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UNIVERSITY OF PENNSYLVANIA

Almanac

Trustees Approve Concepts Of Unit 3 Land Use Plan

In response to a proposal by the Quadripartite Commission on University-Community Development, the Executive Board of the Trustees has passed the following resolution which "approves in principle of the concept" of mixed residential-commercial land use, and assigns administrative officers to initiate discussions with those involved in Urban Renewal Unit Three north of the campus:

WHEREAS the Quadripartite Commission sponsored a planning charrette which was conducted by The Young Great Society Architecture and Planning Center and which was concerned with reviewing the land use plan currently approved for Unit III; and

WHEREAS the results of the charrette suggest an alternate plan which includes a different mixture of residential and institutional land uses; and

WHEREAS the Commission has approved the concept underlying the proposed alternate plan and has urged the Administration and the Trustees to use their best efforts to implement some form of land use in Area III which would recognize the concept advocated by the planning charrette: Therefore be it

RESOLVED, That the Executive Board of the Trustees acknowledge with appreciation the recommendations of the Quadripartite Commission and the receipt of the report, noting that the University, as such, is not a redeveloper in Unit III, and responds as follows:

In consonance with the University desire to be a good neighbor to both the community and its neighboring and associated institutions:

1. The Executive Board approves in principle of the concept of including residential and necessary associated facilities (shopping, schools, medical care, employment opportunities, etc.) in redevelopment proposals where the primary thrust is institutional expansion;

2. The members of the Executive Board as such profess no competence to adjudge the merits of the particular plan proposed

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War Not Condemned by Council, Peace Monument Is Endorsed

The University Council at its regular meeting November 12, defeated by a vote of 51 to 28 a motion that would have condemned further American participation in the war in Vietnam. This motion also would have rejected any University cooperation with the war effort, opposed the spread of militarism in American society and prevented its intrusion within the University.

In a related action, the Council approved circulation of a statement which members could sign, on an individual basis, urging the President and the Congress to adopt a stepped-up timetable for withdrawal from Vietnam.

At a special meeting on October 30, the Council defeated a motion to lower flags on campus to half-staff as had been requested by a special University-wide assembly on October 15 and an earlier Plenum meeting of the Community of Students. The Council voted to support establishment by members of the University community, of a peace memorial to those who have died in Vietnam. President Harnwell has appointed a committee of his staff members to work with students and faculty on this memorial, which is expected to be completed by mid-December. Named to this committee are: John A. Russell, Jr., vice-provost for student affairs, as chairman; Rev. Mr. Stanley E. Johnson, University chaplain, as vice-chairman; Donald K. Angell, vice president-assistant to the president; and Dr. John N. Hobstetter, vice-provost for research and dean of the Graduate School of Arts and Sciences.

The text of the petition to be circulated to members of the Council reads as follows: "We speak as individuals who relate to young men and women. The University with which we are associated takes no position as an institution on the Vietnam war; it is a pluralistic community where men speak for themselves alone on off-campus issues.

"There are times to be silent and times to speak. This is a time to speak. The accumulated costs of the Vietnam war are not in men and material alone. There are costs too in the effects on young people's hopes and beliefs. Like ourselves, the vast majority of our students still want to be-

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First Unit to Open In Free School Project

A converted fieldstone house at 3833 Walnut Street is the first unit to open in the West Philadelphia Community Free School system being set up by the University, the Philadelphia school board and the community.

The Free School system expects to add four more units by the end of the school year to take up to 1000 students from West Philadelphia High School, where nearly 4000 are now enrolled in facilities built for 2400.

The Walnut Street house, leased by the

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Senate Declines to Act On U. S. War Involvement

The University Senate resolved October 29, by a vote of 265 to 140, that "It is inadvisable for the University Senate to act upon a resolution concerning United States involvement in Vietnam, and the University Senate therefore declines to consider the merits of such a resolution."

Bernard Wolfman, professor of law and chairman of the Senate, said the resolution adopted was introduced as a substitute for a resolution condemning the continuing American military involvement in Vietnam, calling for immediate withdrawal of all American forces, and demanding a reversal of national priorities away from militarism and toward social reform.

A referendum of Senate members is being held to determine if the chairman of the Senate should distribute the original resolution to be signed as a petition by individual faculty members.

Aid to Students Exceeds $14 Million

A record $14,330,000 in financial aid was awarded to undergraduate, graduate and professional school students during the 1968-69 academic year. This total is 5.5 per cent greater than the $13,583,000 which was awarded in 1967-68.

"This growth in aid demonstrates the University's determination to remove the economic barriers to enrollment, even as costs have been soaring. But disturbing factors in the growth of aid funds are evident. Over the past 15 years, the growth in loans and jobs for students at virtually all universities has been proportionately much greater than the growth in funds for scholarships. Pennsylvania is no exception and we look with concern on the prospect of asking students to take on even larger loan and job commitments," said Dr. George A. Schlekat, Dean of Admissions and Financial Aid.

Financial aid to undergraduates in 1968-69 reached a record of $6,261,205 in awards of scholarships, loans and part-time employment, to 3,179 students (47 per cent of the full-time enrollment). Awards are based solely on need and therefore awards to individual students may be more or less than the average for a particular group. This amount compares with $5,437,980 in awards to a similar percentage of students in 1967-68. Aid to freshmen beginning studies this fall exceeds $2.2 million.

During the past year, recruitment of students from disadvantaged economic backgrounds has been carried out actively with strong financial support from the Budget Committee and from the Trustees for the financial assistance of these students. Among approximately 250 black students who were offered admission to enter this fall, 150 have matriculated and a substantial amount of financial aid has been awarded to a great many of them to enable them to study here. "This demonstrates a particular concern to provide greater educational opportunities for members of minority groups," said Dr. Schlekat.

Sixty-eight of the 72 students entering this fall under the Small Communities Talent Program are receiving financial aid. In this program, the Office of Admissions in cooperation with public schools throughout Pennsylvania, attempts to recruit promising students who are qualified academically but who need encouragement to seek the University in terms of significant financial support.

Residents of the City of Philadelphia who are receiving financial aid include 244 undergraduates awarded Mayor's Scholarships, which are funded by the University, and Board of Education Scholarships for which about 75 per cent of the funding is provided by the University.

In the graduate divisions and schools and the graduate professional schools, a total of 4,539 students received $7,892,245 in financial aid during the 1968-69 academic year. In the graduate divisions and schools, 71 per cent of the students received aid totaling $5,888,125 (of which more than $1 million was awarded as teaching or research fellowships). In the graduate professional schools, 1,117 students or 57 per cent of the enrollment received financial aid awards totaling $2,004,120.

Awards were also made in the area of special programs including the College of General Studies, the Evening School of Accounts and Finance, and the General Nursing program where 731 students received a total of $176,550.

Nominations Are Accepted For Honorary Degrees

The Committee on Faculty Affairs of the University Council is accepting nominations from schools, departments, University Council members and faculty members of candidates for honorary degrees to be conferred at next May's Commencement. The Committee requests that all nominations, with full supporting biographical data, be sent by December 1, to Robert G. Lorndale, Associate Secretary, 112 College Hall.

