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COUNCIL

McGill Report February 14

The report of the ad hoc Committee on Faculty Appointments and Promotion Policies and Procedures (McGill Committee) will be the first topic of discussion at tomorrow's University Council meeting. The two-part report (Almanac, February 8, 1972) describes current policies and procedures in the 18 schools and presents recommendations for strengthening and improving existing practices.

At its October 5 meeting, the Faculty Senate approved with amendments three of seven recommendations drawn from the Report; they dealt with the primacy of the individual discipline or department; allowing junior faculty and students a part of the decision-making process; and departmental personnel recommendations (Almanac, October 10, 1972).

For this council meeting, Dr. Irving Kravis (Economics) will submit the following amendment to the McGill Report:

The overriding objective of the faculty appointment and promotion policy and procedures should be the recruitment and retention of a distinguished faculty. While the means to this end may vary, particularly in some of the professional schools, generally the objective will be met by stressing intellectual leadership as the chief criterion. Those parts of the McGill Report which are inconsistent with this, notably the provisions for elevating the role of teaching as a criterion and the provision facilitating promotions for administrative reasons, are superseded by this amendment.

Development Commission Report

A subcommittee of the Steering Committee, headed by Council Moderator Dr. Charles Price, has proposed an agenda for discussing the University Development Commission Report with special consideration for issues which most generally concern the whole community. The sections deemed most appropriate for discussion at meetings tomorrow and on February 28 and March 7:

- A. Section 1 (Reallocation, except Rec. #19 and including Rec. #52)
- B. Sections 2, 3, 9 and 14 (Undergraduate and Graduate Education, Endowed Professorships and Calendar)
- C. Section 5 (Black Presence, including #19)
- D. Sections 11, 15 and 16 (Educational Living Patterns, Visual Environment and Creative and Performing Arts)
- E. Section 12 and 13 (Library and Audio Visual Resources)
- F. Section 7 (Continuing Education)
- G. Any other section of the report for which a Councilor wishes to offer a motion.

Appropriate motions for action by the Council would be to approve the section, to approve specific parts of it, to amend one or more of its specific recommendations, or to refer all or part of it to a committee or other group for consideration, with or without instructions and a request to report back to Council, the subcommittee statement said.



"A staggering blow to research . . ." see page 3

NEWS IN BRIEF

SCHRIEFFER: FEBRUARY 15

Sigma Xi, the science honor society, will sponsor the lecture, "Are Science and Technology Compatible?" by Nobel Laureate Dr. J. Robert Schrieffer, Mary Amanda Wood Professor of Physics, in the Annenberg School auditorium, February 15 at 4 p.m. A reception follows in Annenberg Center Lobby.

SCHUTTE: ASSISTANT DEAN AT WHARTON SCHOOL

Dean Donald Carroll has appointed Dr. Thomas Schutte, Associate Professor of Marketing, Assistant Dean. Dr. Schutte has been a member of the Wharton faculty since 1964 and originated the school's pass/no credit grading system. Last year, he helped organize and served as coordinator for the College of Thematic Studies program "Culture of Business and Industry." Dr. Schutte founded the Wharton Summer in Washington and the Wharton in the Arts programs. He received the Wharton MBA Award last spring as "Outstanding Professor in the Wharton School."

STEMMLER: ASSOCIATE DEAN AT MED

Dr. Edward J. Stemmler has been appointed Associate Dean of the School of Medicine. The new post entails responsibility for University Hospital affairs and for further development of outpatient care in private and clinic areas. The new Associate Dean will also work toward establishing a closer relationship between HUP and Graduate Hospital.

Dr. Stemmler, a 1960 graduate of the School of Medicine, specializes in cardiology and pulmonary care and is Associate Professor of Medicine in the Medical School. Since 1967 he has been chief of medicine at Veteran's Administration Hospital.

(Continued on Page 8)

LETTERS

MINORITY OPINIONS

It is tedious but necessary to examine closely the minority statement of Jean Crockett (Almanac January 29, 1973).

In addition to the fact that her arguments are supported by unfounded assumptions which need to be exposed, she has used her position as chairman of the Faculty Senate as an excuse to distribute to the entire faculty her personal observations on the Development Commission Report in the same envelope containing an official call to meeting, thereby giving undue weight to her opinions.

Her "serious reservations" concerning the Black Presence Proposals (numbers 41 through 49 in the Development Commission Report) seem based on certain assumptions she makes about the pool of qualified candidates who are black. Her first assertion is that the pool is not large. I ask her source for this fact. I also would like to know what "qualified" and "large" mean in this case. Who evaluates credentials? Is there evidence that minorities have been systematically excluded by those traditionally responsible for evaluation? Should we be suspicious of the word "qualified" when it is used as justification for the continuing underrepresentation of blacks in this faculty? How large is the pool of "excellence" in any academic discipline? And regardless of the absolute size of the Black pool, hasn't the University committed itself to drawing all its faculty only from the very limited, top strata of those available? Are the devices used in recruiting an Edward Banfield relevant to the recruiting of a black from the "select group" Crockett idealizes?

Crockett's answer to this last question is an unqualified no because she assumes that the pool of potential black faculty consists of two types: mercenaries and second rates. Responding to her own bewilderment about how the University might make itself "attractive to them" she delineates only two alternatives: "offer salaries substantially above those paid to white assistant professors" or bring in "black assistant professors whose attainments are less than those normally required." In her mind, then, the pool of potential black scholars is defined as a mix of mercenaries and misfits, people who can be bought and people not worth buying. She admits to being "unenlightened" concerning what steps the University might take to become "attractive to them." I would suggest that Ms. Crockett ask herself why she is at Penn, that she ask some other "qualified" white faculty who have recently joined the University why they found Penn attractive. I'm sure the range of answers will "enlighten" Ms. Crockett about the variety of human motivation which in turn has more than a little relevance to why black people do things.

If Ms. Crockett had listened more carefully at Development Commission meetings or read with more attention the work team draft of the Black Presence proposals, she would have found her other reservations concerning the proposals superfluous. Nowhere in the proposals is a suggestion that money be spent when there are no, as she puts it, "fully qualified candidates" available. (How many adjectives are needed to qualify the acceptability of a black scholar; to what absurd lengths will we go to assure one another that in spite of what we all know to be true about them, this one is really a "fully guaranteed, unexceptionable, first rate, qualified black"?) Naturally funds must "remain unspent" until one has a good reason for spending them. Even unqualified blacks know that. Yes, as she suggests, it is desirable "that the Provost be advised by a specially constituted University-wide faculty committee in the administration of this program." Not only is it desirable. but such a mechanism is mandated by a provision of the Black Presence work team report, a report Jean Crockett allegedly read since she critiqued it at a meeting of the Development Commission and later in Council.

