Council Adopts Amendment To Include Student Members

The University Council last month adopted an amendment to its bylaws to include students as full voting members of the Council and its Steering Committee. The amendment calls for the addition of 30 student members, 14 from the undergraduate schools and 16 from the graduate and professional schools. There are currently 85 members on the council including 63 faculty representatives and 22 academic administrative officers.

Two methods for selecting student members are outlined in the amendment. A school with a student organization or government certified by the Vice Provost for Student Affairs as being elected on a democratic constituency-wide basis, shall

Afro-American Studies Committee Appointed

Dr. David R. Goddard, provost, announced last month the appointment of a committee to undertake a comprehensive study of approaches toward the establishment of an academic program which would emphasize African and Afro-American life and culture.

The committee has also been charged with considering the establishment of a black social center.

Dr. Alfred J. Rieber, chairman of the department of history, has been named chairman of the committee.

Serving on the committee will be both faculty members and students, including: William R. Adams, assistant dean of admissions; Dr. Igor Kopytoff, associate professor of anthropology; Dr. F. Hillary Conroy, professor of history; Dr. Samuel Z. Klausner, associate professor of sociology; Dr. Herbert S. Wilf, professor of mathematics; Dr. Robert Rutman, associate professor of biochemical animal biology; Dr. Herbert Spiro, professor of political science; Dr. Philip Rieff, Benjamin Franklin Professor of Sociology; Mr. Philip Fochoda, lecturer in sociology; and the Reverend Allen Happe of the Christian Association.

Student members include Miss Cathy A. Barlow, sophomore in the College for Women; Frederick D. Chandler, freshman (Continued on page 6)

Tuition, Fees Increased; Will Total $2350 Next Year

Tuition and fees will be increased at the University of Pennsylvania beginning with the 1969-70 academic year, Dr. Gaylord P. Harnwell, president of the University, has announced.

The tuition and fees for most full-time students will be increased by $200 for a final total figure of $2350. Rent for University residence halls will also be increased by $100 to make the average room rent $560 per student per year.

In announcing the increases in a letter to parents and students, President Harnwell noted that in spite of record philanthropic support in recent years, University costs are continuing to rise more rapidly than revenues.

He explained that increases were made "only after the most careful consideration of all possible sources of additional income and a searching review of expenditures for the next academic year."

Student aid will be increased to eliminate, as well as the University can, the economic factor as a deterrent to educational opportunity, President Harnwell said.

Model of Circulatory System Being Developed on Computer

The National Heart Institute has awarded Dr. Lysle Peterson and his associates a $2 million grant to continue a computer simulation project that could lead to one of the fundamental medical tools of the near future—a computer model of the human circulatory system that will include the cardiovascular system and the aspects of the nervous system, the kidney system, and the endocrine system that control and regulate the cardiovascular system.

A 60 man team of physiologists, programmers, mathematicians, biologists and clinical experts has been working on the project for six years, supported by grants totaling approximately $3 million. The new grant will support the project for the next five years.

Dr. Peterson, who is a professor of physiology and director of the Bockus Research Institute, points out that heart disease and the other diseases of the cardiovascular system are now the leading cause of death in the United States. In his opinion, cardiovascular disease is essentially a systems disease.

"If we're going to learn how to deal with it, we have to look at the system as a whole," he explained. "The model we're putting together will let us look at all the variables that affect the system and all the complex relationships that affect the way the variables act on each other."

Such a model should lead to new understanding of the functioning of the human circulatory system and could lead to the development of an artificial heart that will react to changes in the environment in the

(Continued on page 2)
Antiques Show Will Feature Silver Made by 34 Philadelphia Craftsmen

Over 100 pieces of silver made by 34 Philadelphia silversmiths will be specially displayed at the 1969 University Hospital Antiques Show this month.

The silver, made between the closing years of the 17th century and the early years of the 19th century, has been lent by private collectors and is not usually on view to the public.

The eighth annual Antiques Show will open at 12 noon Tuesday, April 22 and will run through April 26 at the 103rd Engineers' Armory, 33rd and Lancaster Avenue.

In addition to the silver display, visitors will view a wide range of furniture, china, glassware, and other decorative items as they walk the shopped "streets" of the Show that are named for famous colonial Philadelphia craftsmen.

The Antiques Show is held for the benefit of the Hospital of the University of Pennsylvania by the Hospital's Board of Women Visitors. Fifty-four of the country's leading antiques dealers will display antiques for sale.

Visitors to the Show may make advance reservations for several special events, the first being a Preview Dinner on Monday evening prior to the Show's official opening the following day.