Nominations not acted on in previous years will not be considered automatically this year, and new nominations of such persons, with full current supporting material, must be made for reconsideration.

New Director Is Named For University Press

Fred Dernburg Wieck has succeeded Gordon Hubel as Director of the University of Pennsylvania Press.

Immediately before his appointment to the University, Mr. Wieck served the University of Texas at Austin as Assistant for Publications to the Dean, College of Arts and Sciences, and a pro tem Director of the National Tranlation Center there.

In 1961, he became senior editor in charge of special projects with Harcourt, Brace, & World, Inc., and with Harper & Row, Publishers, Inc. (1962-67). He continues to advise Harper & Row as consulting editor in Continental philosophy.

Dow Chemical Policies Discussed by Official of Firm

As specified in the policy approved last month by the University Council on discussions for prospective employers using the Placement Service, a representative of Dow Chemical Co., came to the University on November 25, to discuss the company's policies, as requested by a petition from students.

The Dow Chemical recruitment visit of November 5 was postponed and a new date has not yet been set.

James H. Pearce was the Dow representative participating in the discussion. Dr. Charles C. Price, Benjamin Franklin Professor of Chemistry, was moderator of the discussion.

Faculty and administrative officers who are members of the University of Pennsylvania Club of New York City may become members of the Columbia University Club, 4 W. 43rd St., New York City, as result of a new affiliation.

Pennsylvania Club members will be accorded full membership privileges and may participate in all social functions sponsored by the Columbia University Club. Information may be obtained from the Alumni Relations Office on campus.

Wharton Gold Medal Given to I. T. T. Head

The recipient of the twentieth annual Wharton Gold Medal Award "for distinguished leadership in the promotion of public understanding of business" and "personal contribution to the progress of American business" was Harold S. Geneen, chairman and president of International Telephone and Telegraph Corporation.

The Gold Medal Award was presented to Geneen by the Wharton School Alumni Society at the annual Gold Medal dinner, November 24.

Mr. Geneen has transformed ITT's management and control from the original holding-company type to a central management team which directs the firm's operations worldwide. ITT now comprises over 200 companies and divisions in 67 nations and employs about 300,000 persons. Since 1959, Geneen has directed ITT's growth from an annual rate of sales of $765 million to more than $4 billion in 1968.

Land Use . . .

(Continued from page 1)

for Unit III nor the practicality of its implementation within the timing and dollar constraints set forth in the report;

3. The Executive Board recognizes that the University cannot unilaterally change the plan for Unit III nor could it even effectively advocate a change without the clear concurrence of all affected parties including City and Federal agencies, the designated redevelopers, and a sufficiently broad segment of the community.

4. However, in an effort to be responsive to the recommendations of the Quadripartite Commission, the Executive Board will direct appropriate University officers to initiate discussions with the concerned City agencies as well as with representatives of the organizations under contract with the Redevelopment Authority to act as redevelopers in Unit III in order to determine the effect both legally and practically of the specific proposals of the charrette and any modifications thereof which would give effect to the concept referred to in No. 1 above and at the same time be consistent with the basic objectives of the currently approved Urban Renewal Plan.

The Charrette's plan to revise land use in Unit Three was completed following a two-week intensive planning session which included consultation with agencies, institutions and community groups involved in present redevelopment projects there.

The new proposal calls for approximately 400 units in addition to the 185 already scheduled for Unit Three, and it outlines some approaches to making these units available in the low-income housing range.

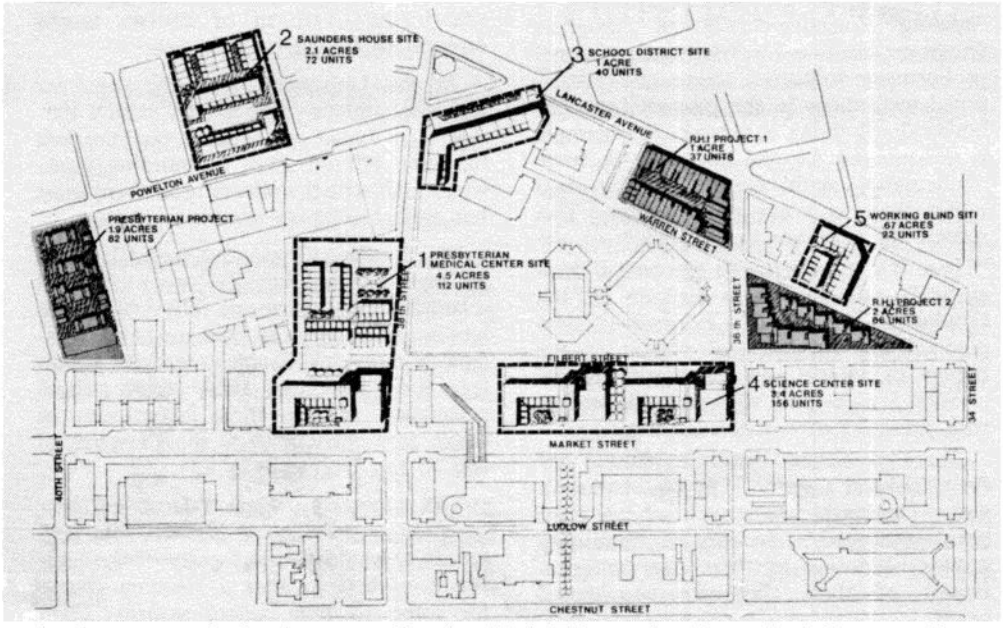
It also includes recommendations for commercial services needed for a residential development of the area, which was set up as all-institutional under the urban renewal concept of the early 1960's.

To secure land for additional housing and services, it would be necessary for the appropriate government agencies to reassign some 9.7 acres of land now scheduled for institutional use, and to go outside Unit Three for one site of 2.1 acres.

Reassignment would subtract 3.4 acres from the University City Science Center for 156 housing units; 1 acre from the University City High School for 40 units; 4.5 acres from Presbyterian Hospital-University of Pennsylvania Medical Center for 112 units; and 0.67 acres from the Working Blind for 22 units.

The plan would also seek to purchase under the Federal "Write-Down" Program the 2.1 acre Saunders House site north of Powelton Avenue, to provide 72 housing units. Saunders House, a private retirement home, has announced that it intends to relocate, probably in the next two years.

These new sites would be in addition to three tracts already scheduled for low-income housing in Unit Three. One is a 2-acre site at Filbert and 36th, reassigned from Science Center holdings to Renewal Housing Inc. for 66 housing units. Another Renewal Housing parcel, a one-acre block for 37 units at Warren and 36th, had been University City High School land before reassignment. The third low-income housing site was the Presbyterian Center's 1.9 acres at 40th and Powelton, where a Center subsidiary had scheduled 82 units.



In the proposed development plan for Unit Three, the three shaded areas above are sites now planned for low-income housing. Five additional sites are recommended by the Charrette Report submitted this month to the Trustees' Executive Board.

A mixture of financing methods would be required to implement the Charrette Plan. In its report, the Charrette points to the 1968 Federal Housing Act's sections 235 (for single-family homes owned by residents) and 236 (for multi-family apartment buildings rented to low-income families). Section 235 subsidizes mortgages from the normal 7½% down to 1% on homes the Charrette projects at $16,000 for families earning $5000-$7000.