It is irresponsible to suggest that a document has omitted safeguards of common sense and due process when those safeguards are present in word and spirit. Accepting Crockett's reasoning, proposals 41, 42, 43, and 49 are impossible, unnecessary and/or dangerous to implement, and 45, 46 and 48 should not be assigned very special priority, leaving only 44 and 47 which become pointless unless backed up by the other proposals and the immediate funding implied by 49. Thus in spite of her sympathy.

SPECIAL SENATE MEETING: FEBRUARY 21

Chairman Jean Crockett has called a Special Meeting of the Senate for Wednesday, February 21, frøm 3 to 5 p.m. in Room B-1, Fine Arts, to consider the Report of the Senate Committee on Academic Priorities; to discuss an addendum; and to open discussion by the Senate of the Development Commission Report.

MEDICAL SCHOOL SENATE MEETING: FEBRUARY 27

The Faculty Senate of the School of Medicine will meet on Tuesday, February 27, in the Medical Alumni Hall, Maloney Building, at 4 p.m.

essentially nothing remains of the Black Presence proposals after Crockett has expressed her reservations.

Special scrutiny of the Black Presence proposals is to be expected and even welcomed since the total University community is being called upon for immediate financial support of the programs contained in proposals 41-49. If the phrase "One University" adopted by the Commission is to have any real significance, the One University concept must crystallize around problems which the total University has used its collective resources to confront.

Unfortunately, the special scrutiny traditionally reserved for blacks on this campus has not been in the spirit suggested above. Why does Bob Schrieffer single out the Black Presence proposals for further study when that same prescription is relevant for just about every proposal contained in the document? In fact, one of the virtues of the Development Commission Report is lack of specificity in areas which call for faculty input beyond the membership of the committee. And what is the point of Professor Schrieffer's call for a "sincere commitment to attract the most outstanding teachers and scholars available"? That needs to be said only if one is implying that such a first principle is lacking in the thrust of the Black Presence proposals. If Professor Schrieffer believes that blacks operate under a set of standards which threaten to compromise his own criteria of excellence, he should indicate the evidence for his fears and demonstrate how provisions of the faculty investment fund are designed to lead to an erosion of quality. Instead of detailed analysis and straightforward assertion, we have a series of platitudes which imply the absence of corresponding noble sentiments in the Black Presence section. In a university that has not hired a black for a full-time faculty position in the College of Arts and Sciences out of normal departmental funds since 1966, a commitment to minority hiring must be supported by more than sincerity.

"I feel that the funds ultimately devoted to minority group faculty appointments must depend on the demonstrated availability of outstanding candidates," he goes on. Who in his right mind believes funds should be devoted to unavailable candidates?

Unless one believes outstanding candidates do not exist, then it seems reasonable to support a mechanism designed to assess the availability of outstanding candidates. No money is allocated for faculty appointments until 1974-75, allowing time for the pool of potential candidates to be identified and evaluated by the faculty committee in charge of the investment fund.

I am not writing this letter to discourage open inquiry or the fullest discussion of the Black Presence Proposals on this campus. However, I am suggesting that the "special scrutiny" of things black which I mentioned above has a lot to do with unfounded assumptions held by the ones doing the scrutinizing and that these must be faced before productive dialogue can ensue. Special scrutiny can range from irrational, a priori fear and distrust to an almost pathological need to interfere, control and thus forge an illusory identification with blacks. Between these extremes special scrutiny can give way to humane attempts at understanding and communication, but in our society the occurrences of such interactions unmixed with racist overtones are rare.

John Wideman
Associate Professor of English and
Director of the Afro-American Studies Program

The Impending Overhead Crisis

by Sherman Frankel

Faculty researchers each year at this University obtain fifty million dollars from public and private agencies which enable them to pursue independent and original research. To offset "indirect costs of research" the University recovers "overhead" on contracts and grants. The University has recently announced *increases of 50%* in overhead rates (from 37% to 56%) starting July 1973.

This sudden and drastic change, taken without any consultation whatsoever with the researchers who are responsible for obtaining the research funds, will represent a staggering blow to research activities at this University. It represents ignorance of the delicate relationships existing between professors and funding agencies and of the realities of research funding in the present era. Such an increase will come in many cases out of funds available for research and constitutes a serious step backward in the University's attempts to maintain and nurture the intellectual efforts of its faculty.

The large increase does not come about because of additional services or goods provided to the research effort but by virtue of paper reassignments and reallocations that occurred for the year ending June 30, 1971. It is important to realize that these negotiations have taken place without researcher participation although it is clear that more than adequate time for such participation has been available. There appear to be no Administration plans for an orderly and equitable transfer to the new rates to become effective next July.

At the same time the University is just now completing negotiations for another huge increase that may raise the rate another 50% the following year. It is also planning a change in the way overhead is assessed that will not increase the dollar flow to the University but will favor one type of research over another.

The Impact

These sudden changes will not affect the whole research community. Slightly more than one half of the research funding in this University comes from grants from the Department of Health, Education, and Welfare (HEW). In this branch of the government indirect and direct costs of research are essentially uncoupled. If the overhead rate rises the agency provides more overhead funds to the University; the direct funds going to the researcher do not change. However, in almost every other Federal agency the two types of support are completely coupled and there are no mechanisms within these agencies suddenly to increase funds. Funds used directly for research, and in many cases already committed, will vanish from these grants and contracts in order to meet the new overhead rates. (It is of interest to note that the agency assigned the task of setting overhead rates at Pennsylvania, binding on all other Federal funding agencies, happens to be HEW.)

In an earlier period of rising Federal research support sudden changes could be accommodated by internal cushions (fat) and equilibrium could be restored the following year by the customary annual increases in support. These options are now simply no longer available.

The Long-Range Problem

This article is prompted by the immediate and urgent problems at hand but as the reader continues he will see that it is really addressing deep-seated problems resulting from the lack of researcher input into both the allocation of indirect and direct support for research at Pennsylvania and into the impact of indirect costs on University priorities and viability.