On Wednesday, an illustrated lecture on "The Elegance of Philadelphia Silver" will be given by Mrs. Thomas J. Curtin, a descendant of silversmith Joseph Richard-son, Jr., an expert silversmith herself and assistant professor of occupational therapy and acting chairman of that department at the University's School of Allied Medical Professions. The lecture will begin at 10:30 a.m. at the Drexel Institute Activities Center, 3210 Chestnut Street, with chartered buses transporting the audience to the Show afterwards. A $5.00 charge for the lecture includes admission to the Show.

Supper at the Show will be held Thursday with many selected pieces of country furniture being placed on sale for the first time. The $7.50 charge that evening includes admission and the supper. The country furniture sale will continue on Friday and Saturday.

The Old Philadelphia Bus Tours this year will take in three restored colonial residences and one in Victorian style in the Society Hill and Washington Square sections of town. The tours, conducted by specially trained guides, will begin at 10:15 a.m. on Thursday and Friday. The $5.00 charge includes admission to the Show.

Inquiries about special events may be made by calling the following number: CA 4-4969 (Area Code 215). Reservations, including checks, should be mailed to: Mrs. Leon H. Collins, 1236 Arwyn Lane, Gladwyne, Pa. 19035. Checks should be made payable to "University Hospital Antiques Show."

Arrangements may also be made for tours to visit the Show and attend special events, and meetings room are also available.

The Show will be open daily from 12 noon to 10 p.m. and from 10 a.m. until 3 p.m. on April 26. Admission is $2.50 daily. A snack bar will be open; in addition, luncheon will be served April 22 through 25 from noon to 2 p.m. The cost is $3.00 per person and advance reservations are advisable.

Development of Artificial Heart Could Result

(Continued from page 1)

same way the real heart reacts.

The model Dr. Peterson's team is developing will not be a physical mockup of the circulatory system of course. Like all computer models, it will be a mathematical description of the system and will have many uses when it is completed—including some that can't be predicted in advance.

Investigators will be able to conduct experiments in which they can change many variables in the system and see what effects the changes have on other parts of the system. They will be able to test theories, for example, that might take years to test if they had to work experimentally with human beings. Or they will be able to manipulate variables that can't be manipulated at all when you're dealing with humans. Or they may discover relationships they would have missed without the model, and discover unexpected aspects of the system that can be used to control cardiovascular diseases.

Complex as the project is, physiologists are already thinking about a computer simulation project that will be even more complicated. Dr. Peterson recently chaired a conference at Woods Hole, Mass., in which participants attempted to predict the effects long term space flights will have on human beings.

This is an important problem for NASA which is interested in the effects of trips lasting a thousand days or more. And the solution that looks most practical at present is a computer simulation that will include every aspect of the human body that could be affected by such a trip. The University City Science Center, of which Dr. Peterson is Executive Vice President, is now making a preliminary study of this project.

Dr. Peterson's group still has many problems ahead of it. The development of more precise instruments is one problem, and the development of the computer programs the project requires is another.

And the researchers still need more information about aspects of the system such as the behavior of the walls of the blood vessels. Most cardiovascular diseases are diseases of the blood vessels, not the heart muscle, Dr. Peterson points out; heart attacks usually begin in the blood vessels that supply the heart, and his group needs more information about important problems such as the movement of salts in and out of the blood vessel walls.

Other faculty working with Dr. Peterson include Dr. George Karreman, associate professor of physiology; Dr. George D. Webster, associate professor of medicine; Dr. Grace Fischer, associate professor of physiology; Dr. Allan Jones, research associate in physiology; Dr. Robert Cox, research associate in physiology; Dr. Roger Backshaw, associate professor of physiology; and Mr. Charles Cross, electrical engineer, Bockus Research Institute.
Students to be on Council ...
(Continued from page 1)

Duplicating Service Available
In Houston Hall Basement

As part of its responsibility of serving the campus community, Houston Hall has recently opened a Duplicating Service in the west end of its basement.

In addition to general use mimeograph and sign press machines, a 2400 Xerox copying machine with sorter is available.

Fees for having individual or departmental work done on the Xerox copying machine are five cents for the first five copies of each original and three cents for all copies of an original after the first five.

University departments may charge work done by the Houston Hall Duplicating Service by indicating the office and the budget number to be billed on a monthly basis.

The Duplicating Service is open Monday through Friday from 10 a.m. to 10 p.m.; Saturday from 1 p.m. to 5 p.m.; and Sunday from 1 p.m. to 10 p.m.