Section 236 works much the same, and the Charrette Plan would create apartments of two or three bedrooms at around $120—suitable for the $5500-$8000 income range. Federal rent subsidies are available to bring these apartments within the range of true low-income families ($3000-$6000), the Charrette points out, but by law only 20% of the units in a given project can have rent supplements.

A third financing method suggested in the report is the Turn-key III public housing program which allows a portion of the tenant's rent to be held toward a down-payment to purchase the property, enabling families in the $4200-$4500 range to become home-owners.

The Charrette Report is being circulated to interested institutions and groups which have no official status in Unit Three, such as the University, as well as to the developers directly involved there.

The actual decision to re-schedule land use in the unit would require approvals to be obtained successively from the Redevelopment Authority, the City Planning Commission, the City Council and the federal Department of Housing and Urban Development.

Dr. James E. Allen Gets Special Education Award

The 1969 National Award of Distinction was presented to Dr. James E. Allen, Jr., U. S. Commissioner of Education, at a dinner November 21, by the Alumni Association of the Graduate School of Education.

Dr. Allen, who also is an Assistant Secretary of Health, Education and Welfare, was cited for leadership and courage in a time of controversy in education, said Dr. Helen Bailey, chairman of the Alumni Association's awards committee.

Before appointment as Commissioner, Dr. Allen was for 14 years New York State Commissioner of Education.

Thermoluminescence Is Researched at Museum

Scientists at the University Museum's Applied Science Center for Archaeology have received a $61,000 National Science Foundation grant to explore how the phenomenon of thermoluminescence in pottery —its tendency to glow under certain conditions—may be used as a precise, archaeological dating tool.

They hope to refine existing knowledge into a routine system that will supplement and in some ways surpass, the widely-used carbon-14 method.

Thermoluminescent dating allows pottery itself to be dated rather than relating it to the age of the organic material in which it is found. In addition, the fact that pottery has been in universal use for the last 9,000 years, plus TL-dating's near infallibility in detecting forgeries, give the new technique important advantages over carbon-14 dating.

The phenomenon of thermoluminescence was first noted by the English chemist and physicist, Robert Boyle, in 1663. Its basic principle is that energy, absorbed and stored in inorganic material, can be stimulated by thermal agitation and released in the form of light.

In the case of pottery, traces of radioactive impurities (uranium, thorium and potassium) within the potter's clay bombard its other constituents with alpha, beta and gamma rays and raise certain electrons to metastable, or slightly unstable levels.

When the clay is heated, these metastable electrons fall back into stable position—emitting photons of light as they do so—and become trapped in "faults" in the crystal lattice of the clay.

Thus, when the initial firing dissipated the natural thermoluminescence accumulated during geological time, the pottery's "TL clock" was set at zero from an archaeological point of view. As the centuries pass, however, the pottery gradually reacquires its TL sensitivity at the rate of about 100 rads a century. (By way of illustration, the radiation emitted in a dental x-ray equals about 1000 rads).

When the pottery is reheated in the laboratory, the level of TL observed by photomultiplying devices is indicative of the accumulated radiation damage, and therefore, the amount of time that has elapsed since the pot was originally fired. The older the pottery, the greater the glow that can be observed.

During 1968, more than 40 tests of "unknowns" and checks for authentication were made at MASCA that have already proved of value to archaeology. In addition, TL dating methods are now both supplementing and supplanting radiocarbon dates for some objects.

For example, because of fluctuations in carbon-14 dates for the period between 1500 and 1700 A.D., TL dates have been accepted as the more reliable ones for samples from a shipwreck off the north coast of Jamaica, placing it at an age appropriate for Columbus's flagship, the Santa Maria.

In other cases, especially with Etruscan statues on display in museums for decades, TL-dating was able to determine that the objects were fired only within the last hundred years, and thus exposed them as forgeries.

"Archaeologists are just beginning to learn about the successful applications of thermoluminescence. There is little doubt, however, that within the next few years the number of thermoluminescence dating stations installed for archaeology will be comparable to those currently engaged in radio-carbon dating," Dr. Froelich Rainey, Director of the University Museum, said.

Library users are now required to present their University identification cards to check out books from the Van Pelt Library.

The policy change is the result of a switch-over from a manual record keeping system to an automated charging system.

To speed transition, those who currently have books charged from the library are requested to return them to the circulation desk to recharge them under the new system.

Free School . . .

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University to the Board of Education, is expected to open in December after its teachers receive special training and its 200 students choose a name for the unit.

The Free School system plan calls for five such scattered houses eventually, each with a maximum of 200 students led by eight teachers. An ungraded experimental curriculum will be offered in two principal parts: one consisting of core subjects taught at the house including mathematics, English, science, history, and foreign languages; the other providing a "floating" elective-enrichment program taught on-location by volunteer personnel in business, industrial, civic and educational institutions in the immediate neighborhood. Studying at a bank, for example is encouraged for the exposure to basic mathematics skills needed in the field rather than as vocational training. This reflects the emphasis in the project on the "Three R's" plus a fourth one called "Relevance", said Dr. Aase Eriksen of the Graduate School of Education who planned the Free School system at the request of parents and community leaders in West Philadelphia who were dissatisfied with present patterns of education.

The Free School system is named for the "friskoler" system of Dr. Eriksen's native Denmark, where such schools have been established by parents or community groups according to their own interpretations of their children's educational needs.

Parents and community leaders from West Philadelphia are involved at all stages of development of the Free School system, Dr. Eriksen said. Working with her and with Francis M. Betts III, Assistant to the President for External Affairs, has been the West Philadelphia High School Advisory Board, which is currently helping select teachers and will later provide teacher aides for the Free School houses. Basic operating costs will be from the School Board's allotment to West Philadelphia (at a citywide average of $750 per pupil per year). Remodeling and start-up costs, about $15,000 to $20,000 per house, are now being sought by University volunteers on behalf of the Free Schools. Indirect contributions include those of companies and institutions which absorb the overhead of courses taught on-location by their employees.

At the University, an early volunteer was the athletic department, which surveyed its use of recreational facilities and has now offered them at morning hours when high-school students need them most but college students use them least.

The Reading Clinic also found it could fit high school remedial work into its schedule, and numerous physical-science laboratory courses are expected to be available as individual faculty members volunteer their time and then secure school permission to use their laboratories at hours convenient both to the Free School and to the University.

The University Plaza Merchants' Association—made up of retailers who sell mostly to students and faculty of the University—voted to start a retailing course for some 15 high school students. Ben Orloff, head of Jos. A. Banks Clothing, expects to teach the basics of small busi-

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Archive to Be Assembled Of Medieval Manuscripts

A grant from the Council on Library Resources, Inc., will enable the University to build up an archive of medieval manuscripts on film. The project is sponsored by the Medieval Studies Committee, of which Dr. Ruth J. Dean, lecturer in the Department of English and Romance Languages and Medieval Bibliographer in the Library, is chairman.