There is no question but that the University must recover all its planned fraction of legitimate indirect research costs because if it does not do so it unwittingly provides extra direct support for research and thus reduces the funds available for other legitimate University functions. If, however, the indirect costs are improperly identified and inequitably distributed the University unwittingly changes the internal priorities, changing the balance of research vs. teaching activities, large research vs. small research, physical sciences vs. humanities, etc.

The long-range problems come into focus when one realizes that in this difficult period of Federal support one can little afford to jeopardize the research output and the research relations that produce one quarter of the University's annual dollar input. One must work to develop an increasing flow of support over the next decade and not confuse planning with expedient budget manipulation.

Most faculty members are unaware of the way Federal regulations concerning overhead developed over the last two decades and of the fact that Federal agencies are about to take a very hard look at the university overhead process. It is common knowledge that the use of average overhead rates (in many cases based on extremely crude estimates), spread over the whole university complex, produces serious inequities. It is common knowledge that an "overhead bureaucracy" has developed in universities throughout the country because the providers of indirect services are not responsible to the cost-conscious researchers. Services are needlessly duplicated, are often simply wasteful, and are often provided to a research community that does not want them.

While the researcher must account for his direct use of funds to scientists in the Federal agencies and while his research work is periodically reviewed and evaluated by referees and research panels, there is no corresponding accounting of the University Administration to the researcher for the indirect costs that are charged. The researcher needs government approval to spend his funds on new experiments or new pieces of equipment but the services for which overhead is charged passes no such test of need or desirability. (A dean can add a secretary to his staff knowing that half her salary will come from overhead independent of her activities.)

The university that does not face up to the possibility of a change in Federal attitude and start to institute overhead reform, under the aegis of the researchers who are the only members of the university community with direct ties to the funding agencies, will soon find the Federal agencies starting to set the rules for them.

Overhead and the Deficit

The funds recovered from indirect costs are actually quite large and important in balancing the University budget. Each year they are larger than the all-important State appropriation and they are an order of magnitude larger than the University "deficit". In the fateful year ending June 30, 1971, the indirect costs allocated to organized research were increased from 7.13 to 10.3 million dollars. This increase (3.17 million) is

to be contrasted with the announced University deficit for the year of 1.25 million dollars.

However, in announcing the 1971 deficit, the Administration failed to inform the faculty that plans to recover 3.17 million dollars from 1971 by overhead charges in 1973 had already been arranged and that in fact there was a surplus of 1.92 million dollars in 1971! (Imagine the outcry if the University decided to recover funds spent on 1971 scholarships from 1973 tuition.) If HEW grants amount to 60% of the total in 1973 and these grants are augmented in the usual way to accord with the 3.17 million increase in allocated indirect costs the University will get 1.9 million of new dollars from the Federal Government wiping out the 1971 loss by over \$650,000 and it will divert 1.27 million dollars from the remaining grants and contracts into the surplus budget. For the years 1971 plus 1972 the indirect cost increase will be 4.4 million dollars compared with a total "deficit" of 3.2 million dollars. Thus we see the crucial role played by "indirect cost recovery" in University solvency.

A Few Overhead Considerations

While overhead is treated by University administrators as a bookkeeping matter, only comprehensible to comptrollers, and dictated by Federal regulations, it is in fact neither.

We cannot in an article of this sort present a complete primer of overhead rules and regulations. The bible in this field is attachment A of circular No. A-21 available from the Office of Management and Budget. All the basic ideas are contained in about the first dozen pages of this circular. Even this bulletin can be summarized by saying that reasonable indirect costs calculated by any reasonable approximation and assessed in any reasonable way are allowed.

We shall need one formula to explain some of the myths that attend overhead. It is:

overhead rate = $\frac{\text{distribution factor x total indirect costs (\$)}}{\text{base (\$)}}$

The total indirect costs are costs of operating the University (building and building contents, depreciation, operation and maintenance, central library costs, research administration, departmental administration, and general University administration) which are not direct charges to grants and contracts. The distribution factor is the fraction of the total indirect costs that are to be charged to the contracts. Thus the numerator in the equation represents the dollars to be recovered. These dollars can be distributed among the grants by using many bases. The base can be salaries of faculty researchers, salaries of researchers plus technicians, salaries of researchers plus technicians plus secretaries plus business managers, or total direct costs (the total grant minus overhead). There are a large variety of allowable bases. The bigger the base the smaller the overhead rate for the same dollars to be recovered. Changing the base does not change the influx of dollars into the University. All that changes is the overhead rate. Since the base does not affect the input dollars one would think that the University would study the effect of base charges before instituting them. It is a fact that no studies preceded the change in base to include secretaries, business managers, etc., two years ago and none have been made for the planned change to "total direct costs" envisioned for 1973. There is a tendency for administrators to wish to increase the base since the overhead rate then becomes smaller and "looks good". But adding secretaries and business managers to the base, as was done a few years ago, does change the internal assessment of charges, so it is not a mere bookkeeping matter. After increasing the base administrators often tell faculty members that their University is "losing money on research" since their overhead rate is now less than that of another institution.

We shall soon see that there is a tremendous flexibilty in the numerator as well as the denominator. If you pay a secretary from your grant her salary does not appear in the numerator. It is a direct charge. But her salary does appear in the denominator so you are assessed overhead on her salary. If the secretary is paid from University funds her salary appears in the numerator but not in the denominator. This simple illustration shows that the *method* of payment affects the rate.

The only relevant question is whether the legitimate indirect costs are or are not recovered. The *rate* has nothing to do with it. Now let us look at the numerator. One remarkable fact will illustrate the main point.

The University estimates that the average faculty member spent over 20% of his time on administration in 1972 (16.5% departmental and 4.1% University administration). (If the average faculty member spends only 50 hours a week on research, teaching and administration this means he spends two hours each day on administration.) The distribution factor for departmental administration is estimated as 46% so that half of this departmental administration time is charged to the grants and contracts. These new administration estimates in fact accounted for almost 2.74 million of the 3.17 million increase referred to earlier in this article!

The 46% estimate is obtained by taking the ratio of research total direct costs to all research and teaching direct costs—not by study or survey. (You pay half the salary of that secretary in the department office that you think is free.)

What can be allocated to total indirect costs and what portion can be distributed to the grants and contracts are matters that are negotiated between the University and the cognizant agency. The methods presently used are crude and biased. The University has a moral obligation to see that fair and equitable distribution is made both in terms of its relations with Federal agencies and within its own varied enterprises.