Job-Hunting Business Graduates
Also Look at City Around Them

College graduates weighing a career in Greater Philadelphia are asking tough questions about such matters as good public schooling for their children, decent housing at the right prices, safe streets, unpolluted air, good transportation and salaries on a level with other major cities, reports Dr. Edward B. Shils, professor and acting chairman of the industry department.

Speaking before members of the Greater Philadelphia Chamber of Commerce, Dr. Shils catalogued the career demands of MBA's, BA's in business and other college graduates outlined in a recent questionnaire circulated among his students.

Minimum traffic congestion, a wholesome environment for their families, good civic leadership, a reasonably equitable system of taxation, sound municipal services and long-range municipal planning are also high among the priorities of career seekers, he explained.

"They don't want to settle for a job in an old decaying city," Dr. Shils said. "They want employment in a fresh and new environment where citizens can look optimistically to the future. The obvious culture of the city, its art, music, entertainment, and the presence of intellectual stimulation are all on the priority list."

He noted that students are seeking positions with firms aware of their responsibility to the public, firms that are socially conscious, and pointed out that students are particularly interested in those larger corporations which employ urban affairs specialists.

He also explained that today's most brilliant students are shying away from communities where there is an overemphasis on a highly structured social environment or too much "establishment."

"They want to work in areas," he said, "where the city fathers and the business leaders look to change for the better."

The products of graduate schools of business today are well trained in decision making, Dr. Shils said. Hence they want to have an opportunity to do this early on the new job.

"They will not go along," he said, "with old-line conservative judgments based on intuition and 'seat of the pants' estimates." In some cities, it takes seven years to reach a decision-making job—in others only three to four. If Philadelphia is judged by college graduates to be a seven-year city, it will not attract the best talent," he declared.

Young business graduates are not interested only in business, Dr. Shils said. Unless corporations are geared to provide sound social objectives, many graduates will go into government, education, hospitals and non-profit institutional administration.

"And if they do go to work for business and industry," Dr. Shils said, "they don't want to work in cities which specialize in branch offices. They are interested in working in cities where the corporation headquarters are usually located. They want to be where the action is and where the important decisions are made."

Dr. Shils also noted that some cities have a reputation of providing the university graduate with a salary based on local markets rather than the national market. He explained that these young men stay away from this type of constraint. "They want to work at salaries which are competitive on a national basis," he said, "and believe that is most possible in New York, Chicago and on the West Coast. If a young man decides to move to another city, he wants to make sure that his prior salary does not work against him in future employment."

Dr. Shils reported that to his knowledge over 60 percent of the top MBA's go to work for large corporations for their initial experience. About 30 percent join medium-size companies and about 10 percent choose small businesses or small organizations. A number, he said, choose the large corporations first to gain sophisticated business experience, planning to move later to a small firm or to start their own business.

Philip Mechem Dead at 76;
Law Professor and Author

Philip Mechem, emeritus professor of law at the University of Pennsylvania Law School, died March 5 at the age of 76. The author of several texts on the law of agency, property and decedents' estates and two mystery novels, Mr. Mechem joined the faculty of the Law School as a professor in 1948 and retired in 1963. He had served as President of the Association of American Law Schools in 1957.

"He will be remembered by hundreds of lawyers who had been his students as an outstandingly effective teacher whose delightful humor enlivened the educational effort," said Jefferson B. Fordham, dean of the school.
Computers Recreate Egyptian Temple Which Disappeared 33 Centuries Ago

Scholars are successfully using electronic computers to recreate visually an Egyptian temple that disappeared more than 33 centuries ago, reports Dr. F. E. R. Rainey, director of the University Museum.

The temple once was part of a complex of public buildings at Thebes (modern Karnak), ancient capital of the Egyptian empire. It was built during the w. years of his brief reign by King Akhenaten, who ruled Egypt with his Queen Neferiti from 1367 to 1350 B.C.

The temple is now a collection of over 30,000 "scattered and scribbled" pieces discovered over the years in the foundations and inner parts of other ancient structures. Photographs of each piece are being matched and reassembled with the aid of computers in the IBM service center at Cairo.

Dr. Rainey said the Department of Antiquities of the United Arab Republic, Egyptian and American scholars and technicians, the International Business Machines Corporation and the Museum jointly are participating in the project, supported by a grant of counterpart funds from the Smithsonian Institution.

The reassembling of photographs will not only help to reconstruct visually one of history's great structural achievements but it should be able to shed more light on a dramatic, but little known, period of Egyptian history. By matching up thousands of fragmented inscriptions to form complete texts and showing paintings and relief sculpture whole and in proper juxtaposition, some of the obscurity and conjecture surrounding this period should be removed. Accurate drawings and three-dimensional models will also be possible.

