

# Almanac

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Swine flu immunization shots will be available for faculty, staff, and students November 29 and 30, 9 a.m. to 5 p.m. in Houston Hall. The vaccine is monovalent; persons requiring bivalent immunization (see Almanac, November 9) go to a City Health Center.

## SENATE

SAC ACTIONS 11/3/76

### NOMINATING COMMITTEE

At its November 3 meeting the Senate Advisory Committee selected its nominees for the Senate Nominating Committee for 1977-78.

1. In accordance with the requirements of the Senate Bylaws, Sec. 8(c) and Sec. 11(b), official notice is herewith given to the entire Senate Membership of the Senate Advisory Committee's nine-member slate of nominees for the Nominating Committee for 1977-78. The nine nominees, all of whom have indicated their willingness to serve, are:

*Steven C. Batterman (applied mechanics)*  
*Martin Goldberg (medicine)*  
*William Hanaway (Oriental studies)*  
*Noyes Leech (law)*  
*Morris Mendelson (finance), Chairman*  
*Humphrey Tonkin (English)*  
*Wesley C. Wilcox (microbiology/vet)*  
*Herbert S. Wilf (mathematics)*  
*Anne D. Williams (economics)*

2. Again pursuant to the Bylaws, Sec. 8(c) you are herewith invited to submit "additional nominations, which shall be accomplished via petitions containing at least twenty-five valid names and the signed approval of the candidate. All such petitions must be received no later than fourteen days subsequent to the circulation of the nominees of the Advisory Committee. Nominations will automatically be closed fourteen days after the circulation of the slate of the Advisory Committee. If no additional nominations are received, the slate nominated by the Advisory Committee would be declared elected. Should additional nominations be received, those nominated by petition have the right to learn the names of all other candidates and withdraw within five days after closing of petition. A mail ballot would then be distributed indicating which nominees were nominated by petition and which by the Advisory Committee. The ballot shall be circulated no later than fourteen days subsequent to the close of nominations. Voting shall be noncumulative...."

The closing date for receipt of nominations by petition is Tuesday, November 30, 1976. Please forward any nominations by petition to the Faculty Senate Office, 303A College Hall/CO.

—Robert A. Zelten, Senate Secretary

### CORRECTION: WXPB

In last week's report on the October 29 Trustees meeting, *Almanac* incorrectly said that a decision on WXPB is expected in 45 days. University Attorney Stephen Burbank notes that the administrative law judge estimates that his decision will come 45 days after the submission of proposed findings of fact and conclusions of law which are due early in December.

## COUNCIL

### SAMP VOTE: 37-11

At Wednesday's meeting the University Council voted 37-11 in favor of a resolution by Undergraduate Assembly leaders opposing phase-out of the School of Allied Medical Professions.

After President Martin Meyerson gave his prepared statement on the University mission and the roles of undergraduate and professional education, debate centered briefly on teaching vs. research. That question resurfaced in debate on SAMP itself, along with such issues as the reliability of budget projections SAMP has made in proposing to add advanced master's programs without additional University resources. See transcript, pp. 3-5.

(President Meyerson and Provost Eliot Stellar met with SAMP faculty and students on Thursday, November 12, for discussion of the decision to be made on the school. The President and the Provost have also conferred with the Council of Academic Deans on the matter, and this week expect to hear from a subgroup of that Council.)

(SAMP Acting Dean Eugene Michels also reports that Senate Chairman Robert Lucid agreed to add SAMP to the November 17 agenda as new business and, if time runs out Wednesday, to call a special meeting Thursday to complete discussion.)

### BY-LAWS: PASSED

Council also passed three by-laws changes (*Almanac* October 12, November 9), debating only one phrase in the charge to the new Educational Planning Committee. James Malone's amendment to delete "require" and substitute "use its best efforts to see" (that administrators submit plans to scrutiny before implementation) was defeated. A reading was given to a proposed change of by-laws to add another undergraduate to the Steering Committee.

### PROVOST: RACIAL DATA, SEARCHES

Dr. Stellar said the self-identification system for reporting racial data to the U.S. Department of Health, Education and Welfare has been labeled unsuccessful by HEW because too many persons chose "other". The University must now adopt a system of "administrative identification" to satisfy reporting requirements or face loss of grants and contracts, he said; the HEW accepted last year's report only on the condition that the action be taken to make the count accurate in the future.

Announcement of a Museum director now awaits only the Trustees' formal action, Dr. Stellar also reported. Other searches in progress are for a Dean of Admissions, Dean of the Graduate School of Fine Arts and Dean of the School of Public and Urban Policy. GSFA Dean Peter Shephard has extended his term by a year to allow for the current search, and SPUP Dean Almarin Phillips announced last week that he will return to teaching and research in June, 1977.

*The following recommendation, prepared by the Academic Planning Committee which completed its work this past summer, sets forth a policy on priorities to guide us in planning for selective excellence within the University. We find these priorities to be wholly consonant with the recommendations of the Development Commission as approved by the University Council and the*

*Faculty Senate. We believe they will be a valuable framework for the use of all faculties and their deans as they deal with our difficult academic decisions. We therefore wish to share this statement with the Council and the University community and to commend its use in the months and years ahead.*

*—Martin Meyerson*

*—Eliot Stellar*

## Priorities for Evaluation of Departments, Centers and Other Academic Units

*A Report by the Academic Planning Committee  
Distributed at Council November 10, 1976*

### *1. Basic Considerations*

a. Responsibility for planning scholarly goals and activities, including choice of fields to be emphasized and choice of faculty, rests fundamentally with the relevant faculty acting variously at the department, school and university levels. Particularly in the cases of clearly outstanding departments and centers, administration should be sensitive to the desires and recommendations of the faculty with respect to paths of future development. Exceptions may arise in cases of patently inept groups. In all cases, there must be exceptionally great sensitivity to the academic freedom of members of the faculty, as represented particularly in their right to teach their discipline as they see it.

b. The overriding criteria in assessing quality are academic excellence (including teaching, scholarly research and new applications of knowledge) and centrality. In general, units regarded as central to the work of the University should be assisted to attain high quality. In some cases, it may be appropriate to emphasize the transmission of knowledge (teaching) or new applications of knowledge (practice) over discovery. In some cases, it may be appropriate to distinguish between the general discipline and a particular department in assessing centrality.

c. Academic excellence is multifactorial and many of its elements will surely prove impossible of clear identification. The reliability and validity of its assessment, even at a stationary point in time, will never be perfect. In the main, we must depend on the quantitative and qualitative evaluation of the work of the faculty, such as can be made from the annual faculty activities report, and on the reputation of the unit in the scholarly world, as can be approximated by consulting knowledgeable members of the discipline from outside the University. One plan has been implemented by the Academic Planning Committee and appears to be producing useful data.

d. Departments, schools and the University as a whole must be constantly alert to new developments in and between disciplines. The ability to initiate new programs of promising quality and under proper control and supervision represents a means by which the University and its parts can adapt to a changing environment and to changes in the organization of knowledge, teaching and research. For this reason, the setting of priorities within the University should make suitable allowances for the assistance which may be necessary to provide initial support for promising new programs.

### *2. The Classification Scheme*

a. *Distinguished departments, centers or units*, which should be regarded as ornaments of the University. *Definition:* Distinguished departments, centers or units are recognized nationally and internationally as containing some of the foremost contributors to the discipline, are known for their outstanding graduates at the Ph.D. or highest professional degree level and also, wherever appropriate, have an outstanding reputation in undergraduate

education. Such departments are regarded as being in the top ten of departments in their field among the universities awarding such degrees. If the number of such departments is fewer than 100, then the applicable standard should be the top 10 percent.

b. *Potentially distinguished departments. Definition:* These departments are rated in the top twenty (or 20 percent, whichever is smaller), or just below that level, if they have demonstrated a recent history of constant improvement. In any case, a department should be regarded as on an upswing to qualify for this designation.

c. *Other departments. Definition:* These departments, centers or units rank below the top twenty (or 20 percent) in the universities awarding these degrees.

### *3. Centrality*

Centrality is independent of excellence. No university can merit designation as such without a central core of disciplines in the humanities, sciences and social sciences. An evaluation of the degree to which a department, center or unit is indispensable to the general work of the University, however intuitively made, must modulate the ultimate policy implications of assessments of quality, particularly in difficult times.

### *4. Recommended Policy Implications*

We recommend that a series of priorities be established in accordance with the following general scheme:

*Priority 1.* Distinguished departments, centers or units. These should be invited to submit two- to four-year plans oriented to retaining and even improving the quality of their work. Implementation of these plans should have top priority.

*Priority 2.* There are a number of departments, centers or units which have been rated below the top twenty (c. in the Classification Scheme above) but which would be and are regarded as indispensable components of any university. No "central" department, center or unit of the University ought to rate below twentieth. Therefore, such departments, centers or units should be invited to submit plans to bring them up to the desired level within two years. Such plans should be reviewed by the appropriate school committee and the dean and those approved should be considered for second priority in the distribution of resources. The new Educational Planning Committee should be advised of these results, and may also make critiques or suggestions for consideration by the school committee and the dean.

*Priority 3.* Departments, centers or units between the tenth and twentieth in the Classification Scheme (b, rating) should be invited to submit two- to four-year plans for retaining and upgrading their status. These, too, would be reviewed by the appropriate planning committee and dean, and the most imaginative and feasible of them selected for third priority support. Depending on resources, some or all should be supported in their aims.

*Priority 4.* Fourth priority should be assigned to departments, centers or units which are neither central nor of high academic quality. These, too, should be invited to submit plans for upgrading, and, depending on our total resources, a few of these might be supported in their aims; others might be reduced or phased out.

## COUNCIL

### RESOLUTION ON SAMP

*Presented by the Undergraduate Assembly  
Passed, 37-11*

*Whereas:* The primary educational objectives of the University of Pennsylvania include not only the preparation of undergraduates for advanced graduate level study, but also the maximization of the potential productivity of those students who are either unable (due to financial exigencies) or unwilling to extend their formal education beyond the attainment of a bachelor's degree;

*and:* Neither of these two roles should be subverted for the sake of the other;

*and:* The success, not only of this dual educational mission, but also of the total educational experience which the University strives to provide, is dependent on the University's encouragement of and support for numerous and diverse programs of the very highest quality;

*and:* It is a sound foundation in the liberal arts which distinguishes a professional undergraduate education appropriate to the University of Pennsylvania and relevant to the University's educational mission, from a program solely vocational in nature.

*Based on lengthy investigation,* the University Council finds that:

1. The evidence\* pertaining to the School of Allied Medical Professions demonstrates the following:

a. The School is viewed with only the highest regard by its educational peers and by members of the respective professions.

b. The School has a proven ability to prepare very successfully its students for either immediate entrance into their fields, for research in their fields, or for work on the graduate level.

c. The curriculum of the School does in fact provide for a significant role to be played by the liberal arts

d. The School has maintained these levels of excellence while generating a budget surplus.

2. The undergraduate programs currently offered by the School have attained the level of excellence which this University must continually encourage.

3. The School, through its unique perspective of the natural sciences and the alternative health profession options it provides, is an important element in the overall diversity which has helped to make the University of Pennsylvania a unique educational institution.

4. The School's undergraduate programs contribute significantly to the fulfillment of the overall mission of undergraduate education at the University.

*Therefore be it RESOLVED that:*

1. The evidence obtained through lengthy investigation, the high level of its educational quality, the desirable element of diversity it provides, and the school's consistency with the overall mission of undergraduate education at the University all clearly indicate that the program offered by the School of Allied Medical Professions is an asset to the University of Pennsylvania.

2. Given these indications, and given the finality and irreversibility of a phase-out, there is insufficient evidence to phase out the School.

3. The quality of the undergraduate program may indeed be improved by the presence of an affiliated graduate level program, though the latter is not necessarily a prerequisite for the achievement of excellence by the former. In reaching a case specific decision, the desirability of "ideal" programs must be weighed against the practicality necessitated by budgetary constraints.

\*The reader of the resolution noted that the evidence referred to is in four appendices (pages 9 and 10 of this issue).

## COUNCIL

*Much of the debate that follows was in the context of President Martin Meyerson's opening statement on the characteristics and aspirations of the University of Pennsylvania. Placing Penn among the two dozen U.S. institutions that influence and lead others in the nation and the world, he detailed the University's attempts to combine the discovery of new knowledge with advanced application; to offer students both breadth and concentration; to meld the arts and sciences with the professions in ways that benefit both; and to infuse teaching with allegiance to scholarship and research. Mr. Meyerson wishes to publish in a future issue his full text, which he condensed as he spoke, rather than a transcription of the tape made at Council.*

## Highlights of the Council Discussion on SAMP (Part II)

November 10, 1976

Council Moderator Peter Nowell asked Dr. Robert Lucid, chairman of the Steering Committee, to reintroduce the SAMP question on the agenda. Dr. Lucid resummarized the recommendations on page 25 of the report (Almanac September 21) which the 1975-76 Steering Committee had submitted to the Provost in their capacity as a Reallocation Review Board. With no order of preference, these were (1) to upgrade SAMP—including the addition of five or six senior faculty members and a new dean—and (2) to transfer the school to Thomas Jefferson University. He also quoted a passage of Dr. Ralph Amado's covering letter to the effect that if neither were acceptable, the 1975-76 Steering Committee hoped to be consulted again.

Dr. Nowell called for discussion of SAMP.

Ted Maciag: [Citing the importance of Council's advisory role in decision-making on SAMP, and referring to D.P. editorials and endorsement by 85 undergraduate organizations, Mr. Maciag said that in one week 6666 signatures had been gathered on a petition reading "To a remarkable degree, Benjamin Franklin's original precept that a Pennsylvania education should combine useful arts with theoretical knowledge is characteristic of the modern University of Pennsylvania," (a quote from a report prepared for the Middle States Association evaluation team in 1974) and continuing "We the undersigned emphatically believe that the School of Allied Medical Professions is consistent with this preferred model of education, and we are diametrically opposed to any efforts to phase out the SAMP programs at the University of Pennsylvania." He said the 6666 signatures included 4261 undergraduates, 1077 graduate students, 177 faculty and 1151 alumni, administrators, staff and others] Clearly SAMP is viewed by the University community as a valuable asset. Clearly the evidence obtained by a long and thorough review process justifies that view, and fails to justify a conclusion to phase out the school. The burden of proof was on those who advocate a phase-out. The burden has not been adequately met. Accordingly I submit to University Council the following resolution and I move its adoption.