As planned, the archive will be composed of negative microfilms of medieval manuscripts from which enlarged prints would be made by Xerox or some comparable process, bound in book form, cataloged for ready reference, and shelved in a special area of the library. The negatives will remain in the archive while the book-form prints will be available for loan or purchase by any scholar or student.

Special Luncheon Honors Emeritus Professors

Twenty emeritus professors were honored at a Faculty Club luncheon, October 3. The thirteen emeritus professors who were able to attend the luncheon have served the University for a combined total of 718 years.

President Harnwell offered the congratulations of the faculties, officers, and Trustees. He presented the emeritus professors certificates on behalf of Chairman of the Trustees William L. Day.

From the College of Arts and Sciences, the emeritus professors present were Dr. Lynn M. Case, emeritus professor of history; Dr. Otakar Odlozilik, emeritus professor of history; and Dr. Enos E. Witmer, emeritus associate professor of physics.

The School of Medicine emeritus professors present were Dr. Wilfred E. Fry, emeritus professor of clinical ophthalmology (effective July 1, 1968); Dr. T. F. McNair Scott, emeritus professor of pediatrics; Dr. Lauren H. Smith, emeritus professor of psychiatry; Dr. Elizabeth Kirk Rose, emeritus associate professor of community medicine and pediatrics; Dr. John C. Williams, emeritus associate professor of anatomy; and Dr. S. Culver Williams, emeritus associate professor of anatomy.

Wharton School of Finance and Commerce professors present were Dr. David T. Rowlands, emeritus professor of finance; Dr. Chester A. Kline, emeritus associate professor of insurance; and Dr. Arthur D. Maxwell, emeritus associate professor of accounting.

The Graduate School of Education was represented by a former Dean, Dr. William E. Arnold, emeritus professor of education.

Among those unable to attend were Dr. Otis Green of the Department of Romance Languages, who assumed his duties as consultant on Hispanic matters at the Folger Shakespeare Library in Washington, D. C. last month, and Dr. Melvin C. Molstad of the School of Chemical Engineering, who is in Helsinki, Finland, on a Fulbright Award.

Also named emeritus professors last spring but not in attendance were the following: Dr. Allan R. Day, emeritus professor of chemistry; Dr. Olin E. Nelson, emeritus professor of zoology; Dr. Alfred Senn, emeritus professor of German and Slavic languages; Dr. Leon J. Saul, emeritus professor of psychiatry; and Dr. William D. Turner, emeritus professor of social work.

Free School . . .

(Continued from page 4)

ness operation two hours a week with other shop owners and managers rotating in the supervision of on-the-job "labs" for the students at their own store locations.

Off-campus, some 70 additional organizations have been contacted by Mr. Betts, and more than 40 representatives have responded so far.

Core-subject teachers and pupils will come from West Philadelphia High School and the Free School will function under the direction of WPHS principal Walter Scott and District One Superintendent, Dr. Marechal-Neil E. Young.

As each house prepares to open, some 200 names will be chosen at random from the High School's total roster, and students will be given a choice whether to join the experiment or not. Random selection will also be used to replace those who elect not to go into the house system and no students will be chosen through application or referral, Dr. Eriksen said.

Such random selection is done to satisfy a special need of the community advisory committee. "The object is to avoid setting up an 'elite' pilot program of students who are already highly motivated. This community wants to show what can be done for *any* inner city child, if you give him something other than the massive urban high school as an alternative," Dr. Eriksen added.

Virtually all the work to found the Free School system has been carried out on a verbal basis and there is no formal contract between the University and the Board of Education. One formal link is provided through the appointment of Dr. Eriksen as consultant to the project.

Locust Street Is Closed From 37th to 40th Streets

Because of construction work on the "superblock" of the new Student Housing Project, Locust Street is being closed from 37th to 40th Streets.

Pedestrian use of Locust Street from 38th to 40th is discouraged to allow access of construction vehicles and permit work on utility trenches. From 37th to 38th Street, it will be open only for pedestrian traffic and access of service or emergency vehicles.

A permanent barricade will be placed at Locust Street on the west side of 38th Street. Access to the parking lot there and the sidewalk on the north side of Locust will remain to allow entrance to Kappa Alpha and Sigma Chi fraternities, the Chaplain's house, and Kappa Kappa Gamma sorority. A driveway will be built from 39th Street for access to the Kappa Kappa Gamma and Sigma Chi parking lots.

Vehicular gates will be built to the east of 40th Street and the west of 39th Street on Locust to allow special access of private vehicles to St. Mary's Church.

Pedestrian access to the Black Students Center and St. Mary's Church will continue through an entrance from Spruce Street. Irving Street from 40th Street may be used by vehicles for access to those buildings.

By the fall of 1972, this entire segment will have been landscaped as a continuation of Locust Walk.

Council . . .

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lieve in a just, honest and sensitive America. But our military engagement in Vietnam now stands as a denial of so much that is best in our society.

"More and more, we see the war deflecting energies and resources from urgent business on our own doorsteps. An end to the war will not solve the problems on or off the campus. It will however permit us to work more effectively in support of more peaceful priorities. Far from being depressed about our nation's future and our institution's future, we see bold opportunities ahead once the divisiveness of this war is in the past.

"As individual members of the University Council of the University of Pennsylvania, we urge upon the President of the United States and upon Congress a stepped-up timetable for withdrawal from Vietnam. We believe this to be in our country's highest interest, at home and abroad."

Leaves of Faculty Members Are Announced

Nearly 75 faculty members have been granted leaves for either this fall or the academic year according to the Provost's Office. A list of those faculty members granted leaves and what they will be doing follows:

COLLEGE OF ARTS AND SCIENCES

Dr. Kenneth R. Atkins, professor of physics, is spending this term working with astrophysicists and cosmologists at the University of London and the University of Cambridge in order to become more familiar with this new field.

Dr. John Biggins, assistant professor of biology, has accepted a visiting professorship for the year at the University of California at Berkeley.

Dr. James C. Davis, associate professor of history, is spending this fall completing two studies he is currently working on: "The Conservation of Family Wealth in the Old Regime" and a book of ambassadors' reports from the Venetian Republic which he is translating from the Italian and editing.

Dr. Leonidas Dodson, assistant professor of history, this fall is completing his history of the University during the Second World War.

Dr. Richard S. Dunn, professor of history, has accepted a visiting professorship for the year at the University of Michigan.

Dr. Holden Furber, professor of history, is devoting the year to writing Volume II of the series on European for the University of Minnesota Press.

Dr. Richard C. Jeffrey, professor of philosophy, is spending the year writing a book in which the ideas set forth in *The Logic of Decision* will be reformulated, extended and applied to problems of ethics.

Dr. Richard V. Kadison, Kuemmerle Professor of Mathematics, is spending the year conducting research programs at various scientific centers in Europe.

Dr. Abraham Klein, professor of physics, is at Princeton this year refreshing his interest in elementary particle physics and completing his book on the theory of nuclear structure.

Dr. George deVries Klein, associate professor of geology, is undertaking a study this year of cyclic sedimentation in rocks of lacustrine origin in the Old Red Sandstone (Devonian) of northeast Scotland; in addition he is completing a manuscript of a textbook entitled, *Sedimentology and Sedimentary Environments.*

Dr. Igor Kopytoff, associate professor of anthropology, is spending the year studying the language, religion and social organization of the Aghem of West Cameroon.