Akhenaten, often deemed to be the founder of Monotheism, precipitated a religious upheaval when he replaced worship of a pantheon of gods, dominated by Amun, the god of empire, with a single deity, Aten, representing the sun disc. Following Akhenaten's death, his religious reformation was overthrown. Amun and the legion of other deities were restored and, probably in reprisal, the great temples built by Akhenaten to Aten were demolished.

Unlike almost all ancient Egyptian structures, the Aten Temple in Thebes had been built of small sandstone blocks of uniform size—2 feet wide, 10 inches high. A laborer could carry a single block unassisted. This mobility may have led Akhenaten's successors to reuse the blocks in nearby structures either as foundations of columns or as stuffing inside massive pylon walls.

Twenty-five thousand blocks have thus far been photographed, and all of the data on the blocks have been computer-processed. The matching up of the photographs is now well under way. Portions of offering scenes, chariots drawn by horses in full gallop, and historically important hieroglyph inscriptions already number in the hundreds.

Book on Folk Culture Heads New Publications

The factors, history and complexity of material folk culture of the United States—from household articles to farm implements—are examined in a new book just published by the University of Pennsylvania Press, Pattern in the Material Folk Culture of the Eastern United States.

Written by Henry Glassie, state folklorist of Pennsylvania and director of the Ethnic Culture Survey of the Pennsylvania Historical and Museum Commission, the book launches a new series for the Press on monographs in folklore and folklife. General Editor of the series is Dr. Kenneth S. Goldstein, associate professor of folklore and folklife. Associate editors are Dr. Dan Ben-Amos, assistant professor of folklore and folklife; Dr. Tristram Potter Coffin, professor of English; Dr. Dell Hymes, professor of anthropology; and Dr. Don Yoder, associate professor of religious thought and graduate group chairman of folklore and folklife.

Other books published by the Press this semester include:

—The Publishing Experience by Cass Canfield, based on two lectures he gave at the University as an A.S.W. Rosenbach Fellow in Bibliography.
—Inquiry and Testament by George C. Averys, a study of the novels and short prose of Robert Walsor;
—The Russian Image of Goethe by

Density of Matter Related To Quasar Red-Shifts

The way in which light from quasars is shifted towards the red end of the spectrum may be an indication of the extent to which matter is compressed in the center of quasars, suggests Dr. Sidney A. Bludman, professor of physics and a colleague of his, Dr. M. A. Ruderman of New York University, in an issue of Physical Review.

Their calculations were carried out at Imperial College in London where they have recently been on leave of absence from their own universities.

Quasars are cosmic radio sources that look like stars but produce energy at an enormous rate. They have puzzled astronomers ever since they were discovered about seven years ago because no one is sure exactly what they are.

One of the many puzzling aspects about quasars has been the way in which their light shifts toward the red end of the spectrum. Some view this shift as an indication that quasars are receding from us at a very high velocity; others, that it is a gravitational effect which results from their highly compressed state.

Dr. Bludman and Ruderman have calculated what happens at pressures so great that the electrons and positive nuclei making up matter are squashed together.

For one thing, they say it is conceivable that the speed of sound in such exceedingly dense matter is greater than the speed of light in vacuum. They also say that pressures high enough to make matter behave in this way are likely to be found only inside really dense stars, such as the hypothetical neutron stars.

For several reasons, physicists have so far doubted that matter could behave in this way.

However, the two scientists have been able to work out the maximum red-shift to be expected from stars containing such exceedingly dense materials; their calculations are strangely similar to those red-shifts now measured in quasars.

The two men claim this lends some support to the view that quasar red-shifts are in fact a gravitational effect caused by the density of the objects. As yet, however, physicists are only beginning to work on the properties of matter at high densities and it is unlikely that the new calculations will be accepted without a great deal of discussion.
Submicroscopic Processes in Living Cells Studied

Two biologists at the University are studying the chemistry and genetics of the living cell with a newly developed polarized light microscope that has several unique advantages: It can be used to observe structures that can normally be studied only with the electron microscope—and it can be used to observe cells that are still alive and functioning.

Dr. Shinya Inoue, professor of biology, and Dr. Hidemi Sato, associate professor of biology, recently received an additional $54,000 grant from the United States Public Health Service to continue their work for another year.