Kenneth Taber: Second. [Mr. Taber read the full text of the resolution (left) after Moderator Nowell had established that virtually all members of Council had received the text along with its appendices (pp. 9-10), which were not read in Council but were referred to by Mr. Taber.]

Mr. Taber: I believe that it is imperative that the University Council act today on this matter, for not to reach a decision today is in itself a decision. The burden of proof must rest with those who advocate a phase-out. It is our belief that this proof has not been presented. We therefore urge the passage of this resolution.

Dr. Nowell: I see no reason why discussion concerning the school cannot proceed within the context of this resolution.

Professor Roma Brown: I would like to commend the undergraduate assembly for the resolution . . . very well done. I think the faculty of SAMP



would wholeheartedly endorse it. For the Council's benefit, I have just three brief comments . . . One of the things that we felt was not addressed adequately in all of the writing and investigation of the school was indeed how the programs related to a philosophy of undergraduate education—to much of what the President addressed today in his comments. So the chairmen of the departments did jointly write a paper on principles of undergraduate education which all of you received either yesterday or today by personal delivery [see pp. 6-8]. Second, the quality of education has been reinforced by this resolution, but also elucidated by the investigation of the Steering Committee. The third is that our dean has developed a five-year budget which includes the development of a graduate program, with five additional faculty members as the Steering Committee felt was necessary for a quality graduate program. At the end of five years this is a balanced budget, on hard dollars we have in hand or project through the five-year budget. In addition to those dollars there are a number of resources in allied health professions that at this point in time, with concern for health in our society, could be tapped to complement the five-year budget.

*Dr. David DeLaura:* I find myself an ignorant bystander . . . who doesn't know SAMP very well . . . It is a terribly irreversible act to do away with another constituent part of the University or seem to be a party to that process. It weighs on me. I feel it particularly in a public place like this. It's a terrible thing to contemplate doing. On the other hand, though, the fact that has been established, that this is a good, solid respectable undergraduate program is not in itself sufficient for me to vote, in effect, the continuance of the program, even though I might not put my personal faith in research as the primary mission of every unit in quite the strong terms the president has done. In other words, I'm in between and I'm waffling. One particular piece of information I'd like to know . . . is: Do other comparable universities have major graduate programs in the areas we fold under the term SAMP? Is there such a thing? I've never heard of it, but that may be just ignorance. Are there going Ph.D. programs in the same areas we have? Are they worthwhile? This does seem to me a relevant question, whether we want to upgrade it. What would it be like? Is there such an animal? Beyond that, what would it cost? That has never been made perfectly clear to me and that's a very important matter. I'm not prepared, in other words, to continue SAMP; but I would hate to put it out of business. Could anyone answer my question about the model at other schools?

*Acting Dean Eugene Michels:* I will try to answer portions of it, and I believe our chairpersons can also contribute. First of all, the fields and the professions are relatively new, having started, especially physical and occupational therapy, during World War I as recognized entities. They moved into academic settings essentially in the 1930s . . . There are existing programs, certainly at the advanced master's degree level, in a number of highly qualified institutions in the country, and I can point to Stanford as one example; I cannot point to Harvard, Yale or Princeton, if that is of interest [laughter]. Well, it *could* be of interest. I am aware of doctoral programs started recently in two of the fields and I believe Roma Brown can speak better to medical technology. So these are activities that are just beginning to move over the edge into some form of substantial reality. Now, as far as the cost is concerned, the budget projection mentioned a moment ago—I believe, unless I hear seriously to the contrary—is a realistic projection of what we could establish over a five-year period which would be financially solvent, increase the amount of research we are doing. And I trust that all members of the Council are not laboring under the impression that our people do *no* research, that we don't have people qualified to do that research. We do, and I do see some present today who could comment upon that further. What I think we have to do is increase that research activity, which is something we have certainly been aspiring to do. I think at this point we can truthfully say that we see a way to do this without depending upon additional resources from this university. We don't entertain aspirations for draining other schools, and I know that other schools are not currently entertaining those aspirations in order to strengthen their budgets . . . I would turn to the chairmen . . .

*Dr. Nowell:* Are there others on this specific question? Then Dr. Langfitt.

*Professor Brown:* I would like to respond from the perspective of medical technology. This is a profession that has breadth in that it encompasses four major disciplines: clinical chemistry, microbiology, immunology and hematology; and at the master's level, there are programs that address all four disciplines and provide advanced education of breadth, or the master's level can be specialized in one of the disciplines. In the main at the doctoral level, the programs are specialized in one of the disciplines; however, there are some that encompass the breadth of the four . . . Now, there are many subdisciplines within those major disciplines so the opportunity for specialization is very extensive; also, the opportunity for breadth is extensive; it depends the goals of the individual which kind of education they seek.

*Dr. Thomas Langfitt:* I'd like to remind the Council that when Dean Rodenberg resigned, he did so because he felt that the school needed considerable addition of resources and this is what he had in mind in building graduate programs. That really was one of the major reasons why the review process was undertaken. In the staff report the department chairmen identified additional resources of about \$400,000 per annum that would be required to accomplish these goals. That constituted a forty percent increase in the budget of the school. Subsequently, when it was evident that I was concerned about where this would come from, the statement was then made, as was just made a few moments ago, that the school could accomplish these goals with no additional resources. And we have gone back and forth on this repeatedly. But I find this very difficult to accept, based upon the data that I have seen. I think it was the general conclusion of the Steering Committee that considerable additional resources would be required if the school were to accomplish its goals.

*Dr. Nowell:* I think we have moved from the realm of philosophy to fiscal details. If the threat of abolition could produce this in every school the University would be in fine shape . . . but it would be a little hard on Council to resolve all these details. Perhaps, Roma, you wanted to speak to that specifically?

*Professor Brown:* Yes. I would like to respond to Dr. Langfitt, for the information of the Council, that even within the environment we've been in the past year, \$100,000 of immediate needs for medical technology have been achieved by an interinstitutional grant we requested for scientific instruments in the laboratory. We have received that; the grant was awarded in July of this year. So obviously we were able to cross out \$100,000 worth of need.

*Dr. Nowell:* Are there other comments on this point? There were other hands . . .

*Acting Dean Michels:* . . . The increase in expense is substantial, but there are also increases in income, so we are able to present a balanced budget—and I would be reluctant to have the council come to a very serious decision based upon what I think is inadequate information which could only be gleaned from a careful study of this budget.

*Mr. Taber:* . . . It seems that the accuracy of this projection is really what is coming under fire. We were concerned about this; we followed it up and spoke with people in the Budget Office and found that the figures that were presented were arrived at through use of the University's budget manual through the same procedures that the Budget Office recommends that each school use in preparing five-year plans. The Budget Office saw *absolutely* nothing wrong with the methodology employed that would not be a fault of *any* budget prepared by *any* school at this university, so I don't think that the accuracy of these figures can really be impugned.

*Professor Jane Carlin:* My remark is a matter of interest that I would like to address both to the gentleman who asked the question along the wall here [Dr. DeLaura] and to President Meyerson, I think it might be of interest to you to know that the most recent school of allied health of which I am informed was started within the last three years—at Johns Hopkins.

*Dr. Nowell:* Any other comment to the resolution . . . still before us?

*Dr. Allyn Rickett:* I was on the Steering Committee which reviewed SAMP. I think in the first place there was no question in our minds about the contribution that SAMP made to the undergraduate teaching role or the mission of the University. What we were concerned about though was the field of allied medical professions as one which is rapidly developing. We felt that in some ways what was happening was what had already happened to nursing: that it was suddenly being escalated from what had been a practitioner-oriented discipline to one where research took an increasingly important part . . . Each of the three [SAMP] areas we have represented here has a slightly different role to play and is in a slightly different stage of development. Medical technology is far ahead in research, at least in the sense that we know it in the University, than are the other programs. But all of these programs are being called upon now to begin to fill new missions. The question then is: Would it be possible, given the extremely heavy load that the present faculty carries, and the fact that over the years research has not been a primary concern or even for many of them a major concern, would it be possible for them to make the kind of effort that would keep the University of Pennsylvania in this area at the top where it has been in the past? This was also reflected in some of the letters we received from outside people. I was in charge of writing to various people in the professions and asking for their evaluations of the three programs. I must say that all except one of the letters I received were very positive about SAMP. One letter was somewhat critical but even that letter could not be put down as totally negative by any means. [The question asked] in some of the letters was: Was SAMP prepared to carry on this tradition of the past in the sense that it was going to meet the needs of the increased research role? Faced with that, then,



we felt as a whole that this was a major concern of the University. We would hate to see a school gradually decline and sort of wither on the vine because it did not or could not keep up with the demands of the profession. On the other hand, if the school or if the University could find those necessary resources we generally felt that SAMP would be a tremendous ongoing contribution to the University and to the undergraduate student body. We did not look at this question from a point of view of research versus teaching. My own feeling, and I think it is reflected by a number of people here, is that it takes all kinds to make a great University. Not everybody can be equally good in both fields. We do have to have among the teachers, people who are not particularly noted for their research but because of their teaching are still in research in the sense that they know what is going on and are involved. That's the minimum as a requirement. So when we were talking about research we were not talking about demanding necessarily that the full orientation of the program change, but to maintain its position in its field we felt it would have to move ahead in this direction, and this would take a new input of faculty.

*Dr. Nowell:* Any other comments?

*Dr. Charles Dwyer:* In a way I find much of the argument, particularly around the financial question, somewhat irrelevant. Let me suggest why. Surely there are conditions under which it is justifiable, and, in fact, there is an obligation to terminate a school or academic unit of the University. By the way, I prefer the term "terminate" to "phase-out"; phase-out seems far too gentle for what is happening. I think some of us know what those conditions are. If a given unit is beyond recall in terms of the quality of the function it performs, if it's draining enormous resources from the University—there are a lot of criteria we might agree upon—there are clear cases in which it is appropriate to take action of this kind. I have looked with some care at the arguments that have been offered on both sides of the question and I find, as I say, most of them irrelevant, including the financial one. Some of the arguments have been that it's not fair to continue to ask the SAMP faculty to make the great sacrifices that they have. That, too, seems irrelevant to me. You ask them, and you see what they do—and apparently, according to their testimony, they want to continue SAMP and continue to make the sacrifices. There have been many predictions about the quality of things in SAMP deteriorating. You do not eliminate a school on the basis of predictions. You eliminate it on the basis of performance. You don't make guesstimates about what may happen in two or three or five years: if it happens in two or three or five years presumably you have the strength to turn around and say, "You didn't make it." The reason I find the financial kinds of questions irrelevant is, again, it's a series of predictions. Dr. Langfitt has difficulty accepting this statement of the SAMP faculty that they can do it without additional funds from the University. I find it difficult to accept budget projections that have been offered, for reasons of past practice that I'm sure you're all aware of. If SAMP has said, "Look, we can move in the directions that many of you think are appropriate without additional funds"—and does anybody believe they're going to get a greater subvention from the central administration? I certainly don't, and they do control that—then why don't we put them to the test? Why don't we say, "Okay, here's three years to deliver." Let's not guess what may happen, let's not say we can't believe they can't do it. Let's find out whether or not they can do it. Now, I'm quite pleased that Dean Michels made the argument that the faculty is engaged in research, they are participating in these activities, perhaps not at a level some would like. I think I emphasized the other direction too much, and that's because I want to make the hard case for SAMP. I think the easier case is "Give them the chance to demonstrate what they promise and if they don't then they can be reevaluated." The hard case, and I think the most relevant argument that has been made is the one that has been made by the president: What kind of a university are we, and are we going to allow ourselves a situation wherein a given school, which at least at a particular point in time has not demonstrated that it is dominated by the research scholarship function, does it belong at the University at this point in time? It apparently has belonged here for 25 years. There apparently have been some changes in the environment. There have also been some changes in the environment over the past hundred years since Johns Hopkins inaugurated its model. Many of those changes are social demands that are made on the University, many of those changes come from the demand of our students for higher quality instruction. Although I am in a sense taking an extreme position, I am highly in favor of the resolution before us, and I would go so far as to say that we can afford some—not a lot—but some units on this campus of an academic kind if their only contribution is to teach us to be superb in the instructional function. It is clear that that's what SAMP does for us. It also does lots of other things but I would be content to continue to maintain SAMP on this campus—as a research university, with all that that implies—if that's all that it continued to do.

*Dr. Nowell:* We will need to bring this resolution to a vote.

