

Almanac

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Rochberg Named Annenberg Professor

Composer George Rochberg has been named the first Annenberg Professor of the Humanities.

President Martin Meyerson made the announcement at a reception following the performance of Rochberg's Violin Concerto by Isaac Stern and the Philadelphia Orchestra conducted by Eugene Ormandy, Thursday night, October 5 at the Academy of Music. Meyerson, Provost Eliot Stellar and FAS Dean Vartan Gregorian will present Rochberg as their choice for the endowed chair to the University board of trustees October 27.

Rochberg, 60, joined the Penn music department in 1960 and served as its chairman from 1960 to 1968. Born in Paterson, New Jersey, he studied at Montclair State Teacher's College, the Mannes School of Music, the Curtis Institute and at the University, where he received his M.A. in 1949. His honors, awards and fellowships are numerous: he has been a Fulbright, an American Academy in Rome and a Guggenheim fellow and has received commissions from the Fromm, Koussevitsky and Naumberg foundations as well as from many distinguished symphony orchestras and chamber music groups. A recording of his third string quartet won *Stereo Review's* Record of the Year Award for 1973. A recorded performance of the violin concerto will be released by Columbia in March, with Isaac Stern, violin, and Andre Previn conducting the Pittsburgh Symphony. The composition was commissioned by that orchestra for the Bicentennial.

Rochberg is currently collaborating on an opera based on Herman Melville's last novel, *The Confidence Man*, with his wife Gene. The opera has been commissioned by the Santa Fe Opera Company.

Isaac Stern said of the award, "I am delighted for the recognition given George Rochberg, one of the major spirits in American music. The choice of George Rochberg does honor to the concept of such an endowed chair, the University and George Rochberg. I congratulate Mr. Annenberg on making this possible."

The professorship was established with a \$1 million gift by the Hon. Walter Annenberg and his family and is one of three Annenberg chairs assigned to the University's Faculty of Arts and Sciences to attract and maintain outstanding faculty members. Last January, Renee C. Fox was named the first Annenberg Professor of Social Sciences.

Increase in State Appropriation Sought

The University submitted a fiscal 1979-80 Commonwealth appropriation request of \$21.8 million, an increase of 21.3 percent from fiscal 1978-79, to the Pennsylvania Board of Education Tuesday, October 3. The new governor will announce the state's fiscal 1979-80 budget requests in January.

The University's requests are:

Item	1978-79 Actual	1979-80 Request	Percent Increase
General Instruction	\$7,063,000	\$7,564,000	7.1
Student Aid	\$3,798,000	\$4,068,000	7.1
Medical Instruction	\$2,882,000	\$4,721,500	63.8
Veterinary Instruction	\$3,772,000	\$4,547,000	20.5
Dental Clinics	\$500,000	\$950,000	90.0
Total	\$18,015,000	\$21,850,500	21.3

The largest increases in the University request come in the dental and medical schools. The 90 percent increase for the dental clinics

would compensate for the difference between the appropriations given the dental schools at the University of Pittsburgh and Temple University as opposed to that given the University; and return the funding parity which existed in 1976. (As a result of the delay in the 1977-78 Commonwealth budget, the University's dental clinic appropriation was reduced to \$500,000, while the appropriations for the two other dental schools remained at \$600,000.) The 63.8 percent increase for the medical school represents the effects of inflation over the last six years, during which the school's allocation was not raised.

In a separate request, the University Museum asked for \$100,000, the amount received in 1978-79.

President Martin Meyerson, in presenting the appropriation requests, noted, "The relentless pressure of inflation has forced us to prune programs and people—even entire schools—from the University, to increase tuition—particularly in the professional schools—to levels that are approaching the intolerable, and to hold salary increases to minimum amounts that cannot help but damage the morale of faculty and staff. In all the budget paring required in these recent years of austerity, our central concern has been to continue to fulfill what we perceive as our proper educational mission. . . . But we have reached a point at which continuing restriction of activities cannot fail to have serious consequences."

NSF to Fund Laser Research Center

The National Science Foundation has awarded \$1,388,000 to the University to establish a regional facility for the research and development of lasers. Robin M. Hochstrasser (chemistry) will be the director of the new facility, to be housed in the chemistry building.

The laser facility will provide research resources for scientists from different disciplines, including fundamental physics, spectroscopy, chemical reactivity and the biological sciences.

Lasers, discovered in the 1960s, are sources of light that are millions of times brighter than light from conventional lamps. Laser technology has become highly developed in areas ranging from communications systems to surgery and medical diagnosis.

Honorary Degree Nominations Requested

The University Council Committee on Honorary Degrees solicits suggestions for recipients of honorary degrees for the June, 1979 commencement. Please submit nominations in writing with background biographical information to any member of the committee, or to Mary Karr, Office of the Secretary, 112 College Hall/CO. The deadline is October 19, 1978.

Committee members include: Judah Goldin, chairman, 854 Williams/CU; Andrew R. Baggaley, D-22 Education/C1; Britton Chance, D501 Richards/G4; James Pickands, III, E-243 Dietrich/CC; Jack E. Reece, 216 College Hall/CO; S. Reid Warren, Jr., 201 Moore/D2; Laura Kassner, Law/14; G. Malcolm Laws, ex officio, 119 Bennett Hall/D1.

Women's Conference Scheduled for November 5

A "Women's Program for the 80s at Penn" will be the topic of discussion at a conference sponsored by the Penn Women's Center and the Women's Studies Program, Sunday, November 5.

"It has been seven years since the first woman's conference at Penn and seven years since the first affirmative action plan was

(Continued on page 4)

Report of the Faculty Panel on Administrative Functioning of the University

Submitted to the Senate Advisory Committee, September 20, 1978

Charge of the Panel

This panel was appointed by the Senate Advisory Committee pursuant to a resolution adopted by the Faculty Senate at the special meeting convened on April 28, 1978. The charge of the panel was as follows:

"The purpose of the panel is to review and categorize faculty concerns about the administration and to recommend to SAC resolutions of the specific problems that it finds.

"The panel should take as its point of departure the aim of developing means of working with the administration to restore an atmosphere of confidence throughout the University. The focus of the panel's work should be on existing problems. Past difficulties should concern the panel to the degree necessary to avoid repetition of similar problems in the future.

"The panel should invite faculty testimony and discuss causes and remedies with the appropriate faculty members of faculty units and administrative officers. The panel should report its recommendations to SAC by September 30, 1978."

Some members of the faculty expressed their concern to the panel that its charge did not call for a balanced assessment of the administration but seemed to invite attention solely to negative aspects of the administrative process. The panel was conscious of this characteristic of its charge and in its basic communication to the faculty encouraged the members to offer constructive suggestions for strengthening the administrative processes of the University. In fact, the whole spirit of the inquiry as contemplated by the Senate Advisory Committee and as conducted by the panel was to identify problems in order to avoid or minimize the kinds of difficulties that have arisen in the recent past.

While the charge instructed the panel to recommend solutions to the problems that it found, the panel took it for granted that it was not to duplicate the work of the Senate Committee on Administrative Structure and the recently reconstituted Task Force on University Governance.

Modus Operandi

The panel was constituted during the first few days of May and promptly set about its task. It held its first meeting on May 15 following a joint meeting earlier the same day with the Senate Advisory Committee. The first meeting was devoted primarily to a discussion of the panel's charge and the rules under which it would operate. Emerging from the first meeting was a decision to submit a statement to *Almanac*, calling attention to the panel's assignment and inviting faculty members to share their concerns with the panel and to suggest appropriate remedies for perceived administrative problems. The statement appeared in the May 23, 1978 issue of *Almanac*.

In the thought that the *Almanac* communication might have escaped the notice of many faculty members because of summer schedules, the panel instructed the chairman to send an individual (form) letter to each member of the Senate, calling attention to the *Almanac* item and the need of the panel to complete its inquiry by the end of summer in view of the September 30, 1978 deadline. Persons with views to present were urged to do so as promptly as possible.

In its *Almanac* communication, the panel expressed a preference for written statements from the faculty in order most efficiently to facilitate analysis and synthesis of the various views presented.