A Proposal

I should like to close by calling for faculty support for the immediate creation of a Task Force on Overhead and Research Funding. It would be composed of experienced research faculty and be supported by personnel detailed from the Comptroller's office and the Office of Research Administration. It would have the following functions:

- Administer an emergency fund consisting of part of the 1970-71 surplus to be obtained from grants and contracts in 1973, to ease the transition from the 37% to the 56% rates.
- Work immediately with University Administrators on matters relating to the planned rise of rate to 80% in 1974 and to the changes in base. It would report back to the faculty.
- Institute studies to lead to equitable methods for allocating indirect costs.
- 4) Study the indirect services supplied to grants and contracts and develop recommendations leading to the curtailment of unwanted services and the improvement in efficiency of needed services.
- 5) Study the creation of a permanent body to serve as a Research Board that would use a fraction of the recovered indirect costs each year to stimulate research, compensate for residual inequities, and encourage new forms of support.

Faculty members must work hard in the next few months to attempt to convince their funding agencies to increase their overall support just as the University must come up with clear means of softening the blow. If a grant is so badly crippled by the overhead change as to affect its research output, it may not be renewed in the future. Then the faculty member and the University will be intellectually poorer and there will be no overhead to argue about.

On Budgets and Universities

by Jean Crockett

The recent emphasis on Responsibility Centers and on fiscal targets for these Centers has generated some unease and perhaps even some uncertainty as to the perceived mission of the University. Fascination with an unaccustomed and powerful tool should not lead us into a confusion of ends and means. We must be very clear as to which is which, and we must spell out the guiding principles for using the tool so as best to achieve the goals.

It is not the mission of a university to meet its costs. The mission of a university is excellence in teaching (which depends on the mastery of existing knowledge) and significant achievement in the expansion of knowledge. But the extent of our excellence and our achievement is limited by our resources—those we currently have and those we can obtain through increased endowment. As a university our goals are essentially non-monetary, but in attaining these goals we are no more immune to the constraint imposed by our resources than we are to the law of gravity.

The problem of utmost importance that is before us is how to distribute our resources among alternative uses in a way that brings us as much excellence and achievement as possible. If we choose wisely, this will probably bring an additional reward by increasing the funds available to us in the future from external sources.

Clearly the answer is not to require each program to meet its own costs, for that substitutes the values of the market place for our own values. Just as clearly a good solution does require information on both the quality and costs of existing and proposed programs.

There are fears within the University that activities contributing greatly to our excellence can be protected only by concealing their cost. I do not believe that we hold our academic values so lightly. Publication of cost and income data requires that subsidies to particular programs be determined by conscious decision, rather than by inadvertence, and forces us to proclaim our values by what we choose to subsidize. The discretionary funds available to the University are not large, but the first claim upon these funds should be the subsidization of excellence. Under present circumstances this does not, of course, excuse programs of high quality from responsibility to minimize the subsidy received by cutting costs in ways that do not significantly affect excellence.

In our teaching mission the benefits accrue predominantly to the individual student, through enrichment of his capacity to comprehend and appreciate the world and himself and through training him to earn a living by providing services that society finds valuable. We should not try to make a profit on our transactions with our students, but at the same time it is reasonable to expect the student to pay the full cost of generating his educational benefits whenever he is financially able to do so. Thus, as a first approximation, the teaching function in each School—apart from the cost of student aid—should be expected to meet all the expenses directly attributable to that function.

Our research mission, to the extent that it is externally supported, should generally be expected to cover its full cost, including overhead at all levels. On the other hand, the benefits of unfunded research, especially if its orientation is basic rather than applied, are not directed to the interests of particular individuals or organizations, but are broadly diffused over the University and over the society. For this reason, regardless of excellence, such research is not ordinarily a marketable service and does not bring a financial return. If it is to occur, it must be subsidized by the University and indirectly by society through support of the University. Unless the directions of growth in knowledge are to be controlled almost exclusively by the Federal Government and the private corporation, this University and others must be prepared to support independent research of quality.

What kinds of budgetary targets should be set for individual Schools to further the aim of achieving as much excellence as our resources permit? Such targets are counter-productive if they do not provide incentives for the Responsibility Centers to move in the direction of the University's goals.

In determining the costs with which individual Schools should be charged in setting financial targets, it seems to me that two considerations are relevant: the accuracy with which particular expenditures can be identified as supporting the educational activities of an individual School (with only incidental benefits to the rest of the University) and the extent to which the level of particular expenditures can or should be controlled on a School rather than a University-wide basis. It is a primary organizational principle that responsibility cannot be effective when separated from authority.

Such costs as library acquisitions requested by a School or operations and maintenance costs for the building(s) which a School occupies are readily identified with the functioning of that School and should be brought under the School's control. General expense and the cost of the Office of the President, the Office of the Provost and the business offices cannot be so identified or so controlled. The Admissions Office and the Division of Student Affairs represent an intermediate case. These units benefit undergraduates almost exclusively and provide services essential or highly useful to the functioning of the undergraduate Schools. Thus with some logic their costs might be charged against those Schools in proportion to the number of students enrolled. However, in the interest of effective management, some control over the magnitude and direction of expenditures should then revert to the Schools involved. Complete control cannot revert to the Schools because of the importance of the quality of our undergraduates for the University as a whole; and it would perhaps be appropriate for the central University to subsidize part of the cost of recruiting and admissions rather than charging the undergraduate Schools with the total cost. In this case, the graduateprofessional Schools, which bear their own recruitment costs, should be expected to make correspondingly smaller contributions to central overhead.

Turning to the second criterion, I would like to argue that certain expenditure decisions are desirably made at the central University level, either because the benefits are widely diffused and not easily perceived in terms of an individual School or because basic questions of value and overall University policy are involved. Furthermore, to keep responsibility coordinate with authority and to avoid confusion as to the level at which particular decisions are made, such expenditures are better charged against general University income than allocated in what can only be an arbitrary fashion among the several Schools.¹

General expense and the cost of general administration almost necessarily fall in the category of central University decisions. It has already been argued that the decision to subsidize particular academic programs should be made consciously and deliberately at the central level, since it should reflect basic University values. The Museum, the Center for the Performing Arts, the program of Intercollegiate Athletics all make their contributions to the general quality of University life and the extent of the subvention which the University provides them should be decided at the central level and should reflect the values of the University as a whole. While many library costs can be quite directly related to the teaching operations of individual Schools, the importance to

¹ E.g., in the budget analysis appearing in the *Almanac* (Dec. 5), one-half of the cost of general administration (offices of the President, the Provost and the non-academic Vice Presidents) is charged to the Medical School and the two hospitals. Two-thirds is charged to the Health Affairs area.

the entire University of a first-class library is so great for research and other purposes that a significant proportion of library costs probably should be absorbed at the central level. This is particularly true insofar as the surrounding community makes use of our library facilities.