*Dean Louis Pollak:* . . . If the question were whether the University of Pennsylvania should establish a school of allied medical professions in the first instance, not having such a school, I think the issue would be very different. We would look to the world around us, and consider whether a great university could exist without such a school; we would find that Harvard and Yale and Princeton did not have such a school and that Stanford did, and that would tell us something—perhaps not much, but something. If we look at Harvard and Yale today, perhaps Stanford also, not Princeton, and ask ourselves could we continue to call ourselves a great university when we don't have a divinity school, we could come to the reluctant decision that we can continue to be a great research center without a divinity school. If we lacked a law school, we could I think even come to that conclusion: Princeton, Johns Hopkins have survived without having law schools, big or small. They would be better universities if they had them. I'm required to say . . . But our posture is not one of not having such a school and should we establish it. Our posture is that we have a school, indeed. The proposal is made to terminate it, or phase it out, whatever the particular bureaucratic verb may be. I would find the issue a very close one (assuming I were informed; I feel about on the same level of ignorance that Professor DeLaura claims to be but I am)—from that threshold of ignorance I would find the issue a very close one if I understood that the school as it stood was doing a mediocre job. I believe we have elements at this university that do a relatively mediocre job, and we continue them. I trust it's implicit in a process of selective excellence that we are all of us under continuing scrutiny and there may be other ingredients in the institution that will be called up—perhaps the law school, perhaps the medical school, perhaps the business school—for periodic review. This is not, so far as I am informed, one of those elements of the University that is doing a mediocre job. It is doing the job it is doing very well. I take it one of two problems is with us, perhaps both: it is not doing its job within the apparatus of a substantial graduate research program that is customary, customary for Harvard University and university professional training. Second, to create such an apparatus we are told would require substantial additional funds. The degree to which more funds would be required I take it is in doubt, and we will not settle it here. Are we sure that the University would find it incompatible with its tradition . . . to have some units which within their particular administrative descriptions don't have an important graduate apparatus? . . . I suggest that we are not in a position to say that a school performing at a very high level of quality should be eliminated when it is at least doubtful that it cannot merely continue to do its job at a good level, but perhaps—perhaps—build the kind of strength which is generally thought is required . . . without the infusion of amounts of money that are simply beyond the horizon. At least it remains doubtful on the record as stated that the school is incapable of performing at a continuing level to its present standard of excellence. But that is not an issue we can resolve here. Certainly it would seem inappropriate for the school to be ended simply because that issue remains in doubt. Risk for risk, I would rather see the University continue the school in being unless and until it eventuates that the school in fact declines in quality . . . I don't think we have that demonstration before us yet. Pending that demonstration, I would be inclined to think at my present level of ignorance that for the University to move to end the school would be an unsound educational decision.

*Dr. Nowell:* The hour of adjournment is unfortunately . . .

\* \* \*

*(The taped record ends here.)*

*(The next speaker, Dr. Peter Freyd, raised as a point of order that there was "no motion before the Council to close SAMP"; Dr. Nowell responded that "the [Undergraduate Assembly] motion before us is in order." Dr. Freyd then said that he disagreed with Dr. Dwyer on questions of relevance: "It sounds simple to say give them another three years. Are you asking to let them start graduate programs and then say we are going to kill them in three years?"*

*(Dr. Stellar, bantering with Dean Pollak about his profession of ignorance, asked cryptically whether this was a shared ignorance with Deans Carroll, Gregorian and Humphrey; this turned out to be a reference to a subgroup of the Council of Academic Deans which had not yet met but was to meet Friday and then hold a discussion with the Provost on Monday.)*

*(Dr. Bruce Johnstone asked whether Council could pass the resolution before it without repudiating its own 1975-76 Steering Committee report, but Dr. Nowell replied that there was no reason Council could not vote the resolution in hand and later endorse the Steering Committee report.)*

*(As the six o'clock chimes were heard Dr. Nowell called for a show of hands on the question. The vote was 37 for the motion and 11 against.)*

Following is the paper on principles of undergraduate education at the School of Allied Medical Professions which was referred to in Council proceedings November 10. The authors are the chairpersons of SAMP's three departments: medical technology, physical therapy and occupational therapy, in that order.

# The Great Question

by Roma Brown, Eleanor Jane Carlin, and Nancy Ellis

At the September, 1976, University Council meeting, Virginia Briscoe\* posed the question, "Does it [the dialogue on SAMP] mean that those of us who see ourselves *both* as performing professionals advancing the field *and* as research people will have to take a back seat? Does it mean that only research will be rewarded, supported at this institution?"<sup>1</sup> President Meyerson later returned to Virginia Briscoe's question, "But the great question before us is the one Virginia Briscoe raised . . . what kind of university are we, have we been, and is [it] most appropriate for us to be?"<sup>1</sup>

We agree that this is a crucial question. To gain further insight into President Meyerson's views on this subject, we turned to a major position paper written by him in 1974: "Civilizing Education: Uniting Liberal and Professional Learning."<sup>2</sup> In that paper President Meyerson elaborated on some basic issues that have not been addressed fully during the SAMP review process. The purpose of our paper is to identify several major themes and propositions stated by the President and to present an evaluation of the SAMP programs in the light of these themes.

## Universities: Centers of Professional Education

Universities have mostly been centers of professional education . . . . One of the virtues of a university is that it can offer multiple options for a liberal and liberating education. To be effective, both liberal and professional education must strive to connect rather than separate the elements of knowledge . . . .<sup>2</sup>

This observation of President Meyerson's is reflective of SAMP's establishment within this University in 1950. The allied health professions are young, emerging professions with their origins early in this century. The integral relationship of their clinical sciences to the basic sciences in the liberal arts institution is the rationale for the development of university centers of professional education for the allied health professions. SAMP was the first in the nation to be conceptualized and organized as a school of allied health. Its educational philosophy then, as now, was to foster interdisciplinary relationships among the professions and to integrate liberal and professional learning. It has served as a model which has been emulated throughout the country.

The importance of SAMP's allied health programs to the University's Health Science Center was stated by Vice-President Langfitt in his address to SAMP students in 1974. He noted that in the past the University's Health Science Center had emphasized research but that now we must broaden our mission to address a service function while maintaining our excellence in research. He further stated that SAMP and its professions would be crucial to this expanded role of the University.

The importance of professional education at Pennsylvania was further recognized by the University Development Commission as

\*Ms. Briscoe was a member of the 1975-1976 Steering Committee which served as the Reallocation Review Board in the case of SAMP.

stated in the report *Pennsylvania: One University*:

The concept of *One University* is based on the conclusion that our greatest potential strength and uniqueness lie both in our historic linkage of professional education with the liberal arts and sciences and in our contemporary advantage of the close physical proximity of our schools on one campus.<sup>3</sup>

## Students' Attraction to Professions

Currently students are prompted to the professions by practical and idealistic reasons . . . . They ask not for traditional liberal learning, but for a learning directed to action . . . .<sup>2</sup>

Student interest in the allied health professions has markedly increased during the past decade and is reflected in a 300 percent increase in enrollment in SAMP. Over the past 25 years SAMP students have expressed both practical and idealistic reasons for selecting SAMP's undergraduate majors—practical in that they were planning for meaningful life-work, idealistic in that they were seeking ways to alleviate social problems.

As the interests of SAMP students emerge during undergraduate study, they recognize that their professional education at SAMP provides, and is linked with, intellectual resources that foster their individual development. They perceive undergraduate professional education to be "learning directed to action" with professional opportunities at the conclusion of their undergraduate study. At the same time they perceive opportunities for further career development through graduate study—advanced roles in their respective professions or alternative health careers based on their professional education.

The allied health programs at this university provide a strong union of liberal arts and professional learning, the opportunity to individualize study, and a choice of the unique experience of a private university—specifically Pennsylvania. All programs in SAMP limit their "required" courses in order to provide students the opportunity to pursue rich and diversified studies, advanced professional course options, experiences with outstanding researchers, and experiences with clinicians in specialized professional roles. Students have sought the allied health programs at *this* university because of these opportunities—opportunities which are unique to a school located in a university with the spectrum of resources provided through a health science center linked to liberal arts disciplines and other professional schools.

## Synthesis of Professional and Liberal Learning

There is an opportunity for us to achieve a new synthesis of liberal and professional learning and to respond to a cultural spirit—partly humanitarian, partly careerist—in our students by doing so . . . . Similarly by adding to the intrinsically valuable academic studies that devotion to social purpose, which is so typically a part of the spirit of the service of the professions, we might give those students who find the traditional studies empty of purpose a sense



of their ultimate relevance. We might also open new paths to liberal education through some of the methods, insights, and research of transformed professional education . . . .<sup>2</sup>

These principles are evident in the statement of educational philosophy of each of the three allied health professions in SAMP. They are further exemplified in curriculum structure and content. The following excerpts from the programs' statements of philosophy<sup>4</sup> characterize the synthesis inherent in SAMP programs:

**Medical Technology:** " . . . This dynamic process [socially responsive health care] is optimized by synergistic educational endeavors that blend knowledge—liberal, scientific, and professional; pragmatic and theoretical; rationalistic and experimental . . . . Thus integration of knowledge from the basic sciences, professional courses, and clinical experiences humanized by the liberal arts is facilitated by the breadth of the resources of the University of Pennsylvania's *One University* . . . ."

**Physical Therapy:** " . . . two major objectives. First, the purpose of solid, general selection of liberal arts, humanities, and science courses is directed toward producing a broadly educated student prepared for life in a complex and changing society. Such a liberal education has as its purpose the development of clarity of thought and expression, compassionate insight into human needs and aspiration, moral and esthetic awareness, openness to new ideas, and commitment to responsible action . . . ."

**Occupational Therapy:** " . . . The education of the occupational therapist requires a broad base of knowledge which encompasses the liberal arts drawing upon the humanities and the social, behavioral, and biological sciences. It requires specific knowledge of health and illness drawn from the body of knowledge generic to the health care professions; and it necessitates the synthesis and the integration of this knowledge into the unique professional focus that defines occupational therapy as the process which facilitates man's healthy performance in his environment through the utilization of self-initiated, goal-directed activity . . . . The curriculum's organizing principles should provide opportunity to integrate knowledge acquired from the breadth of academic disciplines and to utilize both theoretical and empirical strategies of inquiry throughout the education process. The organizational structure should facilitate the growth of self-directed inquiry and learning. A curriculum organized according to these principles will enable the learner, himself, to measure the direction and the magnitude of the growth in the knowledge, skills, and attitudes which mark his development as an individual and as a health care professional . . . . " Throughout the program, the curricula of the three programs are structured to integrate liberal, professional, and clinical learning.

### *Unification Toward Purpose*

Those of us in colleges and universities ought to help unite the profession or the calling with liberal learning. If we do not, we shall have failed the rightful aspirations of many of the young who seek a life of service . . . the ideal of liberal learning ought to be bound to the ideal of the instrumental, the utilitarian, the professional . . . .<sup>2</sup>

The availability and access to resources of the University enable SAMP to develop a unification of professional and liberal learning that optimizes undergraduate education. Linkages relevant to, and in fact descriptive of, the Occupational Therapy curriculum were specifically cited by President Meyerson as an example of how the arts and sciences relate to the professions:

Studies in social psychology of health . . . current research on work, play, community, and family patterns to various kinds of ailments; . . . anthropological studies . . . deal with health as a phenomenon not only of the body and the mind, but one related to job, to relatives, to recreation, and to neighborhood ties . . . .<sup>2</sup>

The ability to sequence and integrate professional concepts and principles with liberal studies provides a cognitive structure that enables each type of study to be carried beyond its compartmentalized limits—a truly synergistic learning result, a oneness greater than the sum of its parts.

Comparable linkages and synergistic effects with the liberal arts and sciences exist in Medical Technology and Physical Therapy. Likewise, linkages with other professional schools (both undergraduate and graduate) provide enriched learning endeavors for SAMP students.

The following organizational structures illustrate this unification and synthesis in SAMP's programs.

(1) *An integrated curriculum.* The curricula of SAMP programs are the result of overt effort to blend, sequence, and interface with studies in the liberal arts and sciences. SAMP's attention to the changing content in these studies enables our faculty to assure a coherent learning endeavor and to implement the philosophy of *One University*.

(2) *Dual degree study.* Concurrent study in a discipline and in a profession develops a dual strategy of intellectual pursuit—each with unique and also common, interacting processes. Likewise, the strategies and goals of inquiry have common and distinctive characteristics.\*\*

(3) *Interdisciplinary study.* Solution of complex contemporary problems defies a one-discipline or a one-profession approach—especially complex health problems in this age of specialization. An interdisciplinary approach with mutual interaction is essential to future progress.

(4) *Independent study and research experience.* These learning strategies are major avenues which enable the student to pursue his aptitudes and interests, encourage individual pursuit of knowledge, and stimulate intellectual achievement and independence of thought. These are characteristic of leaders in a profession—as practitioners, educators, and contributors to the knowledge base of the profession. SAMP fosters these behaviors in its students to the extent of their abilities and interests.

(5) *Clinical study.* The profession's practices, problems, and unanswered questions are the focus of the clinical learning process. This process stimulates the student to examine questions, to seek further theoretical principles, and to augment their strategies of inquiry.

### *The Relationship Between Theory and Practice*

Especially in the academic world matters of theory should not be distant from those of practice, nor the practical far from its source in theory. Seeing theoretical fields in juxtaposition with applied fields not only provides students and teachers with a laboratory in which to test theories, but also can put before them a constant reminder of the social and moral implications of their work . . . .<sup>2</sup>

The health professions represent a particular example of this thesis, focusing on the continuity of health and disease in bringing to bear specific strategies of management and intervention. Three of the six programs for human service professions in the Health Science Center of the University are located in SAMP. The theoretical aspects of the fields of the natural, behavioral, and social sciences are integrated to form the foundations for the health sciences which then derive their own theoretical principles and potentiality. It is the integration of phenomena from these and other fields in the context of the human organism that form the base and theory of the health sciences.

The theoretical principles in the three allied health professions in SAMP are derived in this way. The importance which SAMP accords to this process is demonstrated in the diversity of academic background which the faculty possesses. The learning experiences in each of the three professions integrate theoretical and practical principles throughout the course of study. The aforementioned independent study and research experience—with a primary focus on clinical research—clearly shows the extensive relationship of theory and practice in the learning process.

Thus it is crucial that the theoretical fields of the health sciences be in juxtaposition with both their applied role and the foundational sciences that have a continuing effect of change on

\*\*The dialogue among Karush, Michels, and SAMP faculty members illustrates this duality of perspective and experience in research endeavors.<sup>5,6</sup>

their own theoretical base. These are the linkages and relationships of the SAMP programs.