"The important thing about our approach," Dr. Inoue said in discussing the new grant, "is that we can study cells without slicing them up, chopping them up, mashing them, or damaging them in other ways. When you study the molecular structure of the cell with an electron microscope, for example, the cell has to be sliced into thin sections and fixed in a special material so the section will be rigid enough to handle. With the techniques we use, we can study living, undamaged cells. We can watch many submicroscopic processes while they are actually happening."

MICROSCOPE DEVELOPED

Dr. Inoue's specialty is the development and use of new biophysical approaches to the analysis of the fine structure of the living cell. One of his main tools is a polarized light microscope he has been developing since the early 1950's.

The polarized light microscope is based on a principle that is used in other fields in which researchers want to study the atomic and molecular structure of matter. The arrangement of the atoms in a crystal can be observed, for example, by studying them under a polarized light microscope. The polarized light microscope has several advantages over the electron microscope:

- It can be used to observe living cells;
- It can provide more detailed information about the structure of the cell;
- It can be used to study molecules that are too small to be observed with an electron microscope.

Photos of "The Black City"
On View In Fine Arts Library

"The Black City," an exhibition of photographs by Gerald Goode, is now on display at the Fine Arts Library of the University.

The work will remain on view through May 2, open to the public daily from 9 a.m. to 5 p.m., Saturdays from 12 noon to 5, and Sundays from 3 p.m. to 8 p.m. The Library is in the Furness Building, on South 34th Street between Walnut and Spruce Streets.

Goode, a 25-year-old graduate student in city planning at the University, uses photography "to develop certain ideas about urban problems today," he said. He concentrates on people in the city, with subject matter ranging from anonymous children of the ghetto to familiar figures in the news, like Ralph Abernathy and Dick Gregory.

The young photographer is a native Philadelphian who was graduated from Germantown High School in 1962, then worked as a free-lance draftsman for several years before enrolling in college. molecules make them up? How do they react to changes in temperature and pressure and in the chemistry of their environment? What controls the alignment of the spindle molecules?

MOLECULAR CONFIGURATION MAPPED

In 1964 Dr. Inoue and Dr. Sato used the polarized light microscope to map the molecular configuration of the chromosomes in an insect sperm. Calculations were made based on observations with the polarized light microscope and the calculations were then used to produce a diagram that shows the shape of each chromosome, its length, and where it begins and ends.

"We made detailed diagrams of three sperms," Dr. Inoue says, "at three months per diagram. And the results surprised us. In all three samples, the chromosomes are in the same place. The chromosomes are not arranged randomly in the sperm. Each chromosome has a place and each chromosome knows its place—a fact that could influence some of our basic ideas about how chromosomes interact."

This result will have to be checked with other techniques, Dr. Inoue says. He wants to make sure the patterns on his diagrams really are chromosomes. But even here the polarized light microscope can play an important role.

The sperm can be observed, for example, under an electron. But how can you tell if the cells have been significantly altered while they were being prepared for observation under the electron microscope? Answer: Observe them with the polarized light microscope while they're being prepared.

FUTURE RESEARCH OUTLINED

As an example of possible future research Dr. Inoue mentions a plan to put a radioactive tag on the X chromosome of the same sperm. The X chromosome is one of the two chromosomes that determine sex—and it is known that in this case it is the last chromosome formed when a sperm is manufactured. The DNA that makes up the chromosome is manufactured from another chemical and a sample of this other chemical can be treated so it is radioactive and introduced just before the X chromosome is formed.

The X chromosome will then show up as a dark spot when the sperm is photographed. And the researchers will know the exact shape and location of a particular—and very important—chromosome.

Such basic questions as How do cells move? and How are the DNA molecules (the genes) lined up in the chromosomes? are also being studied in the laboratory.
Volcanic Ash Bed Dating Could Result In Absolute Geologic Chronology

University geologists have begun a massive chronological analysis of volcanic sediments in the Sangre de Cristo mountains near Santa Fe, New Mexico, which should bring the evolutionary picture into sharper focus.

According to Dr. Henry Faul, chairman of the Geology Department, the sandstone beds of the Santa Fe group are the source of the largest collection of vertebrate fossils ever assembled. Gathered over more than 20 years by the Frick Laboratory of the American Museum of Natural History in New York, the collection is the basis of fundamental studies in vertebrate evolution. Interbedded with the sandstones are beds of ash deposited by volcanic eruptions; such ash can be accurately dated.

From mid-Miocene through Pliocene time (about 8 million to 16 million years ago), extinct horses, camels, rhinos, and deer, as well as an abundance of animals which have no living relatives, lived in the Santa Fe region. The era was a period of great mammal development, especially in the adaptation of grazing animals to their environment.