Finally, there is the question of scholarship and fellowship aid, over and above the relatively small fraction restricted by donors to particular Schools. There is a perfectly obvious way of assigning this among Schools in terms of the enrollment of the students receiving the aid. But if this is to be done, control over the granting of aid should also revert to the Schools; and it is far from clear that the overall values of the University will be well served by such an arrangement. The interrelated decisions of admission and financial aid for undergraduates are now made at the central level and there are very good reasons-in terms of efficiency, parity of standards and the spirit of "one University"-why they should continue to be so. But more important, I would contend that there is a broad social commitment on the part of the University to make the high quality of education which we provide accessible to low-income students. The magnitude of that commitment and the principles by which aid should be allocated among the University-wide pool of applicants are matters of fundamental

| TABLE 1 |
|---------------------------------|
| Discretionary University Income |
| Sources and Uses |
| (thousands of dollars) |

| SOURCES | | | |
|---|---------|---------|--|
| | 1971-72 | 1972-73 | |
| State Appropriation— | | | |
| General | 8753 | 9278 | |
| Endowed Scholarships | 2652 | 2507 | |
| Income on Unrestricted | | 700 | |
| Endowment | 608 | 768 | |
| Income on Temporary | | | |
| Investment Fund | 945 | 945 | |
| Unrestricted Alumni Giving | 1567 | 1550 | |
| Unclassified Income | 2648 | _2649 | |
| TOTAL SOURCES | 17173 | 17697 | |
| USES | | | |
| Central Overhead* Less: School Contribution | 11161 | 13559 | |
| to Central Overhead** | 7395 | 9539 | |
| Equals: Uncovered Overhead | 3766 | 4020 | |
| Student Aid Not Covered by | | | |
| School Scholarships/Fellowships | 9892 | 9444 | |
| Subvention of Assignable Costs | | | |
| of Academic Programs*** | 1976 | 1845 | |
| Subvention of Assignable Costs of Non-Academic Programs: | | | |
| Dept. of Intercollegiate Athletics | 1233 | 996 | |
| Museum | 351* | 338* | |
| Annenberg Center | 272 | 248 | |
| Auxiliary Enterprises | 1433b | 687b | |
| Hospitals | 250 | - | |
| Total | 3539 | 2269 | |
| TOTAL USES | 19173 | 17578 | |

- General Administration (\$3.6 million, 1971-72, and \$5.0 million, 1972-73) plus General Expense (\$7.6 million, 1971-72, and \$8.5 million, 1972-73).
- **Whaton \$2.5 million, Medicine \$2.5 million, College \$0.9 million, Veterinary Medicine \$0.5 million, Auxiliary \$0.9 million in 1971-72. College \$1.7 million, Wharton \$2.4 million, Medicine \$3.8 million, Veterinary Medicine \$0.4 million, Auxiliary \$0.9 million in 1972-73. Schools contributing less than \$200,000 not listed.
- *** Moore \$0.4 million, Other Engineering \$0.2 million, Education \$0.2 million, Dental Medicine \$0.6 million in 1971-72.

 Annenberg \$0.2 million, Moore \$0.6 million, Other Engineering \$0.3 million, Education \$0.3 million, Dental Medicine \$0.3 million in 1972-73. Subventions less than \$200,000 not listed.
 - After credit for \$100,000 State appropriation designated Museum.
 - b Includes dining and residence services and bookstore.

University policy. These decisions should be centrally determined, at least as to minimum aid levels for each School, and the cost should be charged against general University income. Special arrangements should perhaps be made for the graduate-professional Schools, which traditionally control their own admissions and should probably be permitted to exceed, at their own expense, the relatively (and perhaps unduly) low level of aid which the University has been willing to allocate to their students.²

Table 1 offsets against general University income those expenditures which, according to the argument above, are most appropriately determined at the central level, reflecting the basic values of the University. In so doing the table provides a picture of the priorities implied by the present uses of discretionary income and an opportunity for comparison with subjective priorities. In this context discretionary income means receipts in excess of those expenditures directly required to meet the obligations (to students and to grantors of research funds) incurred in generating tuition and research contract income. For the central University the major sources of discretionary income are the State appropriation and gifts and endowment income not restricted by the donor for use of a particular School.

The table is derived from data for 1971-72 and estimates for 1972-73 provided by the Office of the Associate Provost for Academic Planning. (For 1972-73 see Almanac, December 5.) In these data a School's tuition income is based on course units taught by the School, rather than students enrolled in the School. Thus, e.g., the College is given credit for Wharton students when they take College courses but not for College students when they take Wharton courses. The figures for the Graduate School of Arts and Sciences refer only to the six departments budgeted through that School. The revenues generated by other graduate groups are allocated to the Schools providing teaching and other resources.

Table 1 indicates that by far the largest use of discretionary funds—well over half—is for student aid. The next largest use—over one-fifth in the current year—is for central overhead not covered by the contributions to overhead of individual Schools. Next comes the subvention of assignable costs of non-academic programs. Smallest of all—about one-tenth in the current year—is the subvention of assignable costs of academic programs.

Most uses of discretionary income are expected to fall in 1972-73 as compared with 1971-72, in accordance with the policy of fiscal restraint required to produce a balanced budget. The large—and probably unavoidable—increase in central overhead costs (\$1½ million for general administration and \$1 million for general expense) is almost, but not completely, offset by an increase in School contributions to central overhead.

The device used here of offsetting Schools' excess income against central overhead leaves much to be desired both in terms of the theory outlined above (which suggests that central overhead should be met out of general income) and in terms of equity, since the actual contributions vary so widely among individual Schools. In both years five academic programs—the School of Medicine, Wharton, the College, Auxiliary Education and Veterinary Medicine—together make contributions amounting to two-thirds of central overhead. In 1972-73 five Schools (three in 1971-72) break even or make very small contributions to central overhead. The remaining six Schools (eight in 1971-72) not only fail to contribute to central overhead but require University subvention of their own assignable costs.