Dr. Robert A. Kraft, associate professor of religious thought, is devoting the year to researching the topic "The Appropriation and Adaptation of Jewish Religious Literature in Early Christianity."

Dr. Gerald Porter, assistant professor of mathematics, is spending the year at the Mathematical Institute in Oxford, England doing research in homotopy theory.

Dr. Charles E. Rosenberg, professor of history, is beginning the writing of a large work on "The Germ Theory Comes to America; American Medicine, 1870-1910."

Dr. James F. Ross, professor and chairman of philosophy, this year is completing a book on the theology of analogy.

Dr. Chih-Han Sah, associate professor of mathematics, has accepted a visiting professorship for the year at the University of California at Berkeley.

Dr. J. David Sapir, assistant professor of anthropology, will continue his field work in Senegal this year, carrying out linguistic and ethnographic research on the Diola.

Dr. Arthur H. Scouten, professor of English, is doing research this year in Britain in connection with a volume on Restoration drama.

Dr. John B. Van Sickle, assistant professor of classical studies, has accepted a resident postdoctoral fellowship this year in the Center for the Humanities at Johns Hopkins University.

Dr. Andre von Gronicka, professor of German, is doing research this fall for a second volume of his study of Goethe's reception in Russia.

Dr. Philip Wagreich, assistant professor of mathematics, is on partial leave of absence this year is order to continue his research at the Institute for Advanced Study in Princeton.

Dr. Gerald C. Weales, professor of English, this year is completing his book on Clifford Odets and plans to travel extensively in Europe and Africa.

GRADUATE SCHOOL OF ARTS AND SCIENCES

Dr. George Bass, associate professor of classical archaeology, is working on several projects this year, among them the preparation for final publication of a manuscript on the Byzantine shipwreck, the preparation of a manuscript concerning the Roman shipwreck, and research for the Thera excavation in Greece.

Dr. Dan Ben-Amos, assistant professor in folkore, has accepted a visiting professorship for the year at Hebrew University in Jerusalem.

Dr. Ludo J. Rocher, professor of Sanskrit, is spending the year doing research work in India.

Dr. E. Dale Saunders, professor of Oriental Studies, this fall is finishing the translation of Abe Kobo's *Dai you kampki,* working on editing of Toganoo's *Mandara no kenyu* and visiting a number of European collections containing Japanese manuscripts.

SCHOOL OF DENTAL MEDICINE

Dr. Benjamin F. Hammond, associate professor of microbiology, is spending the year developing new approaches and laboratory techniques.

Dr. Irwin I. Ship, professor of oral medicine, is spending the year as visiting professor in oral medicine at the Hadassah School of Dental Medicine in Jerusalem.

GRADUATE SCHOOL OF EDUCATION

Dr. Joanna P. Williams, associate professor of education, has accepted a U.S. Office of Education postdoctoral fellowship to Harvard University this year.

SCHOOLS OF ENGINEERING

Dr. Maurice A. Brull, professor of civil engineering, is spending the year in the Department of Aeronautics of the Technion Israel Institute of Technology in Haifa, doing research work in hydroelasticity and completing two monographs now in preparation.

Dr. C. Nelson Dorny, assistant professor of electrical engineering, has been selected as a White House Fellow for the year.

Dr. Peter D. Edmonds, associate professor of engineering, this year is undertaking a program of research at the University of Washington in the Division of Bioengineering.

Dr. Louis A. Girifalco and Dr. Solomon R. Pollack, professor and associate professor of metallurgy and materials science, are devoting the year to CARA corporation in order to expand the company's operations and place it on a sound basis.

Dr. Pietro P. Lombardini, associate professor of electrical engineering, will be on leave through next May.

Dr. Alan L. Myers, associate professor of chemical engineering, has received a National Academy of Science appointment this year as a senior fellow to the Institute of Physical Chemistry of the Soviet Academy of Sciences in Moscow.

Dr. Noah S. Prywes, professor of electrical engineering, this year is developing a time-sharing system that hopefully will be of greater breadth and efficiency than any in existence at the present time.

Dr. Morris Rubinoff, professor of electrical engineering, has a part-time leave of absence this year to make a detailed survey, review and critique of research being done elsewhere in the fields of computerized information retrieval and computer-generated movies.

Leaves . . .

(Continued from page 6)

Law School

Dr. Morris L. Cohen, professor of law, is spending this fall in England and Western Europe doing some work on his *Bibliography of Early American Law*, specifically on English materials relating to Colonial American Law and visiting major European law libraries.

John O. Honnold, William Schnader Professor of Law, has accepted the offer this year of a high-level staff position with the United Nations Commission on International Law.

School of Medicine

Dr. Hadley L. Conn, professor of medicine, is spending the year at American University in Beirut, Lebanon on a research program centering around a population of collected patients.

Dr. Johannes Ipsen, professor of epidemiology and medical statistics, has accepted an honorary visiting professorship for the year at the Institute of Hygiene, University of Copenhagen.

Dr. George D. Ludwig, professor of medicine, will be on sabbatical leave for the year.

Dr. Theodore C. Smith, assistant professor of anesthesia, is spending the year with the Department of Pharmacology at Oxford University where he is working on central mechanisms of narcotic depression and dependence.

Dr. David G. Young, Jr., assistant professor of physical medicine and rehabilitation, is on leave due to health.

School of Social Work

Dr. Harold Lewis, professor of social work, is spending the year at the Behavioral Science Center in Palo Alto, California.

School of Veterinary Medicine

Dr. Benjamin Wolf, associate professor of microbiology, is working with Professor R. R. A. Coombs of the Division of Immunology at Cambridge University investigating antibody receptor sites on immunologically competent lymphoid cells.

Wharton School of Finance and Commerce

Dr. Donald F. Blankertz, director of the graduate division of the Wharton School is on leave this semester for reasons of health.

Dr. Edward L. Brink, associate professor of marketing and international business, has accepted a post as educational research officer for the year on the staff of Commander Naval Forces Vietnam.

Dr. Stephen Elkin, assistant professor of political science, has received support from the Social Science Research Council and University of Leicester and is spending the year pursuing research on immigrants and local politics in several English cities.

Dr. Michael K. Evans, associate professor of economics, has received a Ford Foundation Faculty Research Fellowship for the year.

Dr. Frank J. Furstenberg, Jr., assistant professor of sociology, has undertaken a position for the year with the newly-established National Institute of Law Enforcement and Criminal Justice.

Dr. Jean D. Gibbons, associate professor of statistics and operations research, this fall will carry out as extensive research project in the field of nonparametric statistics.

Dr. Charles S. Goodman, professor of marketing and international business, is spending this semester completing his book on *Management of the Sales Force*.

Dr. Shiv K. Gupta, associate professor of statistics and operations research, this year will participate in the exchange program between the University of Pennsylvania and University of Sussex, England.

Dr. Edward Hutchinson, professor of sociology, is spending the year completing the manuscript of a study of international migration statistics, particularly in relation to immigration to the United States.