To date, the panel has received forty-six written communications, many containing substantial documentation. In a few instances, the respondents stated that they were speaking for a

larger group, at least on general issues. Ten persons appeared before the panel and others asked to meet with the panel or offered to appear if invited. Because of time limitations and schedule conflicts it was not possible to arrange personal appearances for everyone who wished to talk to the panel. Large numbers of faculty members communicated their concerns informally to members of the panel by telephone or in face-to-face conversations. Among those that made their views known to the panel were past and current deans, graduate group chairmen and departmental chairmen. By and large, communications to the panel were from senior faculty members. Despite the constraints imposed by summer schedules, the panel believes that it was able to obtain a fairly broad-based segment of faculty opinion, especially among that portion of the faculty whose direct experience and observations place them in an advantageous position to evaluate the administrative processes of the University.

Persons contacting the panel in any manner were given assurances of confidentiality but few requested it. Oral statements before the panel were tape recorded but only for the use of the secretary in preparing minutes of the meetings and not as a permanent record.

The panel has held eighteen meetings, mostly of two hour duration. It met with President Meyerson on several occasions and with Provost Stellar on two occasions. There were certain other meetings between President Meyerson and the panel chairman.

Articulated Concerns

All but a few of the written submissions and persons appearing before the panel were critical of some aspect of the University administration. They called attention to a wide range of incidents, attitudes, procedures, practices and policies that seemed to point to malfunctioning of the administrative processes. The panel found it possible—and useful—to classify the articulated concerns into three broad categories: (a) general management, (b) relations between the administration and the faculty and (c) the presidential style.

As might be expected, the major areas of concern were the administrative structure of the University; the budgetary process, especially that portion affecting academic goals, priorities and allocations; graduate programs, including governance and procedures for making fellowship grants; faculty appointment and promotion procedures, including the mechanism for naming of University professors; forums for consultation between the administration and the faculty; and long-range planning.

In pondering what constructive measures it could take beyond the mere cataloguing of these charges, the panel considered two approaches. The first was to look into each charge to assess its validity, and, if appropriate, to trace the blame to a particular practice or individual. The second approach was to identify patterns of recurrent or common concerns, with the objective of discussing these concerns with the appropriate executive officers of the University, not to fix fault but rather to develop new procedures and practices to avoid or mitigate the past difficulties perceived by the faculty and other constituencies of the University.

It was not clear to the panel that the first of these two approaches was the more constructive, and in any event time was not available to make the careful inquiries that would have been entailed. Accordingly, the panel chose the second approach. In a lengthy meeting with the president it laid out the principal complaints in rather specific detail, without, however, revealing the identity of the complainants. Although he disagreed with some of the points made

by the panel on behalf of the faculty. President Meyerson acknowledged the existence of many serious problems and pledged his best efforts to create a total environment in which solutions to these problems can be worked out.

In the same spirit, the panel met with Paul Miller, chairman of the trustees, and discussed the faculty's concern with the same candor that characterized the meeting with President Meyerson. It is expected that a meeting will be held with the provost-elect, Dr. Vartan Gregorian.

General Recommendations

In this section attention is called to some central issues that have been troubling the faculty.

Relationship between the offices of president and provost

It is the perception of many faculty members that a major source of the administrative difficulties experienced in recent years is the blurring of responsibilities of the two offices of president and provost. It is a common impression among the faculty that President Meyerson looks upon the provost as his chief of staff or executive vice-president, having powers and responsibilities co-terminal with those of the president but subordinate to the president. Provost Stellar testified that he shares this view of the office. In the panel's opinion, formal implementation of this organizational concept would be inimical to the welfare of the educational core of the University and to the continued vitality of the entire academic enterprise, in that (1) it would necessarily dilute the provost's concern for the educational component of the enterprise, and (2) it would needlessly divert the attention of the president from those vital financial and institutional concerns that fall within his special province.

The panel strongly recommends that the traditional division of responsibilities between the president and the provost be preserved, a recommendation consistent with the thrust of the report of the Senate Committee on Administrative Structure. The provost should be given primary responsibility for directing those functions that are central to the educational mission of the University, with full accountability to the president. The president should continue to be the chief executive officer of the University, in both form and fact, with the respect and support of all constituencies of the University. He speaks for all segments of the University and is accountable to the trustees for his stewardship of the human and material resources made available by the trustees.

Because the office of the president should be strong, with the incumbent having final authority over all educational, budgetary and operating policies and decisions, it is important that the academic arm of the University have a highly placed spokesman whose primary responsibility is assuring that academic concerns are given proper consideration in the decision-making processes of the institution. That spokesman should, of course, be the provost. While the concerns of the provost must extend to students, administrators, clerical staff and others integrally involved in the educational process, the provost must, above all, be an advocate—in the best sense of the term—for the faculty. The faculty of a great university has a very special and precious relationship to the institution and deserves a spokesman or advocate in its highest councils. In serving such a role, the provost can nourish the principle of collegiality which should be restored to its former preeminence. The panel recognizes that the provost must be prepared to step in as acting president in the absence of the president, but it should be possible for the provost to acquire sufficient familiarity with the presidential duties to perform this role without becoming an alter ego of the president.

The panel believes that it is particularly important—even crucial—that the traditional relationship between the president and the provost be observed during the critical transitional period ahead. An individual with strong intellectual credentials and

demonstrated administrative skills should be selected as provost and then be permitted to function as provost in the traditional manner.

The consultative process

The panel paid particular attention to the problems encountered in connection with the consultative process, a process central to the effective functioning of collegial decision-making. In some cases the consultative process has functioned smoothly and efficiently and to the satisfaction of both faculty and administration. Each member of the generally admired set of deans now on the campus, it should be remembered, came through this process. The successful cases appear to have been instances in which there was little doubt on either the faculty or administration side about the definition of the position being filled or about the qualifications being sought. This does not mean that the process was always swift. Sometimes it took a longer time than anyone would have liked to find a qualified person who could be attracted to the position, but these delays could not be ascribed to dilatory behavior on the part of the search committee or to an inherently cumbersome process.

The cases of unsatisfactory operation were often characterized by uncertainties about the definition of the position and the qualifications of the person sought. In some instances the administration changed the job description while the search was in process. In other situations committees were not persuaded that a serious effort had been made to recruit the persons they recommended.

The panel was concerned that a tendency of some search committees to operate by consensus resulted in the nomination only of candidates to whom no one on the committee objected. This process has the danger of favoring bland candidates rather than those who might give decisive leadership. The panel recommends that future chairmen of search committees be prepared to reject the consensus approach in favor of committee votes, with inclusion of the vote count in the submission of its recommendations.

In other respects the panel endorses the recommendations made by the Senate Committee on Administrative Structure (*Almanac*, January 17, 1978). These recommendations, it will be recalled, suggested flexible procedures with the degree of faculty influence in the appointment process graduated according to the degree of academic responsibility of the position in question.

With respect to University-wide academic issues other than administrative appointments, the Senate through its limited but effective committee structure may be expected to continue to provide a mechanism for the expression of faculty opinion. The proposed reorganization of the Senate, shortly to be placed before the faculty, should enhance the efficacy of this process. The current efforts of the University Council Study Committee and the reconstituted Task Force on University Governance should also strengthen the framework for consultation.

There is, however, a need for the president and provost to have informal personal advice from the faculty on problems as they begin to appear. It seemed clear to the panel that part of the past difficulties with the University's chief administrators has been insufficient exposure to faculty opinion. The panel considered a proposal to recommend a broad-based faculty advisory committee for the new provost. In the end, the panel rejected this proposal because most members felt that a provost should be free to obtain faculty advice in a manner most congenial to him or her. The panel was unanimous in its view, however, that the president and provost should by means of their own choosing seek closer contact with a group or groups of faculty advisors.

Administrative structure

The panel, bearing in mind the careful study of administrative structure by a previous faculty committee to which reference has already been made, did not seek to investigate this basic aspect of University administration. The panel endorses the proposals of the

previous committee and notes with satisfaction that a number of them have been put into effect; these include the reformulation of the role of the associate provost and changes in the arrangements for consultation with respect to administrative appointments.

There was, however, one important structural problem that emerged very clearly from recent events with which the earlier committee did not deal. This relates to the arrangements for coordinating graduate programs, especially those that do not fall entirely within the FAS framework. The evidence seems clear that under the present organizational structure, the chief administrator of the graduate program is too remote from the educational process to understand the special problems of the individual graduate groups in FAS and the other schools of the University. The panel recommends that the Educational Planning Committee develop a plan that would give the respective graduate faculties primary academic jurisdiction over their own graduate programs. One possibility would be for FAS, Wharton and Engineering to exercise their own administrative control, with the smaller schools following the model of the biomedical faculties.