"If we were able to determine accurately the dates of the volcanic ash beds found in the Santa Fe group," says Dr. Faul, "we would have the possibility of a precise time control over geologic chronology based upon a rock-stratigraphic method."

Since many hundreds of North American mammals have already been tied to this framework, he notes, and the sequence of the beds themselves is well known, careful radiometric dating of selected ash beds could lead to an absolute chronology; geologists would have a valuable tool for determining not only when evolutionary changes occurred, but at what rate they took place.

They could observe, for instance changes in teeth or limbs, or even brain size as animals adapted themselves to their environment over many millions of years. Such an absolute chronology would also add new dimensions to relative chronologies used elsewhere in the world, Dr. Faul says.

A variety of dating techniques will be applied to the volcanic ash, including potassium analysis by atomic absorption spectrophotometry and argon determination by the isotope dilution method.

Dr. Faul is an authority on nuclear dating and has been working on geological age determination for many years. He is now setting up a new age laboratory at the University. The three-year project will be carried out with the aid of a $70,679 grant from the National Science Foundation.

Lysosomes May Be Culprits In Cholesterol Buildup

Why do cholesterol and other fats collect inside the walls of arteries, eventually causing various types of atherosclerosis? How can this fateful buildup of fat that kills more than 500,000 Americans every year be reversed or prevented?

A research team at the School of Medicine has recently found some clues to this problem and are now seeking both the biochemical malfunction that is involved and chemicals that will destroy the fatty deposits or prevent their buildup. This promising study will be continued during the next three years under a $124,434 grant to the University from the John A. Hartford Foundation, Inc.

Dr. Benjamin F. Miller, associate professor of surgical research and a member of the Harrison Department of Surgical Research, is director of the research project. He has done extensive atherosclerosis research in the last decade and during the past year has found evidence that lysosomes may be the culprits in cholesterol buildup.

Lysosomes are minute bodies within cells that contain enzymes which perform the excretory and digestive functions of the cells by converting large molecules into small, soluble substances that can be easily dispersed by the body. Dr. Miller has discovered for the first time the presence of the enzyme cholesterol ester hydrolase, a lysosome. This enzyme is known to break down some cholesterol compounds. (Recently, an investigator in California has found an enzyme in lysosomes that breaks down neutral [ordinary] fats.)

Dr. Miller's theory is that cholesterol buildup takes place when lysosomes function at a faulty level. He is also searching for chemicals that may stabilize the lysosomes and keep them functioning normally.

He points out that as more and more cholesterol and other fats accumulate in the arteries, they form masses called plaques. When these plaques accumulate in the coronary arteries, the result is angina pectoris. The plaques can damage the smooth wall of the artery, producing blood clots that lead to coronary occlusion. They also can weaken the artery wall so it "balloons" into an aneurysm.

Commission Gives Its $75,000 To Renewal Housing, Inc.

The Quadripartite Commission has decided to turn over its initial allocation of $75,000 to Renewal Housing, Inc. in order to set up a "social and physical planning unit."

(Renewal Housing, Inc. had been designated as representative of community interests during the February sit-in.)

The planning unit project and the University's further construction plans in the Area III are currently under discussion by the Commission.

At its March 10 meeting, the Commission elected its officers. These are chairman, Lawrence Goldfarb, assistant professor of city planning; co-chairman, L. Lorenzo Graham, president of Renewal Housing, Inc.; and secretary, Cathy Barlow, sophomore in the College for Women.

Community members of the Commission are Andrew Jenkins, president of the Mantua Community Planners; the Rev. Edward Sims, executive director of the Volunteer Community Resources Council; Herman Wrice, president of the Young Great Society; and W. Goode, president of the Paschall Betterment League. William Juley, Mantua business man affiliated with the Young Great Society, has been named alternate.

The names of faculty, students and trustee representatives appeared in the March issue of Almanac.

Afro-American Studies . . .

(Continued from page 1) in the College of Arts and Sciences; Ira Harkavy, junior in the College; Miss Gaynell Y. Oubre, freshman in the College for Women; Miss Barbara Z. Perman, sophomore in the College for Women; Clayton R. Ramey, sophomore in the College; and Miss Mercedes Sherrod, freshman in the College for Women.

Books . . .

(Continued from page 4)

—On Haplology in Indo-European by George Cordona, investigates a problem of Sanskrit grammar and is the first publication in the new Haney Foundation series.

—Phineas Bond by Joanne Loewen Neel, studies Anglo-American relations during the Revolutionary war period through the person of Bond who was a Loyalist, winner of the Allan Nevis Prize of the Society of American Historians.