Since the expenditures classified as central overhead are essential to the functioning of the University, all Schools receive some benefits, however difficult these may be to measure. Thus a School which fails to pay for any significant part of this expense is in some degree receiving favored treatment, as compared with Schools

² On the basis of the budget analysis appearing in the *Almanac* (Dec. 5), it appears that student aid, other than that restricted to the individual School, is negligible as a percent of gross tuition for students in Medicine and Nursing and quite modest for Veterinary Medicine, Dental Medicine and Social Work. It is also very small for Wharton MRA's.

of Medicine and Veterinary Medicine is treated as central University income instead of being assigned to these Schools, Veterinary Medicine becomes a deficit operation of substantial magnitude and the contributions of the remaining four Schools fall below one-half of central overhead.

which make substantial contributions. Perhaps, for the protection of the students involved, there should be some upper limit to an individual School's contribution, with the School encouraged to retain any excess income beyond this amount for improvement of the quality of educational services offered. A School's maximum contribution to central overhead might be based on a flat payment (say \$300) per student enrolled, which would be in the nature of a general fee, plus some share of the overhead charge on the School's sponsored research, though this probably should be allocated primarily for School overhead.

The reduction of half a million dollars in centrally financed student aid from 1971-72 to 1972-73 does not entail any decrease in total student aid. As scholarship and fellowship funds for the use of individual Schools have increased, central University support of student aid has fallen correspondingly. Such a policy may well be justified in the short run to meet a financial emergency, but it will have unfortunate long-run consequences if continued. It is discouraging to donors of scholarship funds for a particular School if they find that their contribution makes no additional student aid available to that School, but simply releases central University funds for other purposes.

The largest reduction in uses of discretionary funds is in the subvention of assignable costs of non-academic programs. In large degree this reflects the fall in the dining service deficit associated with the closing of some dining facilities.

The subvention of academic programs has decreased slightly. For Fine Arts and Social Work the subvention has been wiped out, while for the Dental School it has been cut in half. However, for the Moore School the subvention has risen and this is now the only School requiring an amount in excess of half a million

Tables 2-A and 2-B are supporting tables which show the calculation of individual Schools' contributions to central overhead (positive value in column 7) or subvention by the University of the assignable costs of individual Schools (negative value in column 7). All student aid not supported by funds restricted to the individual School is charged against general University income and not against the School. Much of this, of course, represents work-study or loan funds which are largely recovered by the central administration from external sources. Both direct and assignable indirect costs are charged against the School, except for the net cost of auxiliary enterprises, which has here been charged against general University income on the grounds that it has little direct connection with the School's educational function and is properly a central University responsibility. Operations and maintenance for general purpose buildings and for the campus grounds, which have been spread to the Schools, might preferably remain a central University responsibility—as might a substantial portion of library costs. However, such an adjustment could not be made with the data available.

| | | TA | BLE 2 | | | | |
|-----------------------------------|---------------|--|------------|----------------------------|-----------------|---|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | Net Income | Student Aid by Scholars Restricted | ship Funds | Gross Income (1 + 2) | Direct Costs | Direct + Assignable Indirect Costs** | Available to Meet Central Overhead (4 — 6) |
| A. School Contributions to Cen | tral Overhead | , 1971-72 | | | | | |
| GSAS | 2186 | 461 | 44 | 2647 | 2229 | 2554 | 93 |
| Annenberg | 421 | 135 | 79 | 556 | 559 | 671 | - 115 |
| College & CW | 15779 | 5173 | 42 | 20952 | 16886 | 20091 | 861 |
| Wharton | 10050 | 1678 | 22 | 11728 | 8365 | 9206 | 2522 |
| Fine Arts | 2079 | 417 | 27 | 2496 | 2207 | 2651 | — 155 |
| Moore | 1831 | 232 | 30 | 2063 | 2231 | 2486 | - 423 |
| Other Engineering | 3641 | 186 | 31 | 3827 | 3616 | 4029 | - 202 |
| Education | 1495 | 319 | 31 | 1814 | 1812 | 2060 | - 246 |
| Nursing | 1468 | | | 1468 | 1537 | 1587 | - 119 |
| | 1957 | 392 | 25 | 2349 | 1727 | 2356 | - 7 |
| Law | 36875* | 143 | 8 | 37018* | 32919 | 34555 | 2463a |
| Medicine | 7264b | 129 | 20 | 7393b | 6314 | 6903 | 490b |
| Veterinary (incl. Monell) | | | 22 | 4527 | 4495 | 5138 | - 611 |
| Dental | 4162 | 365 | | | | 1232 | - 98 |
| Social Work | 1017 | 117 | 22 | 1134 | 1112 | 624 | 41 |
| SAMP | 548 | 117 | 26 | 665 | 545 | | |
| Auxiliary Educational Enterprises | 2910 | 109 | 4 | 3019 | 1120 | 2094 | 925 |
| B. School Contributions to Cen | tral Overhead | , 1972-73 (| est.) | | | | |
| GSAS | 2470 | 401 | 34 | 2871 | 2417 | 2813 | 58 |
| Annenberg | 490 | 97 | 49 | 587 | 673 | 818 | – 231 |
| College & CW | 18025 | 5181 | 37 | 23206 | 17349 | 21526 | 1680 |
| Wharton | 11415 | 1584 | 18 | 12999 | 9341 | 10623 | 2376 |
| Fine Arts | 2555 | 362 | 20 | 2917 | 2244 | 2842 | 75 |
| Moore | 2018 | 222 | 25 | 2240 | 2534 | 2882 | - 642 |
| Other Engineering | 3938 | 178 | 27 | 4116 | 3867 | 4402 | - 286 |
| Education | 1690 | 271 | 25 | 1961 | 1927 | 2240 | - 279 |
| | 1579 | 2/1 | 2.5 | 1579 | 1591 | 1671 | - 92 |
| Nursing | 2294 | 385 | 21 | 2679 | 1790 | 2563 | 116 |
| Law | | | | 40607° | 34673 | 36774 | 3833c |
| Medicine | 40607¢ | 121 | 14 | | 7040 | 7820 | 3664 |
| Veterinary (incl. Monell) | 8065d | 121 | | 8186d | | 5368 | - 309 |
| Dental | 4719 | 340 | 17 | 5059 | 4505 | | |
| Social Work | 1202 | 117 | 17 | 1319 | 1171 | 1325 | - 6 |
| SAMP | 654 | 144 | 24 | 798 | 542 | 663 | 135 |
| Auxiliary Educational Enterprises | 3293 | 149 | 4 | 3442 | 1211 | 2542 | 900 |

Includes student aid financed by general University endowed scholarship funds, work study disbursements recovered from the Federal government and "free" University aid from unrestricted income (budgeted aid).