Concluding Comment

The charge of this panel was to "review and categorize faculty concerns about the administration" and to recommend "resolution of the specific problems that it finds." The panel found many concerns and many problems. It has made some recommendations, which, if implemented, could remove or at least ameliorate many of the problems. Others may be resolved as individuals of good will and intelligence continue to address them.

The nature of this panel's charge, as noted earlier, required it to dwell on problems. In keeping with another part of its charge: "to restore an atmosphere of confidence throughout the University," the panel concluded that it was neither necessary nor wise to air, much less to attempt adjudication of, the particulars of the many complaints laid before it. The gist of these problem situations, particularly those of a recurring nature, was communicated to the relevant parties and the responses received lead the panel to affirm its own confidence in both the short-term and long-term vitality of the University. Pennsylvania is a great university, with able and committed trustees, a distinguished faculty, inquisitive students, dedicated administrators and staff and loyal alumni. With the successful prosecution of the ambitious capital campaign, in which the trustees are playing an illustrious role, the future of the University has never been brighter.

Finally, the panel wishes to record its appreciation of President Meyerson's many contributions to the advancement of the University. His vision, talents and dedication have helped to make the University a greater institution today than when he came. He needs and deserves the unstinted cooperation of the faculty and other constituencies of the University as he grapples with these problems and the many other challenges of a university presidency in these trying times.

*Members of the Committee**

Steven C. Batterman (applied mechanics)

Alexander Capron (law)

Larry Gross (communications)

Robert M. Hartwell (history)

Irving B. Kravis (economics)

Ann R. Miller (sociology)

Charles C. Price (chemistry)

Truman G. Schnabel (medicine)

Dan M. McGill, chairman (insurance)

*Dr. Philip DeLacy was a member of the panel until September 3, at which time he withdrew because of his conviction that his inability to participate actively (he attended only one meeting) in the panel's deliberations disqualified him from making any judgment about its findings.

News Briefs

(Continued from page 1)

written. I guess we have the seven-year itch — we want to know what progress has been made and what still needs to be done." Women's Center Director Carol Tracy said.

According to Tracy, the conference goals are to expand and revitalize the "women's network," to examine the status of women at Penn in employment and education and to make recommendations to the administration for change in the coming decade.

Secretary of the Corporation Janis Somerville will give the keynote address at the day-long conference.

The conference fee is \$4 per person. For information, call Ext. 8611 or 8740. Details of the November conference will be distributed to women employees and students soon.

Task Force on Governance Continues Work

The Task Force on Governance continues to meet weekly. Within the next few weeks the group plans to conclude its review of the status and implementation of the recommendations of the 1970 task force and to issue a report. The committee will then focus on its second charge: a consideration of the governance problems created by the likelihood that the University will shrink in size. The committee will review the procedures followed in recent efforts to reduce or phase out academic and nonacademic programs and will suggest alternative methods for future difficult decisions. The committee welcomes comments and suggestions from all segments of the University community. Correspondence should be addressed to the chairman, Walter Wales, Room 2E13, David Rittenhouse Laboratory/E1, or the committee's secretary, Barbara Wiesel, 112 College Hall/CO.

Purchasing Policy Reminders

Certain policies and procedures of the purchasing department need to be reiterated each year. The following policies and procedures must be followed to assure prompt purchasing action and eliminate unnecessary administrative work by ordering agencies.

1. **Quotations:** If quotations have been requested and received, they should always be attached to the requisition.

2. **Waivers:** Waivers are required (attached to requisition) when equipment exceeds \$1,000 and only one quotation or price is indicated. A minimum of three bids should be requested for all equipment purchases over \$1,000 in value.

3. **Radioactive Materials:** All requests (requisitions) for radioactive materials must be approved by the radiation safety office in the Towne Building. To expedite purchases, requisitions for this type of supply should be sent directly to the radiation safety office for recording and licensing.

4. **Animal Cages:** All requisitions for animal cages must be sent to the University veterinarian in the division of laboratory animal medicine, School of Medicine. Because of strict federal regulations, approval of size, construction and safety are required.

5. **Invoices:** All invoices, sent to ordering agencies for payment approval, must be returned to purchasing within 10 days.

6. **Vehicle Policy:** All requests for purchases or leases of vehicles will be sent to the vice-president for operational services with a letter justifying the use of the vehicle attached to the requisition.

7. **Use of C-6 Form:** No supplies or equipment will be paid on the C-6 form unless authorized by the purchasing department. The C-6 form is restricted to the payment of invoices, designated commodities and services approved by the comptroller.

8. **\$300 Equipment:** Requisitions for the purchase of equipment \$300 or more in value must be approved by the office of research administration. Certificates of need should accompany requisitions for equipment exceeding \$1,000.

—Robert M. Ferrell,
Director, Purchasing

Establishment of a University Center for the Study of Aging

Few subjects related to health have attracted as much attention from society in recent years as aging. Aging is not only a health interest but also a social and economic issue of major importance. The statistics tell part of the story. The number of aged people is increasing at a rapid rate. There are now 23 million people over the age of 65, and that number will continue to increase out of proportion to the rest of the population through the turn of the century. Between 1970 and 1976 the total population of the United States increased by 5.6 percent while the population over the age of 85 increased by 39.6 percent. Between now and the year 2000 the number of persons 75 years and older will increase by 60 percent. Statistics aside, perhaps the greatest reasons for the current interest in aging are the simple facts that, for most, it is inescapable and its mechanisms are poorly understood.

The biology of aging is an intriguing subject for basic research into cell mechanisms. Life expectancy varies greatly among species, from a few months to more than a century, and the maximum life span is characteristic of each species. These observations suggest that aging is genetically determined. Clearly, however, external influences impinge on cellular function and thus life span. But how does one distinguish between internal and external influences on the life of the cell? Some have argued that cells are potentially immortal and that cellular function could go on indefinitely were it not for noxious influences imposed upon the cell from its environment: in other words, disease in the broadest sense is the only cause of cellular dysfunction and death. A significant contribution to the biology of aging in recent years has been strong evidence that this is not the case, that in fact cells grow old and die under what appear to be optimal environmental conditions.

At the opposite end of the spectrum from cellular aging are equally important research issues such as the proper environment for older people to maintain intellectual interests, productivity and self-esteem; the relative values of dependent and independent living according to the interests and needs of the individual; and the economic implications of a population that is growing older.

The need for research in so many aspects of aging led to the establishment of a National Institute on Aging, the youngest of the National Institutes of Health, and heavier financing of the Administration on Aging within the Department of Health, Education and Welfare. In addition, special programs in aging have been established in several large federal agencies such as the Veterans Administration. The University of Pennsylvania has been involved in several aspects of aging research for many years. However, there has not been a focus for these activities, and only after an inventory of aging projects throughout the University had been performed was it clear how large and diverse the interest in the subject really is. Because of the diversity and magnitude of the problems that must be addressed in order to understand the aging process in its many ramifications, and because of the wealth of talent available at the University to study these problems, we are establishing a Center for the Study of Aging.

Goals of the Center

The overall goals of the center established by the steering committee are to understand the fundamental properties of the aging process and to improve the quality of life of the elderly. These goals will be approached through the establishment of a multidisciplinary center to include the elements of research, education and service. In the process of articulating the goals, the committee made several assumptions. First, a specialized body of knowledge and skills about the process of aging and the aging individual does exist and can be built upon. Second, since aging is a

developmental process involving biological, mental and social changes, a multidisciplinary approach is required. Third, potential financial support from funding agencies is oriented toward a multidisciplinary approach. And fourth, in so far as possible, both research and education should be incorporated within the projects that will contribute to the establishment and growth of the center.

Specific research goals include the nurturing of current projects and the establishment of new projects in selective disciplines that span the field of aging from basic biological research through clinical investigation and the study of patient care and social policy. The center will serve as a catalyst for aging research on the campus and a vehicle for helping those investigators who wish to enter the field. The center is not intended to encompass all research in aging at the University. It will make no attempt to require persons to submit proposals through the center, but we hope the expertise represented in the center will attract most interested investigators to it.