—The Korean War and American Politics: The Republican Party as a Case Study by Ronald J. Caridi, discusses the shaping of American foreign policy by partisan politics.
University Receives Grants Amounting to $71,500

The University of Pennsylvania has received two grants totaling $20,000 from the Esso Education Foundation. The contribution includes $15,000 as the third of five installments of a $75,000 pledge for the Development Program and $5,000 for the Public Finance Center of the Wharton School of Finance and Commerce.

The University is one of 300 education institutions receiving Esso grants totaling $2.7 million for the current academic year.

An unrestricted grant of $5,000 from the American Oil Foundation has also been received for use in the University's capital building program or for any other educational purpose.

The funds are part of more than $2.3 million awarded to 155 colleges and universities around the country in Du Pont's annual aid-to-education program. The money is intended to shore up areas of graduate education affected by recent Federal grant restrictions and cutbacks.

Those University departments receiving funds include Chemistry ($20,000), Physics ($10,000), Chemical Engineering ($7,500), and Biochemistry ($5,500). In addition, a $4,000 graduate fellowship was awarded to assist gifted students with undergraduate degrees in science and engineering in obtaining a master's degree in business administration.

The money will be used by the department for graduate fellowships, financial aid to undergraduates, equipment purchases, and summer grants to promising young faculty members.

Dr. Haviland, 72, Dead; Served University 48 Years

Dr. Thomas P. Haviland, emeritus associate professor of English at the University, died March 2 following an illness. He was 72.

Dr. Haviland served the University for 48 years, retiring in 1967. He received the A.B. degree from the University in 1919 at which time he joined the faculty, and the Ph.D. in 1928. His special interests were American literature, poetry and creative writing.

Among other things . . .

APPOINTMENTS:

A. Leo Levin, professor of law and former vice provost for student affairs, will assume the newly-created position of Vice President for Academic Affairs at Yeshiva University, effective July 1. He will be responsible for the day-to-day functioning of the university including faculty and the operation of educational programs and will, in addition, be concerned with academic planning ranging through the undergraduate, graduate and professional faculties including the Albert Einstein College of Medicine, Ferkag School of Humanities and Social Sciences and the Stern College for Women.

Dr. Peter D. Edmonds, associate professor of electrical engineering, has been reappointed Chairman-Treasurer of the IEEE Group on Engineering in Medicine and Biology for 1969; in addition, he served on the local conference committee for a national meeting of the Acoustical Society of America held last week in Philadelphia.

AUTHORS:

Dr. Robert L. Pfaltzgraff, Jr., assistant professor of political science, is editor of the book Politics and the International System just published by J. B. Lippincott Company. Dr. Pfaltzgraff has also been busy giving a series of lectures in seminars on Contemporary Political Analysis and International Relations Theory for mid-career Foreign Services Officers at the Foreign Service Institute in Washington, D. C.

Dr. Ralph Showers, professor of electrical engineering, was a member of a committee which prepared the report published by the Joint Technical Advisory Committee of the IEEE entitled, "Spectrum Engineering-The Key to Progress, a Report on Technical Policies and Procedures Recommended for Increased Spectrum Utilization." The report was the result of four years of study by many technical experts in telecommunications and was undertaken in response to a request from the White House.

HONORS:

Dr. Wilton M. Kroogman, chairman and professor of physical anthropology and director of the Philadelphia Center for Research in Child Growth, will receive the annual Ketcham Award for basic science (craniofacial growth) research in orthodontics later this month during the meeting of the American Association of Orthodontists to be held in Miami.

The Council on Social Work Education during the annual meeting of its House of Delegates held in Cleveland last January passed a resolution in memory of the late Dr. Roland J. Artigues, professor of social work, expressing the high regard in which he was held by the social work profession. In their resolution the Council cited his work, noting that it had "left a lasting impression and helped to confirm Dr. Artigues' compassion and intellectual concern throughout his academic career and had led him to direct primary attention and most of his energy to social welfare legislation and the social welfare system as social work educator, social worker and social critic."

TRAVELERS & SPEAKERS:

Dr. Russell P. Sebold, chairman and professor of romance languages, has been asked to read one of the plenary papers at the Spring Conference of the Society on the Ibero-American Enlightenment to be held at the University of Illinois on May 9th and 10th. The title of the paper will be "The Influence of the philosophy of the Enlightenment on the emergence of Spanish Romanticism."

Dr. Sebold has also been asked to preside over one of the Spanish literature sections at the Kentucky Foreign Languages Conference this spring. The topics for this section are largely in the area of 18th and 19th century Spanish literature.