Dr. David E. Lavin, associate professor of sociology, this year is developing a major research project dealing with sociological and psychological aspects of higher education.

Dr. Chong-Sik Lee, associate professor of political science, has been awarded a Ford Foundation Faculty Research Fellowship for the year.

Dr. Kenneth D. MacKenzie, associate professor of industry, has accepted a position at the University of Waterloo in Canada this year where he will have access to computing facilities which will aid him in developing a mathematical theory of organization structure.

Dr. Michael D. McCarthy, assistant professor of economics is spending the year directing the operations of the Wharton Economic Forecasting Associates, a non-profit corporation being formed by the University.

Dr. Peter A. Morrison, assistant professor of sociology, has accepted a position for the year with the Rand Corporation.

Dr. Paul E. Mott, associate professor of sociology, will this year complete a monograph which is already in progress and will begin a new study of the effects of compulsory participation in human groups where conditions do not permit the members to leave.

Dr. Edmund S. Phelps, professor of economics, will continue to be on leave this year, having accepted a Fellowship at the Center for Advanced Study in the

(Continued on page 8)

Teachers Trained for Urban Work

Nineteen students are participating this year in the new "live-in" Experimental Teacher Program in Urban Education at the Graduate School of Education.

Funded by the University and by a $90,000 U.S. Office of Education grant, the program began last year as a development-research project focusing on teacher training for the inner city.

The program includes an initial, three-month summer session, one academic year, then an additional summer session. The second year is spent in full-time, supervised teaching in an urban high school.

During both of the summer sessions, the students live full-time in the predominantly-black Mantua area just north of the campus to work with community agencies, primarily The Young Great Society (YGS) on housing, job training, neighborhood medical centers, play streets and neighborhood development.

"Our primary objective is to train 'successive groups of teachers for urban schools who have the knowledge, attitudes and skills to make a difference in community-school relationships," said Dr. Richard A. Gibboney, associate professor of education, and project director.

Other cooperating community institutions are Sayre Junior High School, the Sayre Enrichment Center, and the Pennsylvania Advancement School.

During the academic year, the curriculum includes such innovative techniques as group dynamics and "micro-teaching," which makes use of video-tape replays to improve teaching skills.

"We try, through our 'home movies' to show them what they're doing. There is a vast difference between analyzing teaching, and then trying to do it, and the reverse: seeing yourself in action, then analyzing what you have done," Dr. Gibboney said.

Five black students are presently taking part in the program, and new recruitment techniques are planned in an effort to attract more students of varying race, age, and social backgrounds.

Leaves . . .

(Continued from page 7)

Behavioral Sciences in Palo Alto.

Dr. Edward C. Prescott, assistant professor of economics, has accepted a Brookings Institution Policy Fellowship and will spend this year associated with the Department of Housing and Urban Development.

Dr. Philip Sagi, professor of sociology, is spending this term extending his skill in mathematics in order to keep up with and contribute to growing areas of mathematical demography and mathematical sociology and to work on manuscripts in preparation.

Dr. Donald Smith, associate professor of political science, has accepted a Senior Specialist Award by the Institute of Advanced Projects at the East-West Center in Honolulu.

Dr. Hans R. Stoll, assistant professor of finance, will continue his leave this year to participate in a high-priority study of securities markets for the Securities and Exchange Commission.

Dr. Robert Strauz-Hupe, professor of political science, has been granted a leave of absence with the understanding that he will take the leave upon confirmation of his nomination as Ambassador to Morocco.

Dr. Richard J. Swersey, assistant professor of industry, has accepted a position for the year on the senior research staff of the Esso Mathematics and Systems, Inc. in Florham Park, N. J.

Dr. Paul J. Taubman, associate professor of economics, will spend this fall studying the return to education for the National Bureau of Economic Research and in January will work at Osaka University in Japan on a study of the contribution of government policy to Japan's post-war economic growth.

Dr. Sidney Weintraub, professor of economics, is visiting professor and chairman of the economics department this year at the University of Waterloo in Canada.

Dr. Henry Wells, associate professor of political science, is spending the year lecturing on Latin American politics and Inter-American relations in the School of Political Studies at the University of Costa Rica, as well as doing research on the political culture of Costa Rica.

Dr. Oliver E. Williamson, professor of economics, has a grant from the Brookings Institution to conduct research on a monograph this year dealing with the regulation of monopoly power.

Dr. Richard S. Woods, professor of accounting, is spending the fall term completing the development of materials for use in the Master of Science in Accounting program and will begin research in information systems.

New Faculty Members Named

Additional faculty appointments approved by the Trustees for this year have been announced by the Provost's Office. The following is a listing, by schools, of these new faculty members.

SCHOOL OF ALLIED MEDICAL PROFESSIONS: Dr. Elsa L. Ramsden, assistant professor of physical therapy.

COLLEGE OF ARTS AND SCIENCES: Dr. Samuel C. Vila, assistant professor of astronomy; Dr. Earl E. Muetterties, adjunct professor of chemistry; Dr. Paul A. Magnuson, Dr. Judith Keig, Dr. Benjamin Franklin Fisher, Dr. Carol L. Bernstein, Dr. Karen T. Romer, Dr. Robert N. Ross, Dr. Cynthia Secor, Mrs. Judith Fetterley Bader and Mr. Marshall A. Ledger, assistant professors of English; Dr. Gerald Gillespie, visiting professor of German; Dr. Alan M. Gaines, assistant professor of geology; Dr. William L. O'Neill, visiting associate professor of history; Dr. Paul Thieme and Dr. Elliott Mendelson, visiting professors of linguistics; Dr. Edwin M. Harman and Mr. Marc Sagoff, assistant professors of philosophy; Dr. Ole Hansen, professor, and Dr. Howard Weisberg, Dr. James Chen, Dr. H. Terry Fortune, Jr., Dr. Aaron Pinczuk, and Dr. John Ting-Sum Ho, assistant professors of physics; Dr. Allen I. Teger, assistant professor of psychology; Dr. Lance K. Donaldson-Evans and Dr. Sam L. Guyler, assistant professors of romance languages; and Dr. Murl G. Barker, assistant professor of Slavic languages and literature.

ANNENBERG SCHOOL OF COMMUNICATIONS: Dr. Ray L. Birdwhistell, visiting professor, and Mr. Dolf Zillman, assistant professor, of communications.

GRADUATE SCHOOL OF ARTS AND SCIENCES: Dr. Harry L. Jones, visiting professor in American civilization; Dr. Emilio Gabba, visiting professor of ancient history; Dr. James D. Muhly, assistant professor of ancient Near Eastern history; Mr. Lyndsay A. Farrell, visiting assistant professor of history and philosophy of science; and Dr. Nedin Tuna, assistant professor of Oriental studies.

LAW SCHOOL: Mr. Ernest J. Brown, visiting professor, Mr. Edward V. Sparer, associate professor, and Mr. Bruce A. Ackerman and Mrs. Martha F. Alschuler, assistant professors, of law.