The establishment of a service base for programs of health care and social provision for the elderly is an essential goal. This will be carried out through the Schools of Medicine, Nursing and Social Work working with the Hospital of the University of Pennsylvania, the Philadelphia Veterans Administration Hospital and other affiliated institutions. The educational goals of the center are to produce appropriately trained manpower for research, service and education in gerontology and geriatrics.* Again it is essential that the training be multidisciplinary in its organization.

Brief History of the Center

Approximately three years ago Mr. Thomas McCabe, former chairman of the board of the Scott Paper Company and a long-time friend and benefactor of the University, expressed the opinion that research in aging would rise to the forefront of biomedical research and remain there throughout the rest of the century. McCabe is himself an extraordinary example of the preservation of mental faculties that is possible in the later years of life. He asked about the status of aging research in the nation, we provided information to him, and his interest continued to grow. He provided funds for Dr. Robert Doughty, a former McCabe scholar at Swarthmore College and now a faculty member in our Department of Pediatrics, to do a survey of the current status of biomedical research in aging. Dr. Doughty did a splendid job, and his report provided the stimulus to pursue the matter further. The efforts were encouraged by the late Dr. Kendall Elsom, a long-time faculty member of our medical school and a close friend of McCabe.

In January, 1977 I appointed a steering committee to determine the feasibility of establishing a center for aging at the University. Dr. Vincent Cristofalo, a distinguished biologist in the field of aging at the Wistar Institute, agreed to chair the committee, and Dr. Stanley Brody, an authority in the social and health aspects of aging, joined him. Thus, from the beginning, the steering committee had the benefit of outstanding talent from the two ends of the spectrum of research in aging. The committee is multidisciplinary in orientation and includes representatives from the Schools of Medicine, Veterinary Medicine, Dental Medicine, Nursing, Social Work and the Leonard Davis Institute of Health Economics. Grants were obtained from the McCabe Research Fund and the Administration on Aging to initiate the planning.

A University-wide seminar program was established, and experts whose talents ranged over much of the field of aging were invited to the University from throughout the world to hold seminars and

*Gerontology is the study of the aging process. Geriatrics is the clinical application of the knowledge gained through gerontology.

consult on the plans for the center. The seminars and lectures were well attended by both faculty and students from a variety of disciplines within the University, and this widespread interest has been a significant stimulus in the development of the center. In addition to the external speakers and consultants, an intra-university multidisciplinary seminar program met twice a month in order to exchange information on research programs within the University and in order to identify investigators working in fields closely related to aging. An inventory of University resources in aging was put together by Dr. Sharon Simson, executive secretary of the steering committee. The size and diversity of the inventory was a surprise even to those persons who had become most familiar with research in aging at the University. The 100-page inventory contains contributions from ten schools, three other organizational units and 100 individuals representing a multitude of disciplines.

In the winter of 1978, after a year of intense work and study by the steering committee, it recommended that a Center for the Study of Aging be established at the University. The reasons given were the importance and magnitude of the challenge, the interest and resources currently in existence at the University and the future opportunities for funding research in aging.

Initial Elements of the Center

The core programs of the Center for the Study of Aging will be three in number. Basic research in the aging process requires animal models. The challenge is to distinguish between the effects on the organism of a specific disease entity and aging per se. The School of Veterinary Medicine provides a unique opportunity to develop colonies of aging animals. The animals will be made available to investigators interested in specific aspects of aging, and a cryogenics facility will be established to preserve banks of fixed tissues for future research.

The second core facility is a cell bank to complement the animal bank. Some models of cellular senescence are based on plants and invertebrates, but the primary emphasis has been on vertebrate somatic cells which are maintained in tissue culture. One of the most interesting observations in recent years has been the demonstration that the life span of human cells in tissue culture is inversely related to the age of the donor from which the cells were taken. Again we are fortunate in that the cell bank facility established by the National Institute on Aging is located in the Institute for Medical Research in Camden. The Institute for Medical Research is affiliated with the University, and the principal investigator of the cell bank facility, Dr. Warren Nichols, holds appointments in the medical school. Recently a sister cell bank was established at the Institute for Medical Research by the National Institute of General Medical Sciences to study cells from individuals with genetic abnormalities. Although the cell banks are a national resource, the opportunities are great for the Center for the Study of Aging to make use of these facilities.

The third component of the Center, and in time undoubtedly the largest one, is the clinical arm. The steering committee has identified many interested faculty in the clinical departments of the medical school. The Department of Medicine, in particular, has established aging as a priority field for development. Fellowships in geriatric medicine have been awarded to the Department of Medicine, and an application will be made for a geriatric research and education center to be developed at the Philadelphia Veteran's Administration Hospital. The School of Nursing is developing a graduate program in geriatric nursing. There are many additional opportunities to develop clinical projects through the Schools of Dental Medicine, Nursing and Social Work. In fact, one of the challenges to the health schools and other schools within the University that are interested in aging will be to select those opportunities for education and research which will be most meaningful to the University and most likely to be productive.

Governance of the Center

The core elements of the center will be linked by an administra-

tive unit consisting of a director and a modest staff. The steering committee has recommended that in the beginning two part-time associate directors be named to complement the research interests of the director. For example, the three leaders could be a clinician, a behaviorist and a basic scientist. A scientific advisory committee will be established based on the present steering committee. The scientific advisory committee will contain representatives from the disciplines and schools with major interest in the center. Outstanding scientists in the field of aging from around the country will be invited to serve on the scientific advisory committee to complement the University representatives. The director of the center will report to a governing board made up of the deans of the schools with the most interest in the center, and the governing board will be chaired by the vice-president for health affairs.

A nationwide search for the director of the center has commenced. As is true for other centers and institutes within the University, all primary appointments will be in schools and departments, and the secondary appointment will be in the center.

Funding of the Center

Three applications to fund a Center for the Study of Aging for the fiscal year 1979 and beyond have been submitted to federal agencies. In addition, another grant has been obtained from the McCabe fund for fiscal year 1979. This is the third consecutive year that the McCabe fund has supported the steering committee of the center. Beyond these proposals there are numerous additional opportunities. We hope to endow the center with a major gift. In their report the steering committee lists several pages of grant opportunities, mainly from the federal government but also from the Commonwealth of Pennsylvania. Altogether there are more than 150 federal programs which support research, educational or service activities in the field of aging. All of this opportunity should not be cause for contentment, however, because competition for funds is already intense and will surely increase as more and more institutions enter the field.

Conclusion

In conclusion, I enthusiastically support the establishment of a Center for the Study of Aging at the University. It would be an ambitious undertaking at any time but it is especially so now because the University does not have the financial resources to commit to the program. Therefore, it must be funded from external sources. The opportunity of obtaining those resources are good, however, because of the detailed and thoughtful manner in which the steering committee has put together the program and because of the extensive internal resources that are not only available but committed to the establishment of the center.

September, 1978

—Thomas W. Langfitt, M.D.
Vice-President for Health Affairs

Bulletins

Nominations for Scholars Program Requested

Nominations for the election of students to the University Scholars Program should be submitted by faculty before November 3, according to Henry Trowbridge, program chairman. Send nominations and supporting materials to the University Scholars Office, 3533 Locust Walk. For information, call Cornelia S. Wilson, Ext. 6061, 10 a.m. to 2 p.m., Monday through Friday.

To Call the Museum. . .

The tie-line to the University Museum has been discontinued. For new extensions, call the information number, Ext. 7111. Individual listings for the museum will appear in the new University telephone directory, to be distributed shortly.

Speaking Out

Undergraduate Education

To the Editor:

On May 22, 1978, Professor Richard Lambert, dean of instruction and academic planning, sent to each faculty member in FAS the report by the Committee on Undergraduate Education. With it he enclosed a letter in which two other members of the committee and I dissociated ourselves from the report. I wish to indicate below the reasons for my action.

Perhaps the two most important recommendations of the report are the introduction of a core curriculum and the establishment of a "pedagogical institute." I would like to consider these proposals in that order.

As was the case for many of the committee members, I was not unfavorably disposed toward the idea of a core curriculum. My own contact with such a program was as an undergraduate at M.I.T. in the mid 1950's. Freshmen, and to a lesser extent upperclassmen, were required to take an integrated "humanities" sequence. During the first year, we considered specific historical and cultural periods, such as that of classical Greece and the Italian Renaissance. These we studied primarily by reading original sources in translation, with some guidance from other texts. I found it to be one of the most valuable educational experiences that I have had. On the other hand, many of the students at M.I.T. were primarily interested in professional studies and were miserable in the course. I was somewhat concerned that with the large number of pre-professional students at Penn a similar phenomenon might well occur here.