Excludes net cost of auxiliary enterprises.

a Includes State appropriation of \$2.6 million designated for School.

b Includes State appropriation of \$1.7 million designated for School.

A Proposal for the Annenberg Center

To the Editor:

I am pleased to forward to you, as you have requested, "A Proposal for The Annenberg Center for Communication Arts and Sciences." Although this is only a planning document, I believe that it is appropriate to share it with the community whose interest and response alone can make these plans succeed.

The proposal is the work of Mr. Theodore Hoffman, a consultant to the Center, and Mr. Richard Kirschner, Managing Director. President Martin Meyerson and Provost Eliot Stellar have received it some time ago and indicated support for it. If the general response is favorable and University support is assured, we shall launch a fund-raising campaign to transform the plan into reality. That will bring to the University not only exceptional attractions and talent, but some of the people needed to greatly strengthen the scope and depth of student work in the performing arts.

The cost is many times what University resources and the box office can cover. Full community information, understanding, leadership, and support are the crucial ingredients of a successful fund drive. We hope that an outstanding performing arts program can generate additional resources that would not be available to the University for other purposes.

The time for decision and commitment is upon us. I should be able to tell you in time for next week's Almanac what the response has been, and whether or not we can proceed with the plans.

Sincerely yours,
George Gerbner, Dean
The Annenberg School of Communications and
Center for Communication Arts and Sciences

Our aims are threefold: 1) to provide scheduling and facilities for campus performing arts projects and productions; 2) to offer a Zellerbach Theatre season of high quality "booked" programs in music, dance, film, and theatre, equivalent to that of other university cultural centers; 3) to develop a permanent professional repertory theatre for the Center.

While the immediate plan is ambitious, it is a necessary first step from which the Center could grow organically as a major urban cultural resource. Obviously, initial funding (beyond the Center's established budgetary resources) is a difficult prospect to face; however, we have proceeded on the assumption that if we produce a demonstrably viable season we will be in a position to seek the kind of continuing subsidy that accrues to institutions which present genuine evidence of achievement and not just good intentions.

Audience development will play a vital role in our new season. The Center has established a campus identity and interest base, but we must accommodate an even larger community audience on a continuing basis. To attract that audience, we must offer events of model quality to establish confidence in the Center's programming, and we must offer them at prices which are not only competitive with other producers, but are also within the resources of those we desire to reach. Since quality attractions are expensive, and our revenue potential limited, even at capacity—due to the small size of our main auditorium—we are carefully researching all available events to provide a maximum quantity and variety of programs for a minimum cost.

With regard to promotion, we have accepted the view that cultural centers serve not one audience, but a number of overlapping audiences. The season has been scheduled accordingly into several "series", which can be promoted simultaneously, offering a number of subscription options. The initial thrust of promotion will be a standard (one hundred

thousand) mass mailing campaign, utilizing a handsome and substantial brochure, to attract subscriptions for all series. The continuing campaign will naturally employ conventional advertising but will also emphasize a quarterly "house organ" calendar publication which will provide in-depth background material on Center programming.

The following program provides a balanced, regular season of offerings throughout the academic year. It fully utilizes the Center's production facilities, and it also provides a limited number of attractive dates in the Zellerbach Theatre for outside producers who might wish to book events that meet the Center's standards. In planning the schedule, we have given careful attention to our obligations to campus performing arts groups.

Zellerbach Season

Heading the Zellerbach season, we propose to offer four series: Major Theatre Attractions, Distinguished Artists Series, Music and Dance.

Major Theatre Attractions: We propose one-week engagements by three nationally renowned regional professional theatre companies plus one production by our own resident professional company. The success of the New Phoenix Company has established a pattern which we believe can be used to supplement the commercial theatre offerings of Philadelphia. The New Phoenix will be available again in its second season. The National Endowment for the Arts is most likely to sponsor a second touring season for the Tyrone Guthrie Theatre Company, which is regarded as the most disinguished American theatre company. The Guthrie has indicated a willingness to include a visit to the Annenberg Center in its 1974 program. We do not expect any problems in scheduling a fourth event. John Houseman's City Center Acting Company has established itself during its initial season, and we believe several other leading theatres are concerned to negotiate touring plans during this coming spring.

Distinguished Artists Series: We are concerned here with individual star performers who offer programs which do not involve the very heavy costs of the large theatrical companies. We have already booked a four-day engagement for Jessica Tandy and Hume Cronyn in their bill of Samuel Beckett plays, which won outstanding notices during its run at Lincoln Center's Forum Theatre. We expect to book Ruby Dee and Ossie Davis to perform an evening of black poetry. We have invited Dame Judith Anderson to an evening of dramatic readings. We have reason to believe that Hal Holbrook will be available to us for a revival of his now famous Mark Twain Tonight. We hope to attract Marcel Marceau, although his agency is obligated elsewhere in Philadelphia.

Music: The University regularly presents an impressive series of its own music programs. We expect that a projected electro-acoustical system will make the Zellerbach Theatre available for such events and others. We have already booked the world-renowned Pro Musica Antiqua for its staging of the Renaissance opera, La Daphne, and will offer three other musical events of equivalent stature from the wide variety of available offerings.

Dance: With the cooperation of Stella Moore, chairman of the Dance Council for the Pennsylvania State Council on the Arts, and Dance panelist for the National Endowment on the Arts, the Center has every expectation of securing assistance from the National Endowment for four dance companies approved under the Coordinated Residency Touring Program. We are coordinating our schedule with the Walnut Street Theatre to assist the Philadelphia dance-interest groups in expanding their constituency.

A Resident Company

Philadelphia has lacked a regional professional repertory company since the closing of the Theatre of the Living Arts. The Center is a logical place to develop a nationally recognized theatre company and there is evidence that federal, foundation, and local aid is available to assist the growth of such a company. Such aid demonstrably goes only to ongoing companies. Such aid is not likely to be forthcoming until the second season.

The aim is to begin both modestly and innovatively. A "young" company of eight will be selected from outstanding graduates of professional training schools, along with two promising young directors. Foundations, the National Endowment on the Arts, and educational theatre, have long urged the creation of such a company. We believe that outstanding talent is available, and that by chosing a series of vital and significant plays from the classical and contemporary repertoire, we will appeal to campus audiences and to Philadelphia's theatre-going public.