SCHOOL OF DENTAL MEDICINE: Dr. Raymondien Ouellet and Dr. James Burch, visiting assistant professors in form and function of the masticatory system; Dr. Roselyn J. Eisenberg, assistant professor of microbiology; and Dr. Ikuo Ohmori, visiting associate professor, and Dr. Paul R. Rhodes and Dr. Joseph Kombleuth, assistant professors, of periodontics; and Dr. George J. Shelly, assistant professor of operative dentistry.

GRADUATE SCHOOL OF FINE ARTS: Dr. Mario I. Sama, assistant professor of architecture; Mr. Narendra Juneja, assistant professor of landscape architecture and regional planning; and Dr. E. Bruce MacDougall, assistant professor of regional planning.

SCHOOLS OF ENGINEERING: Dr. E. Farnsworth Bisbee, associate professor, and Dr. Richard T. Douty, Senior Fellow, in Civil Engineering; Dr. John Berberian and Dr. Sohrab Rabii, assistant professors of electrical engineering; and Dr. Norman A. Evans, associate professor of mechanical engineering.

SCHOOL OF MEDICINE: Dr. Peter E. Broan, associate professor of biochemistry; Dr. Alfred P. Fishman, professor, Dr. Samuel O. Thier, Dr. Neil S. Cherniak and Robert D. Utiger, associate professors, and Dr. Allen R. Myers, assistant professor of medicine; Dr. Hartwell G. Thompson, Jr., professor, and Dr. Werener Trojaborg, visiting associate professor, of neurology; Dr. Edward Korostoff, additional appointment as associate professor for research in orthopaedic surgery; Dr. Nurul H. Sarkor, visiting assistant professor of research in pediatrics; Dr. Willys K. Silvers, second appointment as professor, and Dr. Peter Gruenwald, associate professor, of pathology; Dr. David

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Antiques Show Proceeds Presented to Hospital

A check for $84,500, the proceeds of the 1969 University Hospital Antiques Show, has been given to the University Hospital to pay for constructing and equipping the new 5-bed Unit Respiration Intensive Care Unit which opened last March. The sum represents a $9,500 gain over last year's record Antiques Show proceeds of $75,000.

The Respiratory Unit was designed to serve the needs of patients with respiratory failure who require mechanical assistance to breathe; to train personnel from this and other hospitals in respiratory care; and to carry on clinical investigation which will help improve such care.

Among the special features of the Unit, which is the first of its kind in the Delaware Valley area, is an air filtration system that provides constantly changing air essentially free of bacteria, dust and viruses; this helps reduce the possibility of any cross-infection. A closed-circuit TV hookup between the Unit's conference room and patient beds permits clinical teaching without disturbing patients and also permits family and friends to see the patients more often than they might otherwise.

Faculty . . .

(Continued from page 8)

G. Moulton, associate professor of physiology; Dr. Frederick Jay Kayne, assistant professor of physical biochemistry; and Dr. H. Gunter Seydel, associate professor of radiology.

SCHOOL OF SOCIAL WORK: Dr. Florence Kaslow and Dr. Felice Perlmutter, assistant professors of social work.

SCHOOL OF VETERINARY MEDICINE: Dr. Alfred M. Merritt, II, assistant professor of medicine; Dr. Jorge F. Ferrer, associate professor, and Dr. Luis Avila, assistant professor, of microbiology; Dr. Samuel K. Chacko, assistant professor of pathology; Dr. Robert M. Kenny, associate professor of reproduction; Dr. Dudley E. Johnston, professor, and Dr. William J. Donawick, assistant professor of surgery.

WHARTON SCHOOL OF FINANCE AND COMMERCE: Dr. E. Philip Howrey, associate professor, and Dr. Stephen A. Ross, assistant professor, of economics; Dr. Lawrence D. Jones, associate professor, and Dr. C. Richardson Pettit, assistant professor of finance; Harold H. Frank and Dr. Michael A. Moses, assistant professors of industry; Dr. Charles Elder, Dr. Neal Cutler and Dr. Leo A. Hazelwood, assistant professors of political science; Dr. Tony E. Smith, assistant professor of regional science; Dr. Andrew C. Twaddle, assistant professor of sociology; and Dr. Halim Dogrusöz, visiting associate professor of statistics and operations research.

Recent faculty promotions, principally in the medical areas, have been announced by the Provost's Office. The promotions are effective as of last July 1.

COLLEGE OF ARTS AND SCIENCES: Dr. Peter J. Conn and Dr. Gerald W. Meyers to assistant professors of English and Dr. Gerald D. Doppelt to assistant professor of philosophy.

GRADUATE SCHOOL OF FINE ARTS: Mr. David Polk to assistant professor of architecture.

SCHOOL OF MEDICINE: Dr. James W. Lash and Dr. Andrew M. Nemeth to professors of anatomy; Dr. Robert A. Butler and Dr. Theodore C. Smith to associate professors and Dr. Ethan T. Colton and Dr. John L. Neigh to assistant professors, of anesthesia; Dr. George Gerstein to professor of biophysics and physiology; Dr. S. Richard Kaplan and Dr. Leonard Klinghoffer to assistant professors of clinical orthopaedic surgery; Dr. Robert E. Jones, Dr. Joseph J. Peters, Dr. James B. Robitscher and Dr. Samuel Wright to assistant professors of clinical psychiatry; Dr. Adele K. Friedman to associate professor of clinical radiology; Dr. William E. DeMuth to research associate professor of clinical surgery; Dr. Robert L. Snyder to associate professor of comparative pathology; Dr. Richard Marples to research assistant professor in dermatology; Dr. Darcy B. Wilson to associate professor of medical genetics and an additional appointment as associate professor of pathology.

Dr. Burton Zweiman to associate professor and Dr. Harry R. Schumacher and Dr. Jacob W. Streilein to assistant professors, of medicine; Dr. Fred R. Frankel to associate professor of microbiology; Dr. Howard M. Rawnsley to professor of pathology and clinical pathology; Dr. Harold A. Wurzel to associate professor and Dr. Dean A. Arvan to assistant professor of pathology and medicine; Dr. George Ruff to professor, Dr. James R. Harris to associate professor, and Dr. Avner Barcai to assistant professor, of psychiatry; Dr. Robert H. Cox and Dr. Allan W. Jones to assistant professor of physiology; Dr. William P. Graham to assistant professor of plastic surgery; Dr. Mark M. Mishkin to associate professor and Dr. Theodore P. Sanders to assistant professor, of radiology; Dr. Leonard Miller to professor, Dr. Clyde F. Barker, Dr. Stanley Dudrick and Dr. Francis E. Rosato to associate professors and Dr. Ralph Hamilton to assistant professor, of surgery; and Dr. Harry Schoenberg to professor of urology.

SCHOOL OF NURSING: Miss Lauretta Pierce to assistant professor of nursing.

SCHOOL OF VETERINARY MEDICINE: Dr. Stephen R. Sylk to assistant professor of parasitology; Dr. Wilfried T. Weber to associate professor of pathology; Dr. Jules Melbin to associate professor of physiology; and Dr. Paul Berg to associate professor of surgery.

The School of Dental Medicine will hold an open house for University faculty and staff in its new Leon Levy Oral Health Science Building, 40th and Locust Streets, from 4 to 6 p.m., Tuesday, December 2.