### *Professional Education and the Committed Life*

When our students were stressing the need for commitment, they were surely complaining in part that they were not learning how to live and work with purpose. The professions offer ways through which such commitment could be expressed . . . . Awareness of the meaning of a profession should not dawn upon a student in graduate school, law school, medical school, or advanced engineering school . . . . Just as liberal learning can enlarge understanding of professions, so comprehension of professions illuminates learning . . . .<sup>2</sup>

This idea put forth by President Meyerson finds an exemplar in SAMP even at the undergraduate level. The course of study in each of the three allied health professions is rigorous, necessitating an ability to establish priorities, to accept responsibility for mastering a critical knowledge base, and to invest self in others. The challenge to demonstrate the potential for commitment comes early to the student in the allied health professions at the University of Pennsylvania. The SAMP student develops a clearly defined goal, he makes a commitment to the concept of health and to the ideal of service. The students themselves address this phenomenon eloquently:

It was in the courses provided at SAMP that one could experience the real challenge and an authentic application of academic knowledge . . . . The student is able to develop a sense of responsibility to himself and to others, which is generally not the case of the other schools of the University.<sup>7</sup>

Students in SAMP begin to identify with their profession during their first year of study. Through their relationship with their professional mentors and their experiences in the profession, they develop a more definitive understanding of their profession—its theoretical base, its practitioner roles, its frontiers of knowledge and service, and its integral relationship to maintenance or restoration of health. Based upon this template, students readily relate humanistic, social, cultural, and historical values to their conceptualization of their profession. It is through this process of concurrent study that professional education is liberalized and liberal education is integrated into a purposeful life. As the students' "life values" are being shaped, they are concurrently evaluating whether their chosen "life-work" has relevance to their values. By developing an early awareness of the nature of a profession—and specifically their chosen profession—they are able to evaluate and refine their career aspirations.

### *Professional Education and Its Humanitarian Focus*

To reach the objectives for education I have in mind, the teaching of the professions in our institutions, both graduate and undergraduate, needs to be imbued with more of the recognition of the humane and of the analytic method that has been the ideal of the arts and sciences. This, in turn, could establish an interplay that would bring empirical concerns, a sense of social purpose, and some new theoretical insights to the arts and sciences . . . . The challenge is to achieve a better balance between our vocations or callings and the culture (or cultures) we inherit, recreate, and pass on to future generations . . . . We ought to reward the truly civilized teacher who is a model to his students of one who continuously interests himself in the ways his discipline bears on human life . . . .<sup>2</sup>

The challenge to the health professions lies not so much in the question of whether the focus is on human life because this focus inheres in the knowledge base of all health professions. The question is, rather, to what extent the health professions are concerned with the qualitative nature of that life. The SAMP faculty's ability to provide this focus and to serve as models to their students is second to none within the University community. All three disciplines deal with the qualitative nature of human function including its biochemical, physical, and psychosocial aspects. The Medical Technology, Occupational Therapy, and Physical Therapy faculties know the ways their callings serve human life and this is communicated to their students. They

know, too, the directions in which to move their profession's theoretical inquiry in order to remain responsive to society's growing expectation of a life experience whose qualitative aspects are not surpassed by sheer quantitative survival. A student bears witness to this:

Upon graduation from SAMP one has more than a degree or "a job." Involvement in allied health is a commitment, a dedication, and a loyalty to the improvement of the human condition . . . and that is a responsibility that belongs to us all.<sup>8</sup>

### *The Academic System*

Faculty in both the professions and the liberal arts ought now more than ever to devote themselves to exploring how their calling serves civilization rather than concentrating on how they can maintain their position within the academic system or how the academic system can train more academics . . . . But lest my optimism be viewed as excessive, I should caution that we rarely reward our colleagues for their breadth as well as their specialization . . . .<sup>2</sup>

Within the academic system the SAMP faculty focus on their professions and the potential for these professions to improve the quality of life. This focus on life ranges from seeking out the unknown to improving the use of existing knowledge in the context of clinical problems. This range from basic research to applied research and improved strategies of service represents a broad potential with many avenues for serving civilization and its many needs—some esoteric, some practical.

Our linkages with the basic sciences and our linkages with our clinical practice likewise place our faculty in a posture of addressing society's priorities related to our professions. SAMP's high regard for clinical research demonstrates our commitment to this principle.<sup>5</sup> Our experience with students who learn from a faculty with this orientation supports the wisdom of this priority for a faculty engaged in professional education in SAMP.

### *Conclusion*

SAMP at the University of Pennsylvania? Are these the principles which should describe professional education at Pennsylvania?

It was, and is, clear to us that our achievements and our potential are exemplary of the major theses expressed by President Meyerson in "Civilizing Education: Uniting Liberal and Professional Learning."<sup>2</sup> It is also clear to us that the learning opportunities through SAMP are exemplary of Benjamin Franklin's founding principle for the University of Pennsylvania:

As to their studies, it would be well if they could be taught everything that is useful, and everything that is ornamental. But art is long, and their time is short. It is therefore proposed that they learn those things that are likely to be most useful and most ornamental, regard being had to the several professions for which they are intended . . . . The idea of what is *true merit* should also be often presented to youth, explained and impressed on their minds, as consisting in an inclination joined with an ability to serve mankind, one's country, friends, and family: which ability increased is (with the blessing of God) to be acquired or greatly increased by true learning; and should indeed be the great aim and end of all learning.<sup>9</sup>

Thus, we return to The Great Question: Whither the University of Pennsylvania?

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# Appendices to the SAMP Resolution Passed by Council

## APPENDIX A

### *Placement and Performance of SAMP Graduates*

The demand for SAMP graduates in their professional fields was acknowledged in the December, 1975, Vice-President for Health Affairs *Staff Report* (page 50). The number of requests from clinical centers throughout the United States exceeds each year the number of graduating students.

The latest survey of SAMP alumnae and alumni, completed in May, 1976, yielded the following information on 904 respondents:

1. 686 (76 percent) were employed or self-employed in their fields and carried out their major activities in the following situations:

Special Centers	51%
General Hospitals	33%
Higher Education	9%
Private Practice	5%
Research Laboratories	1%
Other*	1%

345 (50 percent) of the 686 held positions as directors, supervisors, chiefs, and consultants.

2. 68 (8 percent) of the 904 respondents were engaged in other professions or occupations: 25 teachers at various levels from nursery school to college, 10 physicians, 5 hospital executives, 4 state and federal health officers, and the remainder in various fields (business system analysis, computer programming, medical social work, etc.).

3. The remaining 150 respondents (16 percent) were homemakers and retired persons.

4. 152 (17 percent) of the 904 respondents held advanced degrees in 28 different areas. Typically, SAMP graduates who elect to pursue advanced studies engage first in professional practice for two or more years before selecting and pursuing an area of advanced study.

5. The 904 respondents reported having produced a total of 44 books, 240 articles in professional and scientific journals, 21 audio tapes (increasingly used in the professions as a source of continuing education), and 25 other publications (monographs, chapters in books, etc.).

Earlier studies of the School's alumnae and alumni (reported in the December, 1975, *Staff Report*) showed that, from 1970 through October, 1975, graduates of the occupational and physical therapy programs ranked first in the nation in frequency of publishing in their respective professional journals. A 1973 survey of medical technology graduates revealed that 52 percent of the total number of years spent by them in medical technology had been spent in research and 48 percent in laboratory service (*Staff Report*, page 46).

## APPENDIX B

### *Status of SAMP in the Professions*

Nationwide rankings of schools of allied health have never been done (see *Staff Report*, page 42). The recognized high standing of SAMP (acknowledged by the Vice-President for Health Affairs) may be attributed to:

1. The School's history of being the first of its kind in any university and its prominence as a model which has since been copied throughout the United States and in other countries.

2. The high quality of, and demand for, its graduates.

3. The representation of the School's graduates among the faculties of programs in other universities (in physical and occupational therapy, for example, SAMP graduates are represented on 20 to 30 percent of the nation's faculties in these programs—see the *Staff Report*, page 47).

\*Other: Health maintenance organizations, extended care facilities, public schools, sports medicine, industrial and commercial organizations, etc.

4. The leadership of the School's graduates in their professional organizations. Of the 904 alumnae and alumni who responded to the survey completed in May, 1976, 113 (12 percent) held or had held elected positions in their professional organizations at local, state, regional, national, and international levels. An additional 100 (11 percent) held or had held appointed positions as committee chairpersons within the various levels of their professional organizations.

5. The reputation and leadership of the School's faculty in their professions. The current 16 fully-affiliated SAMP faculty hold or have held a total of 29 elected positions at all levels of their professional organizations (*Staff report*, page 43). Among the six senior faculty in the School, four are highly prominent because of their leadership:

Associate Professor Roma Brown (medical technology): past president of the American Society for Medical Technology.

Professor Eleanor J. Carlin (physical therapy): past president of the American Physical Therapy Association and former editor of *Physical Therapy*.

Associate Professor Nancy B. Ellis (occupational therapy): vice-president of the American Society for Behavioral Kinesiology.

Associate Professor Eugene Michels (physical therapy): past president of the American Physical Therapy Association and current president of the World Confederation for Physical Therapy.

The School is a charter member of the American Society for Allied Health Professions (formerly the Association of Schools of Allied Health Professions). The former dean was treasurer of the Society when he left the University.

## APPENDIX C

### *The SAMP Curriculum*

Certification for the Bachelor of Science degree in the School's majors requires the satisfactory completion of 36 course units for medical technology or physical therapy, or 35 course units for occupational therapy. Each major relies heavily upon a sound foundation in the arts and sciences.

Because the three majors are in health fields, and because they do differ in their upper level emphases, the distributional requirements and prerequisite courses in the arts and sciences show some commonalities and some unique differences. For example, all three majors specify particular prerequisite courses in biology but medical technology requires five such courses, physical therapy three, and occupational therapy two. Similar differences exist in the number of prerequisite courses in chemistry. These differences reflect differences among the three majors in their biochemical orientation. The reverse trend is seen in the number of arts and sciences free electives provided for in each major track—occupational therapy provides the most (11) and medical technology the least (9). Course work in English and the social or behavioral sciences is a necessary foundation for all three majors.

The following table summarizes the mix of course units in the arts and sciences and in the SAMP major areas (the details are presented in the Bulletin of Undergraduate Courses of Study):

	Arts and Sciences		SAMP Major	Total
	Required	Elective		
Medical Technology	18	9	9	36
Occupational Therapy	5	11	19	35
Physical Therapy	10	10	16	36

The *Staff Report* on SAMP (page 61) presents data on the schools and departments in which SAMP students took courses in 1974-75. A total of 1,327 course units was taken outside of SAMP (1,077 of these in FAS), and 1,427 in SAMP. Of the course units taken within FAS, the greater numbers were taken in biology, chemistry, English, psychology, sociology, history, languages, music, and mathematics.

Medical technology major area courses, in the main, represent intensive extensions of course work in biology and chemistry (especially

microbiology, organic chemistry, and cellular chemistry). Occupational and physical therapy major area courses, in part, represent intensive but more macroscopic extensions of course work in biology, that is, extensions into human anatomy and biomechanics and into physiology (including neurophysiology for physical therapy). Courses in the latter two majors also include extensions of the behavioral and social sciences. On the whole, the occupational therapy major is oriented more toward the behavioral and social sciences, and physical therapy more toward the biological (especially anatomy and physiology).

The unique perspectives of the biological, behavioral, and social sciences which the SAMP majors provide, along with the substantial arts and sciences component of each curriculum, make it possible and often desirable for undergraduate students both within SAMP and outside of SAMP to pursue a course of study leading to two undergraduate degrees (with one of the majors in SAMP).

## APPENDIX D

### *The SAMP Unrestricted Budget and University Resources*

The first attachment shows the SAMP unrestricted budget experience for the last two years (FY 1975 and FY 1976) and the projected budget for the current year (FY 1977). The bottom-line deficit in FY 1975 was covered by a withdrawal from the SAMP "bank." Realized surpluses become deposits in the bank.

In FY 1976, an "on-paper" 10 percent tax was imposed on tuition. The amount of the tax (called General University Tuition) was to be returned to each school in the line "From General University" (University subvention). In FY 1977, a 20% tuition tax is imposed, with one-half of the amount of the tax to be returned through subvention.

According to budget policy, an amount of subvention to each school for space and financial aid charges is determined by algorithms (see column 1 in the second attachment). Any amount of subvention to a school over and above the amount determined by algorithms is called "discretionary subvention" (that is, subvention given at the discretion of the Provost). The second attachment shows that in FY 1975, SAMP received no discretionary subvention and received \$82,000 less than the amount determined by algorithms (the third column may be considered as showing the amount of "negative subvention").

For FY 1976, the second attachment presents first what occurred in the SAMP subvention and secondly how the year-end report shows the SAMP subvention. SAMP either received a negative subvention of \$87,000 or it received a negative subvention of \$2,000 and failed to receive its tuition tax return of \$85,000.

The projected budget for FY 1977 shows no negative subvention for SAMP. It appears that SAMP will receive a "real" subvention of \$102,000 (\$43,000 + \$59,000) to apply against certain assigned charges but at the same time it will be contributing \$105,000 to the discretionary subvention pool for allocation elsewhere (that is, one-half of its 20% tuition tax will not be returned).

It appears from all of this that SAMP has maintained a level of excellence and at the same time made (and will make) a contribution to the scarce resources of the University.

## SAMP UNRESTRICTED BUDGET

(in thousands of dollars)

	Year End FY 1975	Year End FY 1976	Budget FY 1977
<b>REVENUES</b>			
Total Direct Revenues	869	841 <sup>1</sup>	875 <sup>2</sup>
Bank	-	19	14
From General University <sup>3</sup>	135	233	202
Total Available	1,004	1,093	1,091
<b>EXPENDITURES</b>			
Total Direct Expenditures	762	761	789
Total Indirect Costs	269	301	280
Total Expenditures	1,031	1,062	1,069
Excess (Deficit)	(27)	31	22

<sup>1</sup>Net of 10% Tuition Tax.

<sup>2</sup>Net of 20% Tuition Tax.

<sup>3</sup>"From General University": See SAMP Subventions statement, available on request from the acting dean's office, Ext. 5806.

## MEMORIAL FOR DR. ARNOLD

A memorial for Dr. William E. Arnold, former dean of the Graduate School of Education, will be held Wednesday, December 1, at 1:30 p.m. in the Franklin Room of Houston Hall.