During the committee discussions, it became clear that a core curriculum seemed a likely possibility for Penn and I decided to approach such a development positively. I was thus very much disappointed with the report. As described therein, the core program would simply transform the first two years of college into an advanced high school, taught by high school teachers in disguise. Carrying this a step further, it should be recognized that the potential students that we seek most would not be fooled: most of them will have had enough of high school, and will go elsewhere.

The report begins quite pretentiously. It is stated that "universities and colleges almost by default must assume the responsibility for creating new frame-

works for value choice." How this is to be done is not made clear, but I would bet that there is not a high school social studies teacher in the country who does not have a similar dream. I'm not saying that there is anything wrong with this—all that I want to point out is that our students have been exposed to years of "course experiences" in which their teachers have hoped to communicate our values.

Turning to the detailed description of the core, I am again struck by the high school mentality. It often seems to be characteristic of educators, as opposed to individuals who are active in some field and who also teach, that they feel that it is very important to analyze the *methodology* of creative work. This is the approach we find throughout the report. For instance: "Of particular interest here would be an attempt to explain in laymen's terms the ways in which science identifies the major problems and designs research strategies." Such theoretical approaches to their subjects, especially when presented on an elementary level, are regarded as puerile and an impediment to teaching by most scientists (simply ask them!). Speaking as a mathematician, the way to teach mathematics is to encourage the student to *do* mathematics, and not simply talk about it. I would assume that this is true in most fields. Is it not the case that the most successful method for teaching a language is to have the students start speaking it?

The reader might feel that perhaps the report was simply poorly written, and that once the system is set up the excellence of our faculty would prevail to ensure a decent program. Unfortunately, the report recommends a bureaucratic structure which, if implemented, will guarantee that this won't happen.

To me the report can be interpreted in only one way: We cannot trust the departments of this university to implement the core curriculum. We must instead set up a separate faculty to administer it. It will not at all be necessary for its members to be scholars or researchers—the only criterion will be that they be good teachers. Just who would fall into the latter category would presumably be decided by the administrators and the students. Not only would the authors of the report have our students learning about "modes of inquiry," "modes of creativity," and "modes of analysis," they would ensure that the

"cadre" teaching such empty generalities wouldn't know any better.

Let me now turn to the "pedagogic institute." It might indeed be useful to set up a unit which would make available pedagogical advice to the faculty. In particular, the use of video-tapes for diagnostic purposes, and periodic lectures on "tricks of the trade" would undoubtedly be of interest to many of our faculty members. What we find recommended in the report is a much more grandiose and powerful organization. We read: "Faculty members, who, by various means of judging their teaching performance—including SCUE rating—fall below a minimal level of performance, should be strongly urged by the departmental chairman, or by the dean, to attend the pedagogic institute. The institute should periodically give a series of lectures on the fundamentals of educational psychology. . . ."

Let me put aside the obvious question of what conceivable purpose such lectures could have. What is most disturbing about the recommendation is the power it would give to the administration and the students to interfere with the educational decisions of the faculty. *The faculty cannot accept the educational judgments of either the administration or the students as final.* To paraphrase one of my colleagues, should this principle fail, what is the best of teaching will be replaced by the charismatic and fluent.

Does this report indeed represent the consensus of the committee? It should be pointed out that very few of the committee members were involved in the final stages of assembly, which occurred after Professor Schrieffer had gone on leave. The report was not accepted by a vote of the committee. Instead, the members were simply asked by mail to send in any objections that they might have to the report. I would guess that many of the members despaired of patching up such a patently mediocre report. Perhaps they felt it would simply die a natural death. It is not at all clear that the latter will be the case.

What can be done? I would recommend that if it is given the chance, the faculty should reject the report. What is needed is a much more modest and sound program, which is under the control of the present faculty rather than the administration and the educational theorists.

—Edward Effros,
Mathematics Department

For Your Reading Pleasure

Almanac welcomes notices of recently published books by members of the University community for a column of Penn Authors, to be included as a regular feature of *Almanac*. Books will be briefly

noted, *not* reviewed, with reference to publisher, price and subject matter. The column will list books only—no papers, lectures, pamphlets, articles, etc., please. Address all book announcements to *Almanac*, 513 Franklin Building 16.

Letters Welcome

Almanac invites all members of the University community—administrators, faculty, staff and students—to submit letters on relevant University issues to *Speaking Out*.

Speaking Out is a forum for readers' comment on University issues, conducted under the auspices of the *Almanac* Advisory Board: Robert L. Shayon, chairman; Herbert Callen, Fred Karush, Charles Dwyer and Irving Kravis for the Faculty Senate; Valerie Pena for the Librarians Assembly; Shirley Hill for the Administrative Assembly; and Virginia Hill Upright for the A-3 Assembly. Copies of *Almanac's* guidelines for readers and contributors may be obtained from *Almanac's* offices at 513-515 Franklin Building.

Report of the Ad Hoc Subcommittee on Indirect Costs

This report on the indirect costs of research was prepared by a subcommittee of the University Council Committee on Research and endorsed by the committee on May 16, 1978.

Last year (May 10, 1977, *Almanac*) a report was published giving an account of the basis of indirect cost recovery at the University of Pennsylvania. An analysis was provided of the relative costs of the six components which constitute the basis of the University's total recovery of the indirect costs for research conducted by its faculty. The largest of these components was that of school and departmental research administration, which totaled \$6.50 million. Since the administrative activities of each of the schools having to do with research are highly variable, they are likely to be of interest mainly to a rather limited group of the faculty and will not be dealt with here. The second largest component was designated as general or central administration with a research related cost of \$5.74 million. This component, common to all schools and departments, prompted the decision to examine this indirect cost center in greater detail. It is the purpose of this report to inform the faculty of the functions of the general administration and how these are included as a part of the indirect cost of doing research.

General administration is a grouping of convenience for accounting purposes and consists of a melange of 20 offices which provide specialized services for the entire University. As these services are detailed in subsequent sections of this report, it will become evident that the relative contribution of these services to research activities is greater for some than for others. Nevertheless, they are all included under the category of general administration and treated the same way for purposes of accounting. An item by item analysis of each of these services would be tedious in the extreme and when completed would very likely produce cost figures close to the ones obtained by including them together as a group. As indicated in last year's report, a single formula, by arrangement with federal authorities, is used to determine the costs of these offices' contributions to research performed by the faculty. The formula is a percentage calculated by comparing the total cost of the University to the total direct cost of research activities. For fiscal year 1976 the total cost of the four major activities of the entire University—instruction, research, organized activities and auxiliary enterprises—was \$122 million. Direct research costs were 35.2 percent (\$43 million) of this amount. This percentage was applied to the expenses of all general administration activities (\$16.3 million) to derive the figure of \$5.7 million provided in Table 1 of the 1977 report. Since the determination of that figure, a careful survey of 25,000 rooms of the University has been completed which indicates that less space had been devoted to the functions performed by the general administration than previously believed. This finding required a reduction in the computed expenses of general administration to a new total of \$14.3 million rather than the \$16.3 million stated above. This in turn reduces the proportion of these costs which have to do with research. The new figure based

on the space utilization survey is \$4.99 million rather than \$5.7 million, a difference based entirely on space occupancy.

For the above stated purpose of informing the faculty about indirect cost recovery, the \$4.99 million can be further broken down into each of the 21 services which make up general administration. The cost of operations and maintenance of the 20 other offices collectively is by far the largest single item (\$1.4 million) of the \$4.99 million. It is made up mostly of fuel, cleaning and maintenance costs. The second largest item (\$0.6 million) is the research related cost of the University Management Information Systems (UMIS), a computer facility serving administration functions. Third is the cost of auditing, legal and insurance offices (\$0.5 million). The remainder are all much smaller amounts and are listed in Table 1 along with the major items. Table 1 provides dollar amounts in thousands and the percent that these amounts represent of the \$4.99 million in indirect cost recovery for general administration.

Activities of the General Administration

Each of the 21 items in Table 1 has activities which are related to research, either in an obvious manner or more indirectly. Here follows a brief description of each.