The company will use the Prince Theatre to present an "experimental" grouping of three plays—"experimental", referring to staging styles. It will present an "idea" grouping of three plays in the Annenberg Auditorium which will be selected to fit important themes and will be augmented by lectures, discussions, films, along the lines of the effective program now used with other Center productions.

The company will do one major production in the Zellerbach Theatre with a leading guest performer and a guest director. The company will be an Equity Company and have its own production staff, which will also help service the Zellerbach program.

Cinema

The Center's Studio Theatre is equipped as an excellent "cinematheque" and has been used regularly for film showings. Plans are underway to coordinate the Center's film programs with supplementary offerings so that a season of some 100 showings will be available.

A-3 ASSEMBLY: FEBRUARY 15

Discussion groups begun January 18 on several topics will continue at Thursday's A-3 Assembly meeting in Room 285 McNeil Building, 37th and Locust, from 1 to 2 p.m.

INSIDE PENNSYLVANIA: FEBRUARY 20

The Administrative Assembly's "Inside Pennsylvania" series continues Tuesday in the Franklin Room, Houston Hall, from 11 a.m. to 3 p.m. Members of the Administration present what amounts to a special University briefing session at these programs and the audience has a chance to ask questions about University management.

President Meyerson will speak in the morning, as will Chaplain Stanley Johnson and Admissions Dean Peter Seely. After luncheon at noon, Vice President Paul Gaddis will give an overview of University management. At 1:30, Dr. Robert H. Dyson, Jr., will talk about the Development Commission Report. John Pyne, Director of Budget Administration; Edward F. Lane, Director of the Commonwealth Relations Council; and James Keller, Director of Personnel Services, complete the program. By invitation.

Bicentennial Coordinating Committee:

Philadelphia 1876

The University of Pennsylvania's participation in the 1876 Centennial was limited. The four recorded events which relate to the Centennial year:

University of Pennsylvania scientific students installed an exhibition at the 1876 World's Fair. As described in the Philomathean Society's *University Magazine*, June 1, 1876:

We are pleased to announce that the University of Pennsylvania has a handsome representation in the Centennial. In the Pennsylvania Educational Department building, which is octagonal in shape, having a central room and eight others radiating from it-may be seen and examined many deft and curious specimens of the handiwork of our scientific students. The Senior Class have a model of one section of the old Market Street bridge that was burned, which is a perfect prototype of that memorable structure. It is constructed in such a manner as to admit of the ends of the arch resting on two solid wooden piers. The truss work and bolts are beautifully executed, and seem true to nature. There is a model of a section of another bridge which is equally carefully done and no less worthy of praise. The model of a roof which is among our contributions, commands the attention of every passer by. There are also a number of models of cog-wheels, arranged so as to change the direction of the power in many ways. All of these are fitted with handles and can be worked by all who may desire so to do. Besides these models, there is a fine collection of mechanical drawings, executed by members of the different classes. Quite a number of those done by the Junior Class call for special commendation, on account of their accuracy and delicacy. There is another thing there that demands our attention and elicits our praise, and that a file of THE University Magazine. There are many other objects of interest in the collection, of which our want of space precludes a fuller consideration. The specimens are all carefully executed, and are not only a monument to the skill which our students have acquired at the University, and thus place before the world for examination, but will also amply repay anyone who will take the trouble to examine them. We take pleasure in thus publicly commending our fellow students upon this splendid result of their work of this winter.

The decision was made to dismiss students June 2, three weeks early, by action of the Trustees and ratified by the Parents, because the Centennial Exhibition would have made "attendance very irregular." The students were told to go and "see the World's Fair intelligently."

After the World's Fair in 1877, the citizens of Philadelphia gave a purse of \$50,000 to John Welsh for his work as Chairman of the Board of Finance of the Centennial from 1873 to 1877. At this time, Welsh was also a Senior Trustee of the University of Pennsylvania. He, in turn, made a gift of the money to the University which used it in February 1877, to endow the John Welsh Centennial Professorship of History and English Literature.

Professor William Pepper of the Medical Faculty, (later Provost of the University,) was Medical Director of the Centennial. Other faculty members and Trustees doubtless served on many of the Committees.

The University's new Bicentennial Coordinating Committee will have its headquarters in the office of its chairman, Vice President Paul O. Gaddis. Suggestions and proposals relating to the Bicentennial celebration should be sent to his attention, Room 121 College Hall.

A Theme on Women

The College of Thematic Studies is now offering a semesterlong theme titled Women's Studies, designed to enable both female and male students to learn about women through the disciplines of history, biology, psychology, linguistics and many others.

"We see the Women's Theme as a pilot project, the success of which may determine the kind of permanent interdisciplinary women's studies program to be established at Penn," said the Penn Women's Studies Planners, a group of students, faculty and administrators who developed the women's studies theme and have offered proposals for introducing women's studies permanently to the University curriculum.

About 87 freshmen, sophomores and women's studies majors are taking one of the twelve seminars offered and some have chosen independent study as well. Everyone in the program comes together for films, discussions and lectures by guest speakers such as Robin Morgan, author of Sisterhood is Powerful.

To develop the program, teachers for each course and interested students and faculty have held regular workshops throughout the fall. Each instructor has presented her proposed course to the group. The discussion following has focused on three questions: what is the intellectual justification for this course? where will this course link up with other courses? and what are the appropriate teaching methods for the course? In this way program planners are seeking a strong academic program where each course is integrated with the others and where the line separating teacher and student is as fine as possible.

The courses offered range from biology to law, from literature to demography. Two courses are offered in history, four in the social sciences including psychology, sociology and economic history. Two courses focus on women in Asian societies—one in literature and the other, an historical and anthropological look at the roles of women in several Asian societies. Courses on women filmmakers and feminist thinkers and a linguistics course dealing with the way language reflects and perpetuates the status of women are also among the semester's offerings.

According to the Penn Women's Studies Planners, the academic community has a lot of catching up to do in its scholarship on women's contribution to every facet of our society, and women's studies theme will provide a first step. Furthermore, in a time when the structure of the family is

LIFE OPTIONS: LAW

"Women in Law," second in a series of discussions on Life Options for Women sponsored by the Office of Vocational Advising and the College for Women, will be held Tuesday, February 20, at 7:30 p.m. in the Recreation Center at Stouffer Triangle.

Panelists will be attorneys Lila Simon of Ballard, Spehr, Andrews and Ingersoll, Marjorie Marinoff of Pepper, Hamilton and Scheetz, and Janet Stotland of Community Legal Services; and Linda