Colleagues and friends are invited

## FROM THE UNIVERSITY PRESS

The University of Pennsylvania Press has announced the publication of the following volumes:

*Women in the Organization* by Harold H. Frank\*; \$10.95 cloth. A casebook of thirteen true accounts of women struggling up the organizational ladder, with readings on issues relevant to working women.

*Victorian America* edited by Daniel Walker Howe; \$12.95 cloth, \$3.95 paper. Ten scholars present new interpretations of Victorian America as a cultural, political, and moral phenomenon.

*The Life: The Lore and Folk Poetry of the Black Hustler* by Dennis Wepman, Ronald B. Newman, and Murray B. Binderman; \$15.00 cloth, \$5.95 paper. An authentic collection of folk poems—lively verses about the hustler and his subculture—from the streets of the urban black community.

*Designing a National Scientific and Technological Communications System* by Russell L. Ackoff\* et al.; \$12.00 cloth. Dr. Ackoff and his colleagues at the Busch Center of the Wharton School offer a design which would organize the distribution of scientific and technical information on a national scale.

*Modern Economic Thought* edited by Sidney Weintraub\*; \$25.00 cloth. Thirty contributors retrace a century of economic thought—from Marshall's neo-classicism to post-Keynesian distribution concepts.

*Econometric Model Performance* edited by Lawrence R. Klein\* and Edwin Burmeister; \$10.00 cloth. In studies that come closer than any before to standardizing model operations for testing purposes, the editors evaluate the performance of eleven econometric models of the American economy.

*The Widening Circle: Essays on the Circulation of Literature in Eighteenth-century Europe* edited by Paul J. Korshin\*; \$15.00 cloth. Robert Darnton, Roy M. Wiles, and Bernard Fabian discuss the history of books, literary commerce, and the reading public in eighteenth-century England, France, and Germany.

*Historia Vitae et Regni Ricardi Secundi* edited by George B. Stow, Jr.; \$18.00 cloth. The only period portrait of Richard II, this edition updates a manuscript originally published in 1729.

To order a Press catalog or book, call Ext. 6261.

\*Penn faculty member

## BOOKSTORE HOURS

Normal hours for the University Bookstore are 9:30 a.m. to 6:30 p.m. Monday through Thursday, 9:30 a.m. to 5 p.m. Friday, and 10 a.m. to 5 p.m. Saturday. During the holiday season, numerous adjustments take place. Specifically, Director Gerald T. Ritchie announces the following holiday hours for the year:

For Thanksgiving week: Monday and Tuesday, normal hours; Wednesday, 9:30 a.m. to 5 p.m.; closed the rest of the week.

During the Christmas holidays: Monday, December 20, through Thursday, December 23, normal hours; closed the rest of the week. The store will be closed for inventory Monday, December 27. From Tuesday through Thursday, December 28-30, hours are 10 a.m. to 5 p.m.; closed the rest of the week.

Monday, January 3, to Friday, January 7: 9:30 a.m. to 5 p.m.; closed Saturday.

Monday, January 10, through Friday, January 14, open 9:30 a.m. to 5 p.m.; open Saturday and Sunday, January 15 and 16, 10 a.m. to 5 p.m.

Monday, January 17, through Thursday, January 20, open 9 a.m. to 8 p.m.; Friday, January 21, open 9 a.m. to 5 p.m.; Saturday, January 22, normal hours.

Monday and Tuesday, January 24 and 25, open 9 a.m. to 8 p.m.; Wednesday and Thursday, January 26 and 27, open 9:30 a.m. to 6:30 p.m.; Friday and Saturday, normal hours.



# APPOINTMENTS

Following are the APPOINTMENTS approved by the Trustees from May 21, 1975, through April 22, 1976. They are based on actions taken by the Provost's Staff Conference through April 1976. Such a list is normally published in a midsummer issue of Almanac but was delayed this year because of scheduling problems.

## SCHOOL OF ALLIED MEDICAL PROFESSIONS

*Dr. Charles Benson*, Assistant Professor of Microbiology; B.A. Franklin College; M.S., Miami University; Ph.D., Wake Forest University; postdoctoral fellow (1969-73) and associate (1973-75), University of Pennsylvania.

## FACULTY OF ARTS AND SCIENCES

*Dr. Gerhard Bowering*, Assistant Professor of Religious Thought; M.A., University of Montreal; Ph.D., McGill University.

*Dr. John R. Clark*, Assistant Professor of Classical Studies; B.A., University of Connecticut; M.A., Ph.D., Cornell University; assistant professor, Cornell, 1974-75.

*Dr. Jozef Dodziuk*, Assistant Professor of Mathematics; M.A., Ph.D., Columbia University; C.L.E. Moore Instructor, Massachusetts Institute of Technology, 1973-75.

*Dr. Gary P. Freeman*, Assistant Professor of Political Science; B.A., Emory University; M.A., Ph.D., University of Wisconsin.

*Dr. Arthur Green*, Assistant Professor of Religious Thought; B.A., Brandeis University; M.H.L., Jewish Theological Seminary; Ph.D., Brandeis.

*Dr. Torngy Gustafsson*, Assistant Professor of Physics; M.A., Ph.D., Chalmers University of Technology, Gothenburg, Sweden; postdoctoral resident associate, University of Pennsylvania, 1973-75.

*Dr. Todd C. Hanlin*, Assistant Professor of German; A.B., Wabash College; M.A., University of Kansas; Ph.D., Bryn Mawr.

*Dr. Paul G. Langacker*, Assistant Professor of Physics; B.A., Massachusetts Institute of Technology; M.A., Ph.D., University of California at Berkeley; resident associate, Rockefeller University (1972-74) and University of Pennsylvania (1974-75).

*Dr. Ta-yung Ling*, Research Assistant Professor of Physics; B.S., Tunghai; M.S., University of Waterloo; Ph.D., University of Wisconsin; resident associate, University of Wisconsin (1971-72) and University of Pennsylvania (1972-75).

*Dr. Ruth Mattern*, Assistant Professor of Philosophy; B.A., Carleton College; Ph.D., Princeton.

*Dr. David McAlpin*, Assistant Professor of South Asian Studies; B.A., University of Chicago; M.A., Ph.D. University of Wisconsin; lecturer, University of Pennsylvania, 1974-75.

*Dr. Patricia A. McFate*, Associate Professor of Folklore (see CEAS below); secondary appointment as Associate Professor of English.

*Dr. Gary S. Morson*, Assistant Professor of Slavic Languages; B.A., M.Ph., Ph.D., Yale.

*Dr. Richard Murnane*, Assistant Professor of Economics; B.A. (*summa cum laude*), Williams College; M.A., Ph.D., Yale.

*Dr. Basim F. Musallam*, Assistant Professor of History; B.A., M.A., American University of Beirut; Ph.D., Harvard; resident associate, Harvard, 1973-75; visiting fellow, Princeton, 1973-74.

*Dr. Susan Naquin*, Assistant Professor of History; A.B., Stanford; M.A., Ph.D., Yale.

*Dr. Daniel N. Osherson*, Assistant Professor of Psychology; B.A., University of Chicago; M.A., Ph.D., University of Pennsylvania; assistant professor, Stanford, 1973-75.

*Dr. Aigli H. Papantonopoulou*, Instructor in Mathematics; B.A., Columbia University; M.A., Ph.D., University of California at Berkeley.

*Dr. David Premack*, Professor of Psychology; B.A., M.A., Ph.D., University of Minnesota; resident associate, University of Missouri, 1955-64; visiting associate professor, University of California at Los Angeles, 1964; professor, University of California at Santa Barbara, 1965-75.

*Dr. J. Gary Pruett*, Assistant Professor of Chemistry; B.A., Ph.D., Rice University; postdoctoral work, Columbia University, 1974-75.

*Dr. Laurence S. Seidman*, Assistant Professor of Economics; A.B., Harvard; Ph.D., University of California at Berkeley.

*Dr. Robert Somerville*, Associate Professor of Religious Thought; A.B., Western Reserve University; M.A., Ph.D., Yale; teaching fellow and resident associate, Yale, 1968-69; assistant professor of history, Columbia University, 1969-75.

*Dr. Daniel Vining, Jr.*, Assistant Professor of Regional Science; B.A., Yale; M.P.A., Princeton; Ph.D., Carnegie-Mellon.

*Dr. Siegfried Wenzel*, Professor of English; B.A., University of Parana, Brazil; M.A., Ph.D., Ohio University; instructor (1960-62), assistant professor (1962-65), associate professor (1965-70), professor (1970-75), University of North Carolina.

*Dr. Clarence Wilkerson*, Assistant Professor of Mathematics; B.A. (*cum laude*), Ph.D., Rice University; assistant professor, University of Hawaii, 1970-72; research associate, Forschungsinstitut für Mathematik, 1972-73; research associate, Carleton College, 1973-74; instructor, University of Pennsylvania, 1974-75.

*Dr. Anne D. Williams*, Assistant Professor of Economics; B.A., Smith; M.A., Ph.D., University of Chicago.

*Dr. William F. Zaranka*, Assistant Professor of English; B.A., Upsala College; M.A., Purdue University; Ph.D. University of Denver; instructor, University of Colorado, 1974-75.

PARTIALLY AFFILIATED: *Jürgen Habermas*, Visiting Professor of Sociology. . . *Dr. Vincent Harding*, Visiting Professor of Afro-American Studies. . . *Dr. Gerald Horwitz*, Visiting Professor of Physics. . . *Dr. Oscar Marin*, Adjunct Professor of Psychology. . . *Dr. Barbara Metcalf*, Visiting Assistant Professor of History and South Asia Regional Studies. . . *Dr. Uriel Tal*, Visiting Professor of Religious Thought and History.

SECONDARY APPOINTMENTS: *Dr. Baruch S. Blumberg* (Professor of Medicine and Medical Genetics) Professor of Anthropology. . . *Dr. Willy DeCraemer* (Associate Professor of Sociology) Associate Professor of Religious Thought. . . *Dr. John G. Fought* (Associate Professor of Linguistics) Associate Professor of Anthropology. . . *Dr. Edward F. Foulks* (Associate Professor of Psychiatry) Associate Professor of Anthropology. . . *Dr. Chester F. Gorman* (Assistant Professor of Oriental Studies) Assistant Professor of Anthropology. . . *Dr. Robert Inman* (Associate Professor of Finance) Associate Professor of Economics. . . *Dr. Seymour J. Mandelbaum* (Associate Professor of Urban History) Associate Professor of History. . . *Dr. Gregory Possehl* (Assistant Professor of South Asia Regional Studies) Assistant Professor of Anthropology. . . *Dr. Robert E. Somerville* (Associate Professor of Religious Thought) Associate Professor of History.

## SCHOOL OF DENTAL MEDICINE

*Dr. Jane M. Glick*, Research Assistant Professor of Biochemistry; A.B., Randolph Macon Women's College; Ph.D., Columbia University; consultant, National Heart and Lung Institute, 1971; postdoctoral fellow, National Cancer Institute (1972-73) and Stanford (1973-74); research specialist, University of Pennsylvania, 1974-75.

*Dr. Edwin S. Rosenberg*, Assistant Professor of Periodontics; B.D.S., H.Dip. Dent., Witwatersrand University; honorary lecturer and clinical instructor (1964-68) and lecturer and clinician (1968-73), Witwatersrand University.

*Dr. Brian M. Salzberg*, Assistant Professor of Physiology; B.S. (*magna cum laude*), Yale; A.M., Ph.D., Harvard; research assistant, Cambridge electron accelerator, 1965-66; research assistant, Harvard, 1966-71; postdoctoral fellow (1971-74) and lecturer (1974-75), Yale.

*Dr. James P. Voight*, Associate Professor of Periodontics; B.A., D.D.S., Baylor University; associate professor of dentistry, Temple University, 1968-73.

PARTIALLY AFFILIATED: *Dr. Theodore J. Dishon*, Visiting Associate Professor of Pathology. (secondary appointment: Visiting Associate Professor of Oral Medicine). . . *Dr. James F. Galbally, Jr.*, Assistant Professor of Educational Research in Restorative Dentistry. . . *Dr. Marvin M. Rosenberg*, Adjunct Associate Professor of Periodontics.

SECONDARY APPOINTMENTS: *Dr. T. Heber Graver* (Assistant Professor of Restorative Dentistry) Assistant Professor of Histology and Embryology.

## COLLEGE OF ENGINEERING AND APPLIED SCIENCE

*Dr. Saleem A. Kassam*, Assistant Professor of Systems Engineering; B.S., Swarthmore; M.S., M.A., Ph.D., Princeton.

*Dr. Patricia A. McFate*, Professor of Technology and Society; B.A., Michigan State University; M.A., Ph.D., Northwestern University; lecturer, City College of New York, 1962; instructor (1962-64), assistant professor (1965-70), associate professor (1970-75), University of Illinois at Chicago.

**SECONDARY APPOINTMENTS:** *Dr. Robert H. Cox* (Associate Professor of Physiology) Associate Professor of Bioengineering. . . *Dr. Joel Greenberg* (Research Assistant Professor of Neurology) Assistant Professor of Bioengineering. . . *Dr. Edward Korostoff* (Professor of Restorative Dentistry) Professor of Metallurgy and Materials Science. . . *Dr. Julius Melbin* (Professor of Physiology/Veterinary Medicine) Professor of Bioengineering. . . *Dr. Bernard D. Steinberg* (Professor of Electrical Engineering) Professor of Systems Engineering.

## GRADUATE SCHOOL OF FINE ARTS

*Carol Franklin*, Assistant Professor of Landscape Architecture; B.A., Wellesley College; M.L.A., University of Pennsylvania; landscape architect and urban designer, City of Philadelphia, 1966-69; instructor, University of Rhode Island (1970-72), and University of Pennsylvania (1972-73).

*Dr. Larry Hirschhorn*, Assistant Professor of City and Regional Planning; B.A., Brandeis; Ph.D., Massachusetts Institute of Technology; research associate (1971-73) and lecturer (1973-75), University of California at Berkeley.