1. Operations and maintenance: heating and cooling of buildings, cleaning and maintenance, security and repair of administrative office areas.
2. University Management Information Systems: computer facility for administration, payroll monthly and yearly statements which accompany paychecks. Statements of research transactions and summary reports monthly, budget data, special audit analyses and miscellaneous other administrative reports.
3. Auditing, legal and insurance: audits of accounts, legal representation and fees, cost of insurance policies.
4. Maintenance of rental property: property rented to the University for administrative and academic purposes.
5. Comptroller's office: chief accounting office, contract research accounting, investigator's accounts, reports of expenditures, contract close outs and collection of income from sponsors.
6. University publications office: bulletins, catalogs; *Gazette*; *Almanac*.
7. President's office: president, office of budget and ombudsman's office.
8. Treasurer's office: investments, cash flow.
9. Student services: student advisors, international services, cashiers, parking, Houston Hall cafeteria, fellowship information, registrar, work-study program.
10. Personnel information services: payroll, payroll accounting, counselling records of personnel. Twenty-seven percent of total payroll is research generated.
11. Construction and planning: engineers and inspectors for buildings, renovation and relocation.
12. Mailing, copying, telephone: services all administrative functions.

13. Provost's office: chief academic officer, promotions, appointments, policy, including office of vice-provost for graduate studies and research.

14. Chairman, board of trustees and secretary of corporation: policy, acts for University.

15. Vice-president, management: supervises operations services and treasurer, director of personnel, comptroller and UMIS.

16. Vice-president, public relations: responsible for University's research image.

17. Vice-president, operational services: heating, cooling, maintenance, cleaning, facilities planning and auxiliary enterprises.

18. Executive director personnel: hiring, pay ranges, labor relations.

19. Vice-president, health affairs: supervises health professions schools, hospital and clinics.

20. Purchasing: orders and authorizes payments to suppliers. Seventy-four percent of purchases are research generated.

21. Miscellaneous: affirmative action, Faculty Senate, fringe benefits for Wistar staff, professional school alumni offices.

Does the Indirect Cost of Research Affect the Research Environment?

Virtually all sources of research support recognize the validity of indirect cost charges and make some allowance for it. However, all sponsors do not do this in the same way. The federal government, represented chiefly at this institution by the Department of Health, Education and Welfare (HEW), has authorized payment of indirect costs of research by negotiation with the institutions involved. This is done sometime after the award has been funded and establishes a retrospective annual indirect cost rate for each institution, based on an agreement derived from published guidelines (Federal Management Circular 73-8). The guidelines at present permit the indirect cost of research at the University of Pennsylvania to be calculated on the basis of the total direct cost of the research with a few exceptions, equipment and patient costs being the chief items which are exempted. Other sponsors of research may compute indirect costs on somewhat different bases—for example, as a percentage of wages and salaries only. Thus, although the University must justify its indirect cost rate annually (51 percent for FY 1977) the recovery of actual indirect costs of research is not automatic with all sponsors. Actual recovery ranges from zero percent for some sources to 51 percent for the federally approved rate which is negotiated with the Department of HEW. Where funding agencies refuse to allow for the full recovery of indirect costs the University must either accept this ruling or refuse the research grant. The result of this variable level of indirect cost support is an annual deficit of recovery. In 1977, 75 percent of research grants provided full indirect cost recovery and 25 percent less than full recovery. The net deficit was \$3 million, \$15.4 million instead of \$18.4 million. It should be emphasized here that failure to recover fully the indirect costs does not directly affect the individual investigator whose grant is so funded. The unrecovered amount is provided by the University alone if the recovery is less than 8 percent of the direct costs or by the University and the investigator's department if the indirect cost recovery is between 8 and 51 percent. The investigator's budget for direct research costs is not charged for the difference; it is charged only for the indirect costs agreed on. This is true even when the indirect research cost rate rises during the second and third years of support of the same grant. There is, of course, an indirect effect on all members of the University community, since the occurrence of an annual deficit imposes restrictions on salary increases and other costs.

One agency which provides about 13 percent of the research funding at this University, the National Science Foundation (NSF), allows for indirect costs in the same manner as other federal agencies. Because of its limited funds, however, it may provide a specified combined total sum for support of both direct and indirect research costs which will provide less than the requested amounts. After the University has charged this total sum with its prevailing

indirect cost rate for that year, this has the effect of reducing the total direct cost of that grant to a level which is lower than was requested by the investigators. The University's position is that its indirect costs for supporting research are documented in its accounting to the Department of HEW; the costs are ongoing and to charge less would only add to its deficit in the recovery of these costs. The investigator's position in this controversy is that the University is willing to accept less than its prevailing indirect cost recovery rate with other funding groups (such as private foundations); and to single out this research sponsor as a source of full recovery works a hardship on those whose research falls under the aegis of the NSF. The problem arises because the NSF is not one of these foundations and has in fact indicated that it allows indirect costs to be computed at the same rate as other government sponsored research. The practice by NSF project directors of assigning a specified maximum figure for the support of both direct and indirect costs of research which will reduce direct research expenditures is fortunately a rare occurrence at this University. Of the approximately 100 NSF awards made annually only one or two recipients are so penalized by the nature of the award. The prospective NSF investigator would be well advised to avoid any private negotiations with project directors which place the investigator in a position in which indirect costs of the University are to be further negotiated.

Indirect Costs for FY 1978

Two factors have combined to increase the expected recovery of indirect costs for FY 1978. Fixed equipment items located in buildings which were formerly depreciated at the same rate as the

Table 1
Indirect Costs of Research Assigned to General Administration—FY 1977

Component of General Administration	Dollar Cost* (Thousands)	% of Total General Administration Research Costs
1. Operations and maintenance	1,487	29.8
2. University Management		
Information Systems	604	12.1
3. Auditing, legal and insurance	504	10.1
4. Maintenance, rental property	265	5.3
5. Comptroller	259	5.2
6. Publications office	215	4.3
7. President's office	165	3.3
8. Treasurer's office	155	3.1
9. Student services	145	2.9
10. Personnel information services	140	2.8
11. Construction and planning	135	2.7
12. Mailing, copying, telephone	125	2.5
13. Provost's office	100	2.0
14. Chairman of board and secretary of corporation	55	1.1
15. Vice-president, management	50	1.0
16. Vice-president, public relations	50	1.0
17. Vice-president, operational services	50	1.0
18. Executive director personnel	40	0.8
19. Vice-president, health affairs	35	0.7
20. Purchasing	10	0.2
21. Miscellaneous	404	8.1
	4,993	100%

*These figures do not represent the total expenditures of these offices, only that portion allocated to research, 35.2 percent of the total.

building have now been surveyed and will be depreciated at a higher schedule than before. Fuel costs have continued to rise and this will increase indirect costs. On a tentative basis, this is expected to increase indirect costs of research by a few percentage points over last year.

—Submitted by Howard M. Myers

Committee on Research

Chairman: Shiv K. Gupta (operations research)

Faculty: Stella Y. Botelho (physiology)

William R. Brennen (chemistry)

Edward G. Effros (mathematics)

Joseph S. Gots (microbiology in medicine)

Robert H. Koch (astronomy)

Howard Kunreuther (decision sciences)

Howard M. Myers (dental science)

Noah Prywes (computer and information science)

Franklin C. Southworth (South Asian studies)

M. Duncan Stanton (psychology in psychiatry)

John R. Williamson (biochemistry and biophysics)

Jerry Wind (marketing)

Students: Anne M. Houle (FAS'78)

Pamela Russell (GrFAS)

Ex officio: Donald N. Langenberg (vice-provost for graduate studies and research)

Frank A. Trommler (chairman, Faculty Grants and Awards Subcommittee)

University Policy on Conduct of Research Programs

The following report, a revision of the "Integrated Statement of University Policy on Conduct of Research Programs" adopted by Council November 8, 1967, was approved by the Council Committee on Research, May 16, 1978. See Almanac, February 21, 1978 for the "Report of the University Council Ad Hoc Committee on University Relations with Intelligence Agencies" whose recommendations gave impetus to the report. The committee requests that responses from the University community be sent to this year's committee chairman, Dr. Howard Myers, School of Dental Medicine.