Dr. Stanley Baum, associate professor of radiology, was visiting professor of

(Continued on next page)
Among other things . . .

radiology last month at M.D. Anderson Hospital in Houston where he gave lectures on the role of angiography in the detection of gastrointestinal hemorrhage. Prior to that visit he was also visiting professor and guest of the Department of Radiology of Harvard Medical School where he lectured on various aspects of cardiovascular radiology.

Earlier in the semester, Dr. Baum participated as a guest faculty member in a Symposium on Controversies in Angiography sponsored by The Cleveland Clinic Foundation and was visiting professor at the State University of New York in Syracuse.

DR. NOAH S. PYYVES, professor of electrical engineering, recently participated in the Council Meeting of the International Technical Cooperation Centre in Israel which is planning a World Congress to be conducted in Israel in June of 1970.

ROBERT B. MITCHELL, director of the Center for Urban Research and Experiment and professor of city planning, last month attended a conference in Mexico City sponsored by the Organization of American States, World Bank, the United Nations and AID together with the Ford and Rockefeller Foundations. The purpose of the meeting was to discuss a common strategy on financing of urban education and research in Latin America. Later in the month he attended a meeting for the Directors of Urban Centers at Wayne State University in Detroit and in February, served on a panel of the National Academy of Science meeting in Washington, D.C. to evaluate applicants in the Academy of Science meeting in Washington, D.C. to evaluate applicants in the Graduate Fellowship Program of the National Academy of Science.

BRITTON HARRIS, professor of city and regional planning, last month addressed the Graduate School of the University of Southern California on “The New Technologies and Urban Planning” and has been invited by the University of London to deliver a course of Special University Lectures in May.

At the 15th annual meeting of the Orthopaedic Research Society of the American Academy of Orthopaedic Surgeons held in New York City, Dr. Carl Bright, assistant professor of orthopaedic surgery, presented a paper on “In Vitro Epiphysial Plate Growth Under Various Oxygen Tensions.” Dr. Marvin Steinberg, assistant professor of orthopaedic surgery, presented a paper on “Thyroidcalcinin in Osteoporosis of Disease.”

DR. A. K. JOSHI, associate professor of electrical engineering, was invited to give a talk to the Washington Linguistics Club at the George Washington University, on the topic of “Formal Grammars and Their Relevance to Language Structure.”

DR. PAUL J. KORSHIN, assistant professor of English, attended a conference called “The Dictionary and Literary Studies” held by the Department of English at the University of California at Riverside in January, where he read a paper entitled “Johnson and the Renaissance Dictionary.” More recently, at a small Colloquium held by the University’s English Department, Dr. Korshin gave a talk on “Swift and Typological Method in A Tale of a Tub.”

DR. STUART W. CHURCHILL, Carl V. S. Patterson Professor of Chemical Engineering, in February gave a lecture on “To Compute or Not to Compute,” as part of the Distinguished Series of Lectures in Chemical Engineering Frontiers sponsored by the Dow Chemical Company. He later read a paper, “Mixing in the Inlet Region of a Reactor,” (co-authored by Dr. Warren D. Seider, assistant professor of chemical engineering) at the one-day meeting of the Twin City Section of the American Institute of Chemical Engineers.

DR. ARIE L. LOY, assistant professor of Arabic, in January was member of a TV symposium on the Arabic-Israeli conflict in the Middle East. Earlier, he was chairman of the Committee on Islamic Egypt at the annual meeting of the American Research Center in Egypt held at the University late last term and presented a paper on “Secular Poetry of Egypt under the Ayyubids.”

DR. KENNETH R. ATKINS, professor of physics, lectured at Wabash College in Crawfordsville, Indiana last month under the auspices of the American Association of Physics Teachers and the American Institute of Physics as part of a broad, nationwide program to stimulate interest in physics. The program is now in its twelfth year and is supported by the National Science Foundation. In addition to lecturing, Dr. Atkins assisted faculty members and students with curriculum and research problems and met informally with both students and faculty.

DR. GEORGE N. STEIN, clinical professor of radiology, last month gave a talk on “Radiological Approach” as part of the Symposium on Management of Gastrointestinal Hemorrhage presented by the Academy of Medicine of New Jersey at the Muhlenberg Hospital in Plainsfield, New Jersey.

DR. MANFRED ALTMAN, professor of mechanical engineering, presented a paper entitled “The Minicar Mass Transit System” at the Carnegie Mellon Institute in Pittsburgh recently. He later addressed a group from the Philadelphia Gas Works on “Philosophy; the Missing Link in Transportation Planning.”