Among other things . . .

APPOINTMENTS:

DR. HERBERT S. DENENBERG, Loman Professor of Insurance, has been elected president of the American Risk and Insurance Association, and has been re-elected vice-president and scientific secretary of the American chapter of the International Insurance Law Association.

DR. HIROSHI MIYAJI, assistant professor of Japanese studies, has been appointed Director of Japanese Language in the 1970 summer program of Middlebury College.

STEVEN P. GIGLIOTTI, medical illustrator in the School of Medicine, has been named chairman of the board of governors of the Association of Medical Illustrators.

AUTHORS:

DR. NALLANA LAKSHIMINARAYANAIAH, associate professor of pharmacology, is author of a book, *Transport Phenomena in Membranes,* published by Academic Press.

DR. HERBERT S. DENENBERG, Loman Professor of Insurance, is co-editor of *Insurance, Government and Social Policy: Studies in Insurance Regulation* published by Richard D. Irwin, Inc.

ROBERT LEWIS SHAYON, professor of communications, has initiated a national study of professional criticism in conjunction with Lou Harris and Associates, Inc., which is being funded by the *Saturday Review* and the Office of Communications of the United Church of Christ. He also has been named to the Committee on Instructional Fixed Television Service of the Federal Communications Commission. He is serving as an adviser on communications policy to the Robert F. Kennedy Memorial Foundation and as a member of the Council on Communications, which has been established by the Smithsonian Institution.

HONORS:

DR. STUART W. CHURCHILL, Carl V. S. Patterson Professor of Chemical Engineering, received the William H. Walker Award for excellence in contributions to chemical engineering literature, from the American Institute of Chemical Engineers at its annual meeting in Washington in November.

DR. BRITTON CHANCE, director of the Johnson Research Foundation and chairman of the departments of biophysics and physical biochemistry, received the eighth annual American Chemical Society Philadelphia Section Award in October.

DR. GEORGE H. CRUMB, associate professor of music, and GEORGE ROCHBERG, professor of music, have received special awards from the American Society of Composers, Authors and Publishers.

TRAVELERS & SPEAKERS:

DR. ARTHUR E. HUMPHREY, professor and director of the School of Chemical Engineering, was coordinator of a Latin-American conference on biotechnology in Sao Paulo, Brazil, from September 14 to October 3. Forty scientists from 16 countries attended the conference, sponsored by UNESCO.

DR. SEYMOUR S. COHEN, professor of

Among other things . . .

biochemistry and chairman of the department of therapeutic research, has been named a Visiting Fellow of the College de France in Paris, and will give a series of lectures there next spring.

DR. LEENDERT BINNENDIJK, professor of astronomy, participated in the International Astronomical Union Symposium on Visual Double Stars at Nice, France and in that organization's colloquium on "Mass Loss in Close Binaries" in Elsinore, Denmark.

DR. ROBERT H. KOCH, professor of astronomy, also gave an invited paper at the International Astronomical Union colloquium in Denmark.

DR. GLENN R. MORROW, Adam Seybert Professor Emeritus of Moral and Intellectual Philosophy, attended the Fifth Symposium Aristotelicum at De Pietersberg in Oosterbeek, Holland, in August. He also participated in the International Humanistic Symposium at Delphi, Greece, September 25 to October 4, held under the auspices of the Hellenic Society for Humanistic Studies.

DR. HSUAN YEH, professor of mechanical engineering and director of the Towne School of Civil and Mechanical Engineering presented a paper, "Electron Heat Transfer in a Quiescent Non-Equilibrium Plasma," (co-author, E. V. McAssey) at the annual meeting of the American Society of Mechanical Engineers, November 16-20, 1969 in Los Angeles. At the same meeting, DR. BURTON PAUL, professor of mechanical engineering, presented a paper on "Stress Analysis of a Pressurized Cylindrical Bore in a Rectangular Block," (co-author, M. D. Gangal) and DR. ALAN I. SOLER, assistant professor of mechanical engineering, presented a paper, "Higher Order Theories for Structural Analysis Using Legendre Polynomial Expansion."

LEONARD ATHERTON, director of the University Chorus, conducted the group in a performance of Mahler's Symphony No. 2 with the Baltimore Symphony Orchestra in October.

BERNARD WOLFMAN, professor of law, was chairman of a panel of lawyers discussing "Conglomerates and the Federal Income Tax" in New York, in October under the auspices of the American Bar Association Sections on Anti-Trust Law, and Corporations and Banking. He participated in a program under the auspices of the Association of the Bar of the City of New York on "Private Foundations under the Proposed Tax Law—How Can They Coexist?" He presented an overview of the pending proposals in Congress and compared them with those contained in the 1965 Department of the Treasury Report on Private Foundations for which he was the Consultant-Reporter.

DR. JOSEPH C. TOUCHSTONE, professor of research surgery and research professor of obstetrics and gynecology, presented a paper on "Quantitative Aspects of Thin Layer Densitometry" in September at the International Congress of Clinical Chemistry in Geneva, Switzerland, in September.

DR. PETER G. EARLE, associate professor of romance languages, gave a lecture on "Los problemas del realismo espanol" at Temple University in October.

A paper was given at the Technical Symposium on Navigation and Positioning at Fort Monmouth, N. J., in September on "Studies on the Degradation of the Omnidirectivity of Antennas Mounted Near Helicopter Members" by DR. RICHARD J. DOVIAK, assistant professor, DR. JULIUS GOLDHIRSH, assistant professor, J. M. LEE, research assistant, and RALPH C. UNKS, research fellows, all in the Moore School of Electrical Engineering. A paper on "Radiation Pattern Characteristics of a Dipole Near a Thick Conducting Cylinder of Resonant Length" was given there by Messrs. Goldhirsh, Doviak, and Unks with DENNIS KNEPP, research fellow in the Moore School. Also a paper on "Impedance Characteristics of Monopole Antennas Over Finite Conducting Cylinders" was given by DR. RICHARD F. SCHWARTZ, associate professor in the Moore School (with P. J. Saidman).

DR. GEORGE D. LUDWIG, professor of medicine, presented a paper on "A Simple Screening Test for Lead Poisoning" at the International Congress of Clinical Chemistry in Geneva, Switzerland in September.

DR. E. KENDALL PYE, assistant professor of biochemistry, gave a paper on "Oscillating Biochemical Reactions" at the annual meeting of the American Institute of Chemical Engineering in Washington in November.

DR. JOHN O'M. BOCKRIS, professor of chemistry, lectured on "The Theory of the Double Layer at Electrified Interfaces" and "Activated Electrochemical Kinetics" at Ohio State University in October.

DR. ELI S. MARKS, research professor of statistics and operations research, lectured on "Operations Research in Family Planning" and on "Analysis of Data from Unstructured Interviews" at the University of Alberta in October.

DR. LEONARD NANIS, associate professor of chemical engineering, lectured in October to the Detroit Section of the Electrochemical Society at Wayne State University on "Electrochemical Engineering."

DR. CRAIG R. THOMPSON, professor of English, delivered a paper on "Erasmus and Tudor England" at the international Erasmus Congress in Rotterdam, Holland in October.

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

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