A. Roles and Responsibilities of the University and Its Faculty

The University accepts as one of its major responsibilities to society the support of faculty programs for acquisition and dissemination of new knowledge. It thus posits and requires the independence of its faculty members and their research decisions from control or pressure. It seeks to maintain such independence, even from University supervision, because of the fundamental belief that the essential functions of a university can be accomplished by freely permitting capable scholars to follow the search for truth in their fields of professional competence, wherever it may lead. The University imposes no limitation on the freedom of the faculty in the choice of fields of inquiry or upon the media of public dissemination of the results obtained. It is the obligation of a faculty member to make freely available to his colleagues and to the public the significant results he has achieved in the course of his inquiries.

B. General Guidelines

1. Approval

Proposals for grants, contracts and other cooperative agreements must be approved by the appropriate department chairman, the dean of the school and the vice-provost for graduate studies and research. If the University is to avoid limiting the freedom of its faculty in the choice of fields of inquiry or the media of dissemination, approval cannot be denied if the proposed research follows the standard of normal academic procedure in the relevant discipline.

2. Student Participation

Research projects carried on under contracts or grants generally involve substantial participation of graduate students in degree-related research. It is desirable that they should do so, and indeed such furtherance of graduate and postgraduate education is an additional indication of the scholarly purpose of a project. The standard of free publication is no less fundamental to these educational purposes.

3. Dissemination of Results

Other than in exceptional circumstances described hereafter, the University as a corporate entity will accept and administer research agreements with sponsors only for projects whose primary purpose is to produce results which will be freely available and publishable

in the manner accepted in the relevant discipline. All agreements for research projects should clearly state that the faculty investigators retain full and free rights to determine what they will publish. These publications may suitably protect the identity of the sponsor and its proprietary or confidential input data according to normal standards of professional ethics. It is also understood that the terms of an agreement may require the preparation of privileged reports to the sponsor as long as the principal purpose of the project is the generation of results that are freely publishable.

The University may permit delay (normally not to exceed three months) but *not* denial of publication for the following reasons:

- (a) if a project involves use of privileged input data of the sponsor;
- (b) if a project is only one task or element of a larger program, and release of results must be coordinated with others; or
- (c) if a project involves the development of an invention which may be patentable.

4. Sponsor Identification

The provision of B3 above for protection of the identity of a sponsor notwithstanding, the University requires open identification of the actual sources of funding for all sponsored programs and will so advise potential sponsors at the time a proposal for funding is submitted. In order to assure adherence to this principle, the office of research administration will make public at regular intervals, the sources of support for each program which will include a title, name of sponsor, name of principal investigator, period of agreement and funding amount.

5. University Independence

Funding agencies will refrain from interference in all matters of University governance and shall not influence, directly or indirectly, the personnel or other policy decisions of the University.

6. Technical Directions

Although they may, of course, choose what they support, funding agencies are not permitted to: (a) occupy any supervisory or directing role in the progress and development of research or (b) exercise influence on the manner in which conclusions are formulated.

7. Publicity

No publicity or advertising by the sponsor is to be given to results of supported work without written approval by the University. The name of the University of Pennsylvania is not to be used in advertising or publicity material unless authorized by the president of the University. The names of the investigators are to be mentioned only in the literature references. Any publicity is subject to the normal procedures outlined in section B1 above.

C. Contracts with Government Agencies

The above principles apply with equal force to all outside agencies including all agencies of domestic and foreign governments.

The University does not accept contracts or grants that carry or may be reasonably expected to acquire formal security notification. Access to classified data and security clearance should be obtained.

if necessary, by the individuals involved and not by the University.

D. Contracts with Commercial Organizations

The University notes that it may be desirable for members of its faculty to conduct research projects funded by commercial and industrial concerns. Such projects must follow the normal academic research and approval procedure outlined in section B.

It is the responsibility of department heads to insure that work of this character is not permitted to become of such a magnitude as to give an unduly commercial aspect to the activities of their department.

E. Exceptional Public Need

Exceptional circumstances may arise when the urgent needs of the local, national or international community uniquely call for a University research project whose primary aim is service rather than contribution to general knowledge. In such circumstances the University may participate in contract or grant arrangements not otherwise acceptable under University policy, but only upon

approval by the president of the University after consultation with the departments involved and with the consent of the Committee on Research. That committee shall periodically review these arrangements. Only in a national emergency proclaimed by the president of the United States shall the aggregate of such contracts or grants in a particular department or school constitute an appreciable portion of total research contracts and grants in that department or school.

F. Implementation and Administration

Responsibility for the execution of the University research policy and the decisions concerning compliance with this policy is delegated to the vice-provost for graduate studies and research, who acts with the advice of the Committee on Research (of the University Council).

In case of disagreement between a faculty member and the relevant approving authority (e.g., department chairman, dean or vice-provost for graduate studies and research), it is the faculty member's right to appeal to the Committee on Research or other appropriate faculty committees.

—Submitted by Jerry Wind

Openings

The following listings are condensed from the personnel office's bulletin of October 5, 1978. Dates in parentheses refer to the Almanac issue in which a complete job description appeared. Bulletin boards at 14 campus locations list full descriptions. Those interested should contact Personnel Services, Ext. 7285. The University of Pennsylvania is an equal opportunity employer. The two figures in salary listings show minimum starting salary and maximum starting salary (midpoint). An asterisk () before a job title indicates that the department is considering promoting from within.*

Administrative/Professional

Applications Programmer (9-12-78).
Assistant Bursar (two positions—9-26-78).
Assistant Director, Wharton Graduate Alumni (9-12-78).
Assistant Regional Director (9-26-78).
Assistant to Associate Provost (10-3-78).
Assistant to Director (two positions—9-12-78).
Associate Director (9-12-78).
Associate Director for Maintenance Operations (9-12-78).
Business Administrator I (two positions) (a) (9-19-78); (b) (9-26-78).
Business Administrator IV prepares department budgets, is responsible for grant applications and proposals. College graduate with major in accounting or management, 10 years' experience. \$14,400-\$20,550.
Coach (9-12-78).
Controller (9-12-78).
Coordinator, Alumni Placement (9-12-78).
Director of Facilities Management (9-12-78).
Director of Fraternity Affairs (9-26-78).
Engineer, Pressure Chamber (9-19-78).
Financial and Administrative Officer is responsible for managing the financial and physical resources of the hospital. University experience managing research grants required. \$16,626-\$23,725.
Group Practice Administrator (10-3-78).
Insurance Manager (10-3-78).
Librarian I (10-3-78).
Library Department Head III (9-19-78).
Manager of Auxiliary Services (9-26-78).
Placement Counselor (9-12-78).
Research Coordinator assists in the collection and submission of data. College degree, experience with computer software and statistics; background in cancer data management preferred. \$11,525-\$16,125.
Research Specialist I (two positions) (a) (9-26-78); (b) (10-3-78).
Research Specialist II (9-12-78).
Research Specialist III (two positions) (a) involves analysis of data from experiments in high energy physics (Ph.D. in high energy physics and three years' experience); (b) requires analysis of micro-data in African demography, particularly in the areas of mortality and internal migration (Ph.D., knowledge of indirect estimation techniques and computer skills with large data sets). \$13,250-\$18,575.
Senior Systems Analyst (three positions) (a) (9-12-78); (b) (two positions—9-19-78).

Senior Systems Programmer (9-12-78).
Staff Auditor (two positions—10-3-78).
Staff Writer I (9-26-78).
Systems Analyst (10-3-78).
Terminal Manager (9-12-78).

