths from the Youth Development Center (a correctional institute in Philadelphia) in June and August.

DR. CARL C. CHAMBERS, vice president for engineering affairs; DR. NORMAN A. HIXON, assistant vice president for graduate studies for chemical engineering; and DR. STUART W. CHURCHILL, Carl V. S. Patterson Professor of Chemical Engineering, attended the Annual Meeting of Engineers Council for Professional Development in New Orleans, Louisiana.

Earlier, Dr. Churchill and DR. WARREN D. SEIDER, associate professor of chemical engineering, attended the 10th National Heat Transfer Conference of the American Institute of Chemical Engineers and the American Society of Mechanical Engineers, held in Philadelphia. Dr. Churchill was honorary chairman of the Conference, co-author of a paper presented at the meeting and served as chairman of another technical session while a number of graduate students served as session aides.

DR. CELSO-RAMON GARCIA, professor of obstetrics and gynecology, recently participated in the biennial meeting of the Latin-American Association of Investigators in Human Reproduction held in Salvador, Bahia, Brazil. On his return he served as consultant for the Ford Foundation with reference to Family Planning Studies in the Caribbean area, visiting Puerto Rico and Haiti.

*Almanac* is published monthly during the academic year by the University for the information of its faculty and staff.

News items should be sent by the first of the month to:

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