*Dr. Setha Low*, Assistant Professor of Anthropology in Landscape Architecture and Regional Planning; B.A., Pitzer College; M.A., Ph.D., University of California at Berkeley.

## SCHOOL OF MEDICINE

*Dr. Leslie Dornfeld*, Assistant Professor of Medicine; B.A., Rutgers; M.D., George Washington University; private practice, 1969-75.

*Dr. Peter U. Feig*, Assistant Professor of Medicine; M.D., University of Sao Paulo; resident, University of Sao Paulo, 1969-70; assistant resident, Lemuel Shattuck Hospital, Boston, 1970-71; senior resident (1971-72) and chief resident (1972-73), Newton Wellesley Hospital; clinical and research fellow, Beth Israel Hospital, Boston, 1973-75.

*Dr. Clara Franzini-Armstrong*, Associate Professor of Anatomy and Physiology; Ph.D., University of Pisa; assistant professor, University of Pisa, 1960-61; postdoctoral fellow, Harvard, 1961-63; research assistant, National Institutes of Health, 1964; research associate, Duke University, 1967-69; associate, University of Rochester, 1969-72; assistant professor, University of Rochester, 1972-75.

*Dr. Harvey M. Friedman*, Assistant Professor of Medicine; B.S., M.D., McGill University; intern (1969-70) and resident (1970-71), Jewish General Hospital, Montreal; fellow, Wistar Institute, 1971-73; clinical and research fellow, HUP, 1973-75.

*Dr. Robert L. Giuntoli*, Assistant Professor of Obstetrics and Gynecology; B.S. (*cum laude*), Seattle University; M.D., St. Louis University; intern and resident, Naval Hospital, Chelsea, Mass., 1966-71; fellow, HUP, 1973-75.

*Dr. Douglas A. Greene*, Assistant Professor of Medicine; A.B., Princeton; M.D., Johns Hopkins; postdoctoral fellow, University of Pennsylvania, 1972-75.

*Dr. Edward J. Hoffman*, Assistant Professor of Radiological Sciences; B.S., St. Louis University; Ph.D., Washington University; research associate, Bartol Research Foundation of Franklin Institute, 1970-72; fellow, Washington University, 1972-75.

*Dr. Alan S. Katz*, Assistant Professor of Medicine; B.A., Oberlin; M.D., Chicago Medical; assistant professor, Hahnemann College of Medicine, 1973-75.

*Dr. Roger Kennett*, Assistant Professor of Human Genetics; B.A., Eastern College; Ph.D., Princeton; postdoctoral fellow, University of California at San Diego, 1969-71; departmental demonstrator (1971-72) and research officer (1972-75), Oxford.

*Dr. Robert F. McAlack*, Assistant Research Professor of Pediatrics; B.S., Drexel University; M.S., Ph.D., Thomas Jefferson University; postdoctoral fellow, Einstein Medical Center, 1968-71; director of transplant immunology at Einstein, 1971-75.

*Dr. Joel Morganroth*, Assistant Professor of Medicine; B.S., M.D. (*cum laude*), University of Michigan; intern and resident, Beth Israel Hospital, 1970-73; clinical associate, National Institutes of Health, 1972-74; fellow, HUP, 1974-75.

*Dr. Paul Mueller*, Professor of Biochemistry and Biophysics; M.D., Bonn University; assistant in physiology, Bonn University, 1951-53; Fulbright research fellow (1953-54) and assistant (1954-55), Rockefeller University; Privat Dozent, Köln University, 1955-57; senior staff scientist, Eastern Pennsylvania Psychiatric Institute, 1957-75.

*Dr. Michael J. Palmieri*, Assistant Professor of Research Pediatrics; A.B., LaSalle; Ph.D., University of Pittsburgh; postdoctoral fellow (1971-73) and resident staff (1973-76), Children's Hospital.

*Dr. L. Leo Parrott*, Assistant Professor of Obstetrics and Gynecology; B.S., Harvard; M.D., University of Pennsylvania; intern and resident, HUP, 1968-73; military service, 1973-75.

*Dr. Alan S. Pearlman*, Assistant Professor of Medicine; A.B., Williams College; M.D., Harvard; intern (1970-71) and resident (1971-72), Peter Bent Brigham Hospital, Boston; clinical associate, National Institutes of Health, 1972-75; research physician, Hospital Cardio-Vasculaire et Pneumologique, Lyon, France, 1975-76.

*Dr. Michael E. Phelps*, Associate Professor of Radiological Sciences; B.S., University of Washington; Ph.D., Washington University; instructor (1970-71), assistant professor (1971-74), associate professor (1974-76), Washington University.

*Dr. Shirley Rubler*, Assistant Professor of Medicine; B.A., New York University; M.D., Women's Medical College; assistant physician, Montefiore Hospital, 1955-64; associate physician, Queens Hospital, 1964-67; assistant professor (1967-73) and associate professor (1973-75), New York Medical College.

*Dr. Barry M. Schimmer*, Assistant Professor of Medicine; B.A., Rutgers; M.D., Albert Einstein; clinical and research fellow, Massachusetts General Hospital, 1973-75.

*Dr. William J. Snape*, Assistant Professor of Medicine; B.A., Princeton; M.D., Thomas Jefferson University; intern and resident, Bronx Municipal Hospital Center, 1969-71; fellow in gastroenterology, HUP, 1973-75.

*Dr. Richard Spielman*, Assistant Professor of Human Genetics; A.B. (*cum laude*), Harvard; M.S., Ph.D., University of Michigan; research associate, University of Michigan, 1971-74.

*Dr. Beatrice States*, Assistant Professor of Research Pediatrics; B.A., Temple University; M.S., University of Pennsylvania; Ph.D., Temple; research associate (1967-69) and research staff member (1969-76), Children's Hospital.

*Dr. Paul D. Stolley*, Professor of Community Medicine; B.A. (*summa cum laude*), Lafayette College; M.D., Cornell University; M.P.H., Johns Hopkins University; intern (1962-63) and resident (1963-64), University of Wisconsin Medical Center; medical epidemiologist, Communicable Disease Center, 1964-66; medical officer, Office of the Surgeon General, 1966-68; assistant professor (1968-71) and associate professor (1971-76), Johns Hopkins.

*Dr. Kenneth B. Tomer*, Assistant Research Professor of Pediatrics; B.S., Ohio State University; Ph.D., University of Colorado; NSF fellow, H.C. Orsted Institut, Copenhagen, 1970-71; fellow, Stanford University, 1971-73; assistant professor, Brooklyn College, 1973-75.

*Dr. Michael V. Yow*, Assistant Professor of Medicine; B.A., Emory University; M.D., Medical College of Georgia; intern (1968-69) and assistant resident (1971-73), Grady Memorial Hospital, Atlanta; fellow, HUP, 1973-75.

**PARTIALLY AFFILIATED:** *Dr. Robert C. Brownlee*, Clinical Professor of Pediatrics. . . *Dr. Larry P. Davis*, Assistant Professor of Social Work in Psychiatry. . . *Dr. Georgina Faludi*, Assistant Clinical Professor of Medicine. . . *Dr. Harold M. Flowers*, Visiting Associate Professor of Pediatrics. . . *Dr. Lennart Juhlin*, Visiting Professor of Dermatology. . . *Dr. Boris Kotlyar*, Visiting Professor of Physiology. . . *Dr. Kathryn F. LaNoue*, Adjunct Associate Professor of Biochemistry and Biophysics. . . *Dr. In-Young Lee*, Visiting Assistant Professor of Biochemistry and Biophysics. . . *Dr. Herbert C. Mansmann, Jr.*, Visiting Professor of Pediatrics. . . *Dr. F. Arthur McMorris*, Assistant Professor of Human Genetics. . . *Dr. Barry Miller*, Assistant Professor of Psychology in Psychiatry. . . *Dr. Braulio Montalvo*, Assistant Professor of Psychology in Psychiatry. . . *Dr. Donald W. Nibbelink*, Adjunct Assistant Professor of Neurology. . . *Dr. L. Isobel Rigg*, Assistant Clinical Professor of Child Psychiatry. . . *Dr. Elliott Rosenberg*, Assistant Clinical Professor of Medicine. . . *Dr. Hagai Rottenberg*, Visiting Associate Professor of Biochemistry and Biophysics. . . *Dr. Robert G. Sharrar*, Assistant Clinical Professor of Medicine. . . *Dr. Albert Stunkard*, Visiting Professor of Neurological Sciences. . . *Dr. Martin Weigert*, Associate Professor of Human Genetics.

**SECONDARY APPOINTMENTS:** *Dr. Jacob M. Abel* (Associate Professor of Applied Mechanics) Associate Professor of Applied Mechanics in Neurosurgery. . . *Dr. Charles E. Benson* (Assistant Professor of the History and Sociology of Science) Assistant Professor of the History of Medicine. . . *Alexander Capron* (Associate Professor of Law) Associate Professor of Law in Human Genetics. . . *Dr. Giulio J. D'Angio* (Professor of Radiology) Professor of Pediatrics. . . *Dr. Myron W. Frederic* (Assistant Professor of Neurology) Assistant Clinical Professor of Medicine. . . *Dr. James Harp* (Associate Professor of Anesthesia) Associate Professor of Neurosurgery. . . *Dr. Alan F. Horwitz* (Assistant



Professor of Biochemistry and Biophysics) Assistant Professor of Biochemistry and Biophysics in Human Genetics. . .*Dr. Russell C. Maulitz* (Assistant Professor of the History and Sociology of Science) Assistant Professor of the History of Medicine. . .*Dr. John C. McKittrick* (Assistant Professor of Pathology) Assistant Professor of Microbiology. . .*Dr. Alan J. Ominsky* (Associate Professor of Anesthesia) Assistant Professor of Psychiatry. . .*Dr. Henry Rosenberg* (Assistant Professor of Anesthesia) Assistant Professor of Pharmacology. . .*Dr. Bryan Salzberg* (Assistant Professor of Physiology/Dental Medicine) Assistant Professor of Physiology in Medicine. . .*Dr. Henry Sloviter* (Research Professor of Neurosurgery) Professor of Biochemistry. . .*Dr. Carroll Smith-Rosenberg* (Associate Professor of History) promoted to Associate Professor of History in Psychiatry. . .*Dr. Joseph Spear* (Associate Professor of Physiology/Veterinary Medicine) Research Assistant Professor of Medicine.

## SCHOOL OF NURSING

PARTIALLY AFFILIATED: *Lillian R. Gigliotti*, Assistant Clinical Professor of Nursing in the graduate division.

## SCHOOL OF SOCIAL WORK

*Dr. Phyllis B. Freeman*, Assistant Professor of Social Work; B.A., Harvard; M.S.W., University of Pennsylvania; field work placement, Philadelphia State Hospital, 1965-67; psychiatric social worker, Drenk Memorial Guidance Center, 1971-73; program director, Jones Memorial Human Services, 1973-75.

*Dr. Marilyn O. Kent*, Assistant Professor of Social Work; B.A., Pennsylvania State University; M.S.W., M.A., Ph.D., University of Pennsylvania; social worker, Norristown State Hospital, 1966-74; consultant, Opportunities Industrialization Center, 1972; consultant, Associated Day Care Services, Philadelphia, 1972-73; consultant, Montgomery County Prison Task Force, 1973.

## SCHOOL OF VETERINARY MEDICINE

*Dr. Clifton Baile*, Associate Professor of Nutrition; B.S., Central Missouri State College; Ph.D., University of Missouri; instructor (1966-68) and assistant professor (1968-71), Harvard; adjunct associate professor, Penn State, 1971-75; Smith Kline Corporation, 1971-75.

*Dr. Peter J. Felsburg*, Assistant Professor of Epidemiology and Public Health; B.S., Pennsylvania State University; V.M.D., Ph.D., University of Pennsylvania; research associate, University of Pennsylvania, 1973-74; investigator, United States Army Medical Research Institute, 1973-75; adjunct assistant professor, University of Pennsylvania, 1974-75.

*Dr. Peter F. Jezyk*, Assistant Professor of Medicine in Medical Genetics; B.S., Ph.D., University of Massachusetts; V.M.D., University of Pennsylvania; postdoctoral fellow, University of Michigan, 1966-67; assistant professor, Medical College of Virginia, 1967-71.

*Dr. Leon P. Weiss*, Professor of Anatomy; M.D., Long Island College of Medicine; intern and resident, Maimonides Hospital of Brooklyn, 1948-50; postdoctoral research fellow, Harvard, 1950-52; instructor, State University Medical Center of New York, 1952-53; lecturer, University of Maryland, 1954-55; associate (1955-57) and assistant professor (1957-60), Harvard; associate professor (1960-66) and professor (1966-75), Johns Hopkins University.

PARTIALLY AFFILIATED: *Dr. William Chalupa*, Adjunct Associate Professor of Nutrition. . .*Dr. Thomas G. Gabuzda*, Adjunct Professor of Comparative Medicine. . .*Dr. Seth A. Koch*, Adjunct Assistant Professor of Ophthalmology. . .*Dr. Robert H. Weston*, Visiting Associate Professor of Nutrition.

SECONDARY APPOINTMENTS: *Dr. Steven C. Batterman* (Professor of Applied Mechanics) Professor of Biomechanics.

## WHARTON SCHOOL

*Dr. Peter Davis*, Assistant Professor of Social Systems Science; B.A., Cambridge; M.S., London School of Economics; Ph.D., University of Pennsylvania; assistant professor, University of Mexico, 1970-73; staff consultant, Arthur D. Little, 1973-75.

*Christian C. Day*, Assistant Professor of Business Law; A.B., Cornell; J.D., New York University; associate, Morgan, Lewis, and Bockius, 1970-74.

*Dr. James R. Emshoff*, Associate Professor of Social Systems Science; B.S., Western Reserve University; M.S., Ph.D., University of Pennsylvania; management research analyst, Management Science Center, 1964-67; research associate, University of Lancaster, 1965-66; assistant professor, University of Pennsylvania, 1967-68; management consultant, McKinsey

and Company, 1969-70; senior consultant, Busch Center, 1970-75.

*Dr. Marshall L. Fisher*, Associate Professor of Decision Sciences; B.S., M.S., Ph.D., Massachusetts Institute of Technology; assistant professor of management science, University of Chicago, 1970-75; visiting assistant professor, Cornell, 1974-75.

*Dr. Terry C. Gleason*, Associate Professor of Marketing; B.A., University of California; M.A., Ph.D., University of Michigan; assistant professor, Carnegie-Mellon Institute, 1969-75.

*Dr. Pradeep Kakkar*, Assistant Professor of Marketing; B.A., University of Calcutta; M.B.A., Indian Institute of Management; Ph.D., University of California.

*Dr. Yoram Landskroner*, Assistant Professor of Finance; B.A., M.S., Hebrew University; Ph.D., University of Pennsylvania.

*Dr. William Panning*, Assistant Professor of Public Policy; B.A., University of Kansas; M.A., Ph.D., University of Pennsylvania.

*Dr. Stephen A. Schneider*, Assistant Professor of Management and Industrial Relations; B.S., M.B.A., University of Cincinnati; M.A., Ph.D., University of Pennsylvania.

*Dr. Tyzoon T. Tyebjee*, Assistant Professor of Marketing; B. Tech., Indian Institute of Technology; M.S., Illinois Institute of Technology; M.B.A., Ph.D., University of California at Berkeley.

*Dr. David A. Ulmstead*, Assistant Professor of Finance; B.S., University of Vermont; M.S., Massachusetts Institute of Technology; M.B.A., Boston University; Ph.D., University of North Carolina.

PARTIALLY AFFILIATED: *Dr. Martin C. J. Elton*, Visiting Associate Professor of Social Systems Science. . .*F. Frank Land*, Visiting Professor of Decision Sciences. . .*Dr. Douglas Vickers*, Visiting Professor of Finance.

SECONDARY APPOINTMENTS: *Dr. F. Gerard Adams* (Professor of Economics) Professor of Finance. . .*Dr. Donald J. Balaban* (Assistant Professor of Community Medicine) Assistant Professor of Health Care Systems. . .*Dr. Stanley J. Brody* (Professor of Community Medicine) Professor of Health Care Systems. . .*Dr. Peter O. Buneman* (Assistant Professor of Computer and Information Science) Assistant Professor of Decision Sciences. . .*Dr. Kevin Clancy* (Assistant Professor of Sociology) Assistant Professor of Marketing. . .*Dr. Jay R. Galbraith* (Associate Professor of Management) Associate Professor of Decision Sciences. . .*Dr. William Hamilton* (Associate Professor of Decision Sciences) Associate Professor of Health Care Systems. . .*Dr. Charles Jerge* (Professor of Dentistry) Professor of Health Care Systems. . .*Dr. Robert C. Jones* (Associate Professor of Statistics) Associate Professor of Health Care Systems. . .*Dr. Irving Kravis* (Professor of Economics) Professor in the Multinational Enterprise Unit. . .*Dr. Edward J. Lusk* (Associate Professor of Accounting) Associate Professor of Health Care Systems. . .*Dr. Noah Prywes* (Professor of Electrical Engineering) Professor of Decision Sciences. . .*Arnold J. Rosoff* (Assistant Professor of Business Law) Assistant Professor of Health Care Systems. . .*Dr. Stephen A. Ross* (Professor of Economics) Professor of Finance. . .*Dr. Laurence S. Seidman* (Assistant Professor of Economics) Assistant Professor of Health Care Systems.

## PROMOTIONS

Like the APPOINTMENTS above, the following PROMOTIONS were approved at meetings held during 1975-76, based on Provost's Staff Conference actions through April, 1976.

## SCHOOL OF ALLIED MEDICAL PROFESSIONS

*Eugene Michels* to Associate Professor of Physical Therapy. .

## FACULTY OF ARTS AND SCIENCES

*Dr. Norman T. Adler* to Professor of Psychology. . .*Dr. Maria Z. Brooks* to Professor of Slavic Languages. . .*Dr. Michael Cohen* to Professor of Physics. . .*Dr. Charles R. Gallistel* to Professor of Psychology. . .*Dr. John H. Gillespie* to Associate Professor of Biology. . .*Dr. Robert F. Lucid* to Professor of English. . .*Dr. Roberto Mariano* to Associate Professor of Economics. . .*Dr. William Quandt* to Associate Professor of Political Science with tenure. . .*Dr. Thomas A.*

Reiner to Professor of Regional Science. . .Dr. Paul Soven to Professor of Physics. . .Dr. Bradford Wayland to Professor of Chemistry. . .Dr. Don Yoder to Professor of Folklore and Folklife. . .Dr. Robert W. Zurmuhle to Professor of Physics.

## SCHOOL OF DENTAL MEDICINE

Dr. Ronald A. Cameron to Assistant Professor of Periodontics. . .Dr. Bal Krishna Goyal to Assistant Professor of Restorative Dentistry. . .Dr. Robin D. Harshaw to Assistant Professor of Orthodontics/Pedodontics. . .Dr. Barry Hendler to Assistant Professor of Oral Surgery. . .Dr. Edward Korostoff to Professor of Restorative Dentistry. . .Dr. Phoebe S. Leboy to Professor of Biochemistry. . .Dr. Stanley M. Lipkowitz to Assistant Professor of Restorative Dentistry. . .Dr. Michael E. Pliskin to Assistant Professor of Pathology. . .Dr. Arnold B. Porges to Assistant Professor of Restorative Dentistry. . .Dr. Herman L. Press to Assistant Professor of Restorative Dentistry. . .Dr. Burton Rosan to Professor of Microbiology. . .Dr. Irving Shapiro to Professor of Biochemistry. . .Dr. James Tatoi to Assistant Professor of Oral Surgery. . .Dr. Arnold S. Weisgold to Professor of Form and Function of the Masticatory System (partial affiliation).

## GRADUATE SCHOOL OF EDUCATION

Dr. Peter J. Kuriloff to Associate Professor of Education.

## COLLEGE OF ENGINEERING AND APPLIED SCIENCE

Dr. Ira M. Cohen to Professor of Mechanical Engineering. . .Dr. Takeshi Egami to Associate Professor of Metallurgy and Materials Science. . .Dr. William C. Forsman to Professor of Chemical Engineering. . .Dr. Edward K. Morlok to Professor of Transportation Engineering. . .Dr. Shiro Takashima to Professor of Bioengineering. . .Dr. Vukan R. Vuchic to Professor of Civil and Urban Engineering.

## GRADUATE SCHOOL OF FINE ARTS

Dr. Norman Glickman to Associate Professor of City and Regional Planning.

## SCHOOL OF MEDICINE

Dr. Allan Arbeter to Assistant Professor of Pediatrics. . .Dr. Andranik Bagdasarian to Research Assistant Professor of Medicine. . .Dr. Lester Baker to Professor of Pediatrics. . .Dr. Joel S. Bennett to Assistant Professor of Medicine. . .Dr. Henry G. Berger to Assistant Clinical Professor of Psychiatry (partial affiliation). . .Dr. Henry D. Berkowitz to Associate Professor of Surgery. . .Dr. Wallace F. Berman to Assistant Professor of Pediatrics. . .Dr. Emmanuel C. Besa to Assistant Professor of Medicine. . .Dr. Jonathan Black to Associate Professor of Research in Orthopaedic Surgery. . .Dr. Monty M. Bodenheimer to Assistant Professor of Medicine. . .Dr. Ronald J. Bolognese to Associate Clinical Professor of Obstetrics and Gynecology. . .Dr. Francis J. Bonner, Jr., to Assistant Professor of Physical Medicine and Rehabilitation. . .Dr. F. William Bora, Jr., to Associate Professor of Orthopaedic Surgery. . .Dr. Seth N. Braunstein to Assistant Professor of Medicine. . .Dr. Frederic D. Burg to Adjunct Associate Professor of Pediatrics (partial affiliation). . .Dr. David D. Burns to Assistant Clinical Professor of Psychiatry (partial affiliation). . .Dr. Peter A. Cassileth to Associate Professor of Medicine. . .Dr. Ivan S. Cohen to Assistant Professor of Psychiatry. . .Dr. Cynthia W. Cooke to Assistant Professor of Obstetrics and Gynecology. . .Dr. Theodore L. Donmoyer to Assistant Clinical Professor of Medicine. . .Dr. Harvey E. Duchin to Assistant Clinical Professor of Obstetrics and Gynecology. . .Dr. Jeffrey G. Garber to Assistant Professor of Anesthesia. . .Dr. Betty J. Gersley to Assistant Clinical Professor of Medicine (partial affiliation). . .Dr. Joel B. Glass to Assistant Clinical Professor of Psychiatry. . .Dr. Mary C. Glick to Professor of Research in Pediatrics. . .Dr. Stanley Goldfarb to Assistant Professor of Medicine. . .Dr. Howard Goldfine to Professor of Microbiology. . .Dr. Manfred I. Goldwein to Associate Professor of

Medicine. . .Dr. Bertram Greenspun to Assistant Professor of Physical Medicine and Rehabilitation. . .Dr. Robert A. Greenstein to Assistant Clinical Professor of Psychiatry (partial affiliation). . .Dr. Louis E. Gromadzki to Assistant Clinical Professor of Neurology. . .Dr. Richard H. Helfant to Associate Clinical Professor of Medicine. . .Dr. Marilyn E. Hess to Professor of Pharmacology. . .Dr. Robert A. Hirsh to Assistant Professor of Anesthesia. . .Dr. Jonathan C. Howard to Adjunct Associate Professor of Pathology (partial affiliation). . .Dr. Lois H. Johnson to Associate Professor of Research in Pediatrics (partial affiliation). . .Dr. Mark E. Josephson to Assistant Professor of Medicine. . .Dr. Stuart L. Kaplan to Assistant Clinical Professor of Psychiatry. . .Dr. Nicholas A. Kefalides to Professor of Biochemistry and Biophysics (secondary appointment). . .Dr. Manoochehr Khatami to Assistant Clinical Professor of Psychiatry (partial affiliation). . .Dr. Seung U. Kim to Research Associate Professor of Pathology. . .Dr. Peter L. Klineberg to Assistant Professor of Anesthesia. . .Dr. Norman Klinman to Professor of Pathology and Microbiology. . .Dr. Otakar Koldovsky to Professor of Research Pediatrics. . .Dr. Maria Kovacs to Assistant Professor of Psychology in Psychiatry. . .Dr. Edgar R. Kunz, Jr., to Assistant Professor of Endodontics (partial affiliation). . .Dr. W. Thomas London to Associate Professor of Medicine. . .Dr. John C. McKirrick to Assistant Professor of Pathology. . .Dr. Anna T. Meadows to Assistant Professor of Pediatrics. . .Dr. Leena M. Mela to Associate Professor of Physical Biochemistry in Surgery. . .Dr. Jay R. Moore to Assistant Clinical Professor of Medicine (partial affiliation). . .Dr. Peter H. Morse to Associate Professor of Ophthalmology. . .Dr. Scott Murphy to Associate Professor of Medicine. . .Dr. John C. Mutch to Assistant Clinical Professor of Obstetrics and Gynecology. . .Dr. Lawrence C. Parish to Associate Clinical Professor of Dermatology. . .Dr. Joseph J. Peters to Associate Clinical Professor of Psychiatry (partial affiliation). . .Dr. John W. Petrozzi to Assistant Clinical Professor of Dermatology. . .Dr. Edwin O. Polish to Associate Clinical Professor of Medicine (partial affiliation). . .Dr. David M. Raezer to Assistant Clinical Professor of Urology (partial affiliation). . .Dr. Alan C. Rosenquist to Associate Professor of Anatomy. . .Dr. Karl F. Rugart to Assistant Clinical Professor of Obstetrics and Gynecology. . .Dr. Marie Russell to Assistant Professor of Pediatrics. . .Dr. Joseph W. Sanger to Associate Professor of Anatomy. . .Dr. Louise Schnauffer to Associate Professor of Pediatric Surgery. . .Dr. Bernard H. Shapiro to Assistant Research Professor of Pediatrics. . .Dr. Michael B. Simson to Assistant Professor of Medicine. . .Dr. Roger D. Soloway to Associate Professor of Medicine. . .Dr. Joseph F. Spear to Associate Professor of Physiology and to Research Associate Professor of Medicine (partial affiliation, secondary appointment). . .Dr. William R. Stayton to Assistant Professor of Family Study in Psychiatry. . .Dr. Emery K. Stoner to Professor of Physical Medicine and Rehabilitation. . .Dr. Samuel H. Tucker to Associate Professor of Pediatrics and of Neurology. . .Dr. Jane Marie Vanderkooi to Assistant Professor of Biochemistry and Biophysics. . .Dr. Donald A. West to Assistant Clinical Professor of Psychiatry (partial affiliation). . .Dr. Edward B. Winheld to Assistant Clinical Professor of Obstetrics and Gynecology (partial affiliation).

## SCHOOL OF NURSING

Christine Bossone to Assistant Professor of Nursing in the undergraduate division (partial affiliation). . .Candace Burley to Assistant Professor of Nursing in the undergraduate division. . .Monica Wolcott Choi to Assistant Professor of Nursing in the graduate division. . .Joette Clark to Assistant Professor of Nursing in the undergraduate division. . .Susan Marie DiFabio to Assistant Professor of Nursing in the undergraduate division. . .Joan Faris to Assistant Professor of Nursing. . .Susan Harris to Assistant Professor of Nursing in the undergraduate division. . .Doris Geller to Assistant Professor of Nursing. . .Dolores Hilden to Assistant Professor of Nursing in the undergraduate division. . .Vickie Ann Lambert to Assistant Professor of Nursing in the undergraduate division. . .Miriam V. Lundgren to Assistant Professor of Nursing. . .Ellen Mahoney to Assistant Professor of Nursing in the undergraduate division. . .Mary E. O'Reilly to Assistant Professor of Nursing in the undergraduate division. . .Constance F. Pairent to Assistant Professor of Nursing in the undergraduate division. . .Marcia Sass to Assistant Professor of Nursing in the undergraduate division. . .Joyce Shoemaker to Assistant Professor of Nursing. . .Nancy S. Storz to Assistant Professor of Nursing in the undergraduate division. . .Mary Ann Whitmore to Assistant Professor of Nursing. . .Karen B. Wilkerson to Assistant Professor of Nursing in the graduate division.



## SCHOOL OF VETERINARY MEDICINE

*Dr. William D. Hardy, Jr.*, to Adjunct Associate Professor of Oncology (partial affiliation). . . *Dr. Robert M. Kenney* to Professor of Animal Reproduction. . . *Dr. Lawrence C. Parrish* to Adjunct Assistant Professor of Dermatology.

## WHARTON SCHOOL

*Dr. Robert Edelstein* to Associate Professor of Finance. . . *Dr. Robert P. Inman* to Associate Professor of Finance.

### MINIMUM WAGE: \$2.30 PER HOUR IN JANUARY

On January 1, 1977, the federal minimum wage for all University employees will increase from \$2.20 per hour to \$2.30 per hour according to the provisions of the Wage-Hour Law. The Commonwealth of Pennsylvania's minimum wage provisions coincide with the change in the federal minimum wage.

Budget administrators should submit Personnel Action Forms for all employees who are currently paid less than \$2.30 per hour. To effect the wage adjustment by January 2, 1977, the new hourly rate for January 1 should be shown on the Personnel Action Forms as effective January 3, 1977. All Personnel Action Forms reflecting the new wage rate must be submitted to the Personnel Relations Services Office, 130 Franklin Building/16, by December 13, 1976, to be processed.

Please submit Time Report Forms reflecting the new rate until the change is indicated on the turnaround Personnel Action Form. Under no circumstances can employees be permitted to work at less than the federal minimum wage of \$2.30 per hour after January 1, 1977.

Please direct any questions you may have to the Personnel Relations Services Office, Ext. 7285.

—George W. Budd, Director of  
Personnel and Labor Relations

## OPENINGS

The following listings are taken from the Personnel Office's bulletin of November 10. Dates in parentheses refer to the Almanac issue in which a complete job description appeared. The full list is made available weekly via bulletin boards and interoffice mail. Those interested should contact Personnel Services, Ext. 7285, for an interview appointment. Inquiries by present employees concerning job openings are treated confidentially.

The University of Pennsylvania is an equal opportunity employer. Qualified candidates who have completed at least six months of service in their current positions will be given consideration for promotion to open positions.

Where qualifications for a position are described in terms of formal education or training, significant prior experience in the same field may be substituted.

The two figures in salary listings show minimum starting salary and maximum starting salary (midpoint).

### ADMINISTRATIVE/PROFESSIONAL

ACCOUNTANT I (2) (10-19-76).

ACCOUNTANT II (10-12-76).

ASSISTANT DIRECTOR responsible to director for supervision of college union programs and scheduling of University facilities for other than academic purposes. Oversees planning and implementation of the contemporary and classical concert series, film series, organized recreational activities, art exhibits, recitals, and social events. Interprets policy on University facilities and coordinates usage with other University offices; coordinates speakers program. *Qualifications:* Graduation from an accredited college or university, master's degree preferred. Two years of relevant experience in education in such functions. Experience in student union programming required. \$9,800-\$13,550.

DIRECTOR OF CGS & SUMMER SCHOOL (9-14-76).

DIRECTOR OF RESOURCE MANAGEMENT (9-14-76).

EXECUTIVE ASSISTANT TO THE SENIOR VICE-PRESIDENT is responsible for liaison with University officers and departments and other specialized tasks as assigned. *Qualifications:* College degree in management or administration, preferably at the master's level; at least three years' experience in administration with supervisory responsibilities; ability to express ideas effectively in written and oral communication and to interact effectively with high level management personnel. *Salary to be determined.*

FACILITIES PLANNER (9-28-76).

JUNIOR RESEARCH SPECIALIST (11-9-76).

LIBRARIAN II (Media Service) (11-9-76).

LIBRARIAN II (9-14-76) to catalog in Arabic, Persian, Turkish.

LIBRARIAN FOR RARE BOOKS responsible to director for overall policies and development of rare books and special collections of the University Libraries and for interpreting these collections to the community. *Qualifications:* Master's degree in Library Science and Ph.D. or other appropriate advanced degree in medieval and renaissance studies. \$16,300-\$22,400.

STATISTICIAN works under supervision of faculty in biostatistics unit on research projects. Organizes data collection; prepares data for use on computer; maintains and updates data files; uses packaged programs for analysis of data; writes new programs as needed. *Qualifications:* M.S. in statistics or computer science or the equivalent. Knowledge of computers and statistical method, ability to work independently. Organizational skills helpful. \$9,100-\$12,275.

### SUPPORT STAFF

ADMINISTRATIVE ASSISTANT I (11-9-76).

ADMINISTRATIVE ASSISTANT I (3) (11-2-76).

ADMINISTRATIVE ASSISTANT I (NEW YORK) (10-5-76).

ADMINISTRATIVE ASSISTANT II supervises four secretaries; prepares and controls budgets; processes and controls invoices for major projects; processes all personnel forms plus miscellaneous office forms; secretarial duties to the director and handling of confidential material for the office. *Qualifications:* Familiar with University budgets and personnel forms, excellent typing; at least five years' experience with the University. \$7,475-\$9,350.

CUSTODIAL FOREMAN (11-2-76).

ELECTRON MICROSCOPY TECHNICIAN II (11-9-76).

LICENSED PRACTICAL NURSE weighs patients, obtains specimens; basic laboratory tests with specimens; prepares examining rooms and patients for physicians' examinations. Obtains necessary information from patients and other related tasks for clinic visits. *Qualifications:* High school graduate. Must be dependable, patient, and tactful. Basic background in Ob-Gyn family planning. \$6,575-\$8,225.

MEDICAL SECRETARY (2) (9-14-76).

PROGRAMMER II works under direct supervision involving programming for an electronic data processing system. Plans problem solving techniques and programs parties utilizing the service of the EDP System. Assists in analysis of new problem areas. Prepares reports and other data as required. Provides documentation for all programming work performed. *Qualifications:* Graduation from high school plus two years' formal training and experience in programming concepts. Pertinent experience should include knowledge and use of relatively large operating system, for example 360 DOA or OS, IBSYS, etc. \$8,600-\$10,750.

RESEARCH BIBLIOGRAPHER I (10-19-76).

RESEARCH LABORATORY TECHNICIAN II (2) (11-9-76).

RESEARCH LABORATORY TECHNICIAN III (9) (11-9-76).

RESEARCH MACHINIST II (11-2-76).

SECRETARY II (3) types manuscripts, reports, minutes, class material, etc. via handwritten notes, shorthand, or dictaphone. Arranges appointments, conferences, and meetings; responsible for file system. Informs students, staff, and public of University and departmental policies; related bookkeeping activities. *Qualifications:* Graduation from high school or approved training program. At least two years' secretarial experience. Ability to type with speed and accuracy. Ability to take dictation or to type from records accurately. Good clerical aptitude. \$5,625-\$7,025.

SECRETARY III (11-9-76).  
SECRETARY III (10-12-76).  
SECRETARY III (12) (10-12-76).

**SENIOR COLLECTION ASSISTANT** supervises the collection assistants in the routine maintenance of student accounts; audits delinquent loan accounts and computes interest charges. Coordinates payments made on delinquent accounts with student loans. Answers inquiries about deferments, cancellations, billing complaints, etc.; types necessary correspondence. *Qualifications:* Aptitude for detail work, ability to supervise clerical personnel and to type accurately. Graduation from high school. At least five years of experience in handling the billing of accounts receivable; familiarity with accounting and data control procedures is helpful. \$6,950-\$8,675.

**SUPERVISOR-MECHANICAL SYSTEMS** (10-12-76).

**UNIVERSITY POLICE OFFICER (2)** (11-2-76).

### DEADLINE FOR THOURON APPLICATIONS

Members of the faculty and administrative staff are urged to inform students of the exceptional opportunity for postgraduate study in Great Britain provided by the Thouron-University of Pennsylvania Fund for British-American Student Exchange. The largest program of its kind sponsored by a single American university, the Thouron Awards program seeks seniors and graduate/professional school students who show strong potential for leadership in business and industry, in politics and public affairs, in the professions, in the arts and in intellectual pursuits. The exchange exists for the promotion of better understanding and friendship between the people of Great Britain and those of the United States. A Thouron Award provides generously for tuition fees, room, board and travel for a period of twelve months and may be renewed for a maximum of three years. The program is open to United States citizens who intend to pursue a degree program (or equivalent) in any British institution, and is not intended to support research leading to a Pennsylvania degree.

Any interested student should be urged to seek further information and application forms from James B. Yarnall at 133 Bennett Hall, Ext. 4661. The application deadline for study next year is December 1, 1976.

### ARTES FEMINAE

*A Voyage Out*, the literary forum for women in the University community, is accepting contributions for the third annual issue. The magazine, named after Virginia Woolf's first novel, aims to serve the needs of women writers and artists. All women in the community are invited to contribute fiction, artwork, poetry, and photography. Deadline is December 3, 1976. Women are also invited to participate collectively in all aspects of production: selection of material, layout and paste-up, publicity, sales, and distribution. If you are interested call Ext. 8611. Bring or mail contributions to: *A Voyage Out*, c/o Penn Women's Center, 112 Logan Hall/CN.

## THINGS TO DO

### FILM

*Shadows of our Forgotten Ancestors* (Russian) and *Children of Paradise* (French) are the November 18 and 19 screenings in the CA's international cinema series; Hopkinson Hall, International House; 7:30 p.m., \$1.

A film of *Dutchman*, the one act-play by Imamu Amiri Baraka (Leroi Jones), is scheduled for Thursday at 9 p.m. in the Rooftop Lounge of High-Rise South. A discussion will follow.

Hopping down the bunny trail: the Royal Ballet movie version of *Tales of Peter Rabbit* shows this Saturday at 10:30 a.m. in Harrison Auditorium of the Museum.

French director Malle explores *Phantom India* November 21 at 2:30 p.m. in the Harrison Auditorium of the Museum.

### THE POST-THANKSGIVING GAP

Those whose events should be announced on November 30 are reminded that there will be no *Almanac* that Tuesday because of the printer's holidays the previous week. Send information *immediately* if you want it in the November 23 issue.

### MUSIC

A dorm concert of music for *soprano and piano* is scheduled for Sunday, November 21, at 8 p.m. in the Rooftop Lounge of Harnwell House.

William Parberry conducts the *University Choral Society* in concert November 23 at 8:30 p.m. in the Tabernacle Church. Selections by Mozart, Monteverdi, Ives, and Pachelbel.

### MIXED BAG

Ace's wild: The electronic vaudeville show of *Ace the Spaceman*, a.k.a. Dana Atchley, comes to the Wilma Theatre Project at the Christian Association this weekend; \$2.50; 8 p.m. Thursday, Friday, and Saturday.

Faculty and staff are invited to participate in the *Family Night* at the Class of '23 Rink this Friday. For information, call Alumni Relations, Ext. 7811.

Hear and see George Gerbner, dean of the Annenberg School of Communications, on November 23 at 9 a.m. on the *Joel Spivak Show* (WCAU-TV, Channel 10).

The coordinating committee of the A-3 Assembly announces an open house meeting in the Ivy Room of Houston Hall on December 7 at 12:30. Call Margaret Sabre, Ext. 5285, for information.

### LECTURES

Spellbinding: Dr. Lillian B. Fredericks, assistant professor of anesthesiology, tells the Women's Faculty Club about *Medical Hypnosis* today at 11:30 a.m. in the Ivy Room of Houston Hall. Bring your own sandwiches; coffee and tea are provided.

The Morris Arboretum brings *environmentalist Judy French* to speak at the Woodmere Art Gallery (9201 Germantown Ave.) tonight at 8 p.m.

Jack McMakin of the Philadelphia Health Management Corporation speaks before the *Health Care Association* at 4:30 p.m. in Colonial Penn Center Auditorium, November 18.

A two-day symposium on *Race and Law: The Quest for Social Justice in Higher Education in the United States* is scheduled for this weekend.

Friday, November 19, Margaret Bush Wilson, chairman of the NAACP board of directors, speaks at 2 p.m. in Room 100 of the Law School. That evening, Federal Judge and University Trustee A. Leon Higginbotham speaks at 7:30 p.m. on the historical aspects of race in the American legal process (same room). Saturday, a number of distinguished panelists take up "The Historic Role and Future Survival of Black Institutions of Higher Learning"; 9:30 a.m. in the Annenberg School Auditorium.

An all-day conference on *Public Policy and the Asian Community of Greater Philadelphia* is also on the agenda for Saturday. Speeches and panel discussions will take place on "Public Policy and Asians," "Law and Asians," "Asian-American Citizenship Rights and Cultural Conflicts," and other topics. The location is the School for Social Work. For information, call Emiko Tonooka, 922-2165.

And now, a word: *The Sponsor in Television—an Historical Perspective* is the topic chosen by Erik Barnouw, author of *The History of Broadcasting in the United States*, at the Annenberg Colloquium; 4 p.m., November 22, in the Colloquium Room of the Annenberg School.

Linda Nochlin talks about recent ICA guest George Segal in the November 23 *Emerging Traditions* lecture; Fine Arts Auditorium, \$4, 7:30 p.m.

Meritorious conduct: *Charge Transfer and Alloy Formation*, a lecture by Dr. L.A. Girifalco, professor of metallurgy and associate dean of engineering; November 23, 4 p.m., Room 105, LRSM Building.

ALMANAC: 515 Franklin Building (16) Ext. 5274

Editor..... Karen Gaines

Assistant Editor ..... Duncan Williams

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