Support Staff

Administrative Assistant I (three positions) (a) (9-12-78); (b) (two positions—9-26-78).
Administrative Assistant II (two positions) (a) (9-12-78); (b) involves budgetary work, processes student records (college graduate with some bookkeeping and office experience). \$7,700-\$9,850.
Bookkeeper (9-26-78).
Cashier (9-12-78).
Clerk III (9-19-78).
***Computer Terminal Operator** (9-19-78).
Coordinating Assistant I (two positions) (a) (9-12-78) (b) employed in conjunction with research projects involving human subjects (two or more years of college or business school, administrative and secretarial experience). \$7,700-\$9,850.
***Coordinating Assistant II** organizes and maintains information dissemination system, assists with newsletter. B.A., research and writing experience. \$7,700-\$9,850.
Dental Technician II (9-12-78).
Electronics Technician III (10-3-78).
Gardener (Chestnut Hill) is responsible for maintenance, gardening and preparation for special functions. Experience in grounds maintenance and ability to operate equipment. \$9,050-\$11,575.
Groom, Stables (New Bolton Center) (10-3-78).
Head Cashier (10-3-78).
Information System Technician involves data processing activities and instructing personnel and students on the Diablo terminal word processing system. Two years' administrative experience. \$7,150-\$9,150.
Instrumentation Specialist (9-12-78).
Junior Accountant (seven positions—9-26-78).
Lab Assistant, Head (10-3-78).
Maintenance Man (New Bolton Center) keeps operating rooms and hospital recovery stalls clean, operates electric steam jenny. Elementary school graduate, ability to perform janitorial duties. \$6,525-\$8,325.
Network Supervisor (9-19-78).
***Office Automation Editor** (three positions) (a) (10-3-78); (b) operates word processing system; overtime, weekend and holiday attendance required during peak load periods (experience with computer-based word processing systems); (c) coordinates use of experimental and developmental facility, manages system and user documentation through computer word processing (administrative skill and experience, training in use of computer word processing). \$7,150-\$9,150.
Operator, Telephone PBX (New Bolton Center) operates multiposition console-Direct Trunk Terminal. Graduation from high school, special training in operation of console-Direct Trunk Termination switchboard or



From "The Traditional Pottery of Guatemala," on exhibition at the University Museum through January 7.

six months' experience. \$5,800-\$7,400.

Payroll Clerk (9-26-78).

Programmer I (10-3-78).

Receptionist, Medical/Dental (10-3-78).

Research Bibliographer I (9-12-78).

Research Bibliographer II (9-12-78).

Research Lab Technician I assists in biochemical laboratory with emphasis on semi-micro analytical work. B.A. in chemistry or biology, experience. \$6,775-\$8,675.

Research Lab Technician II (two positions) (a) (9-19-78); (b) (10-3-78).

Research Lab Technician III (nine positions). See campus bulletin boards. \$8,625-\$11,050.

Secretary I (10-3-78).

Secretary II (13 positions). \$6,225-\$7,975.

Secretary III (10 positions). \$6,700-\$8,575.

Secretary IV (9-26-78).

Secretary, Medical/Technical (six positions). \$7,150-\$9,150.

Supervisor I, Gift Shop orders merchandise, attends trade shows, deals with sales representatives. Graduation from college or equivalent work experience, knowledge of purchasing. \$6,700-\$8,575.

Typist II (10-3-78).

Part-Time

Details on three administrative / professional and 20 support staff positions can be found on campus bulletin boards.

The Art of Cooking without Cuisinart

Cookery in the age of Chaucer is the theme for a one-day workshop and illustrated lecture sponsored by the Foodways Group and the Graduate Program in Folklore and Folklife. The October 18 noon workshop will examine problems in the study of historical cookery. In an illustrated lecture at 6:30 p.m., Dr. Lorna J. Sass answers the proverbial question *Do Too Many Cooks Spoil the Broth?* Dr. Sass, who received a Ph.D. in medieval literature from Columbia University, prepared the diplomatic edition of the Middle English *Fourme of Cury* (c. 1391) and wrote *To the King's Taste: Richard II's Book of Feasts and Recipes, To the Queen's Taste: Elizabethan Feasts and Recipes and Dinner with Tom Jones*.

Things to Do

Send listings for *Things to Do* to Almanac, 515 Franklin Building/16. Deadline for inclusion is the Tuesday before the Tuesday of the issue in which the listing will appear.

Lectures

K. C. Alexander of the National Institute for Rural Development, Hyderabad (India) and the Rural Development Committee, Cornell University, discusses **The Radicalization of Politics: Class as an Emerging Basis of Political Participation** in a Political and Social Transformation in South Asia seminar, October 12, 11 a.m., University Museum. § Professor Peter Ludz of the University of Munich provides an **Analysis of American**

Political Theory for the Department of Political Science and the Center for the Study of Democratic Politics, October 12, 4 p.m., Room 286 McNeil Building. § **Some Ideas from Ancient India in Contemporary America** are offered by Dr. R. W. Weiler of the Department of South Asia Regional Studies, October 12, 5:30 p.m., University Museum, Rainey Auditorium. § The Institute of Contemporary Art continues its **Artists in Their Studios** series with Jody Pinto, October 12, 6:30 p.m. (Admission is by series subscription only. Call Ext. 7108.) § Professor George Savidis, who holds the George Seferis chair of modern Greek Studies at Harvard, will present **Contemporary Greek Poetry: A Worm's Eye View** October 15, 8 p.m., in the Faculty Club basement auditorium. § A. C. Nielsen, Jr., explains **Contemporary Nielsen Methods and Issues in Audience Measurement** in an Annenberg School Communications colloquium, October 16, 4 p.m., Annenberg School Colloquium Room. § The Department of History and Sociology of Science examines the question **Is There a Sociology of Technology?** with Dr. Diana Crane, Department of Sociology, October 16, 4 p.m., Edgar Fahs Smith Hall. § Dr. R.O. Davies, Department of Physiology, speaks on *The Ventral Medullary Chemoreceptor* (October 17, 12:30 p.m., physiology library, fourth floor, Richards Building § Dr. S. S. Chern, Department of Mathematics, University of California at Berkeley, reviews **Moving Frames: Old and New Applications** October 16, 4:30 p.m., and October 17, 3 p.m., Room A-6, David Rittenhouse Laboratory, in the Hans Rademacher Lecture Series. § The Writing Program and the Philomathean Society sponsor a **Poetry Reading by Judith Moffett**, author of *Keeping Time*, October 18, 4 p.m., Philomathean Room, fourth floor, College Hall.

Films

Annenberg School's Exploratory Cinema series features **Leninist Film Truth (Kino Pravda #21)** and **The Man with the Movie Camera** October 11 and **Chess Fever** and **Potemkin** October 18, 7 and 9:30 p.m., Studio Theater, Annenberg Center (students \$1, others \$2). § Penn Union Council offers **The Sound of Music** (8 p.m.) and six **Three Stooges'** movies (midnight) October 13, Irvine Auditorium, and **Obsession** (7:30 and 10 p.m.) October 14, Fine Arts B-1, \$1. § Werner Herzog's **Heart of Glass** (October 12, 7:30 p.m.; October 13, 4 and 10:30 p.m.) and Kurosawa's **The Idiot** (October 12, 9:30 p.m.; October 13, 7:30 p.m.) are International Cinema's selections, International House, Hopkinson Hall (evening \$1.50, matinee \$1).

Theater/Music

Rex Harrison, Claudette Colbert and George Rose star in **The Kingfisher**, a comedy by William Douglas Home, at the Annenberg Center, October 11 through October 15 (preview tonight). Call Ext. 6791 for tickets. § **Virgil Fox** performs on the Curtis Organ in a concert sponsored by the Curtis Organ Restoration Society and the Performing Arts Society, October 13, 8 p.m., Irvine Auditorium. Tickets are available at the Houston Hall ticket office. § **Daniel Waitzman**, flutist, performs October 18, 8 p.m., University Museum, in a concert sponsored by the Performing Arts Society. Call DA9-0151 for information. § The Musical Fund Society of Philadelphia presents the **Eastman Wind Ensemble** in a concert of American music, October 18, 8:15 p.m., Zellerbach Theater, Annenberg Center. Requests for tickets, accompanied by a stamped, self-addressed envelope, should be sent to Daniel M. Layman, 212 Almur Lane, Wynnewood, PA 19096.

Mixed Bag

Sections of **High Hollows**, the Samuel S. Paley House, 101 W. Hampton Road, Chestnut Hill, have been furnished and decorated by local designers and artists and are on exhibit through October 29. Hours: Monday through Friday, 10 a.m. to 4 p.m.; Saturday and Sunday, noon to 4 p.m.; Wednesday and Friday, 7 to 9 p.m. Admission: \$4. § **Morris Arboretum** offers field trips, workshops and short courses. Call CH7-5777 for details. § Penn plays Lafayette in Easton, October 21, 1:30 p.m. Alumni can reserve seats by calling the **General Alumni Society**, Ext. 7811, by October 13. § International House sponsors an **Evening in Russia** with Russian food and the Kovriga Balalaika Orchestra October 13 (dinner 5-8 p.m., music 7-8:30 p.m.) and a **Discover America Trip to New York City** October 14 (members \$25, others \$30). Call EV7-5125 for further information. § The first follow-up **A-3 Assembly Workshop** will feature Odessa McClain on reclassification and promotion, Houston Hall, second floor, October 17, 1 p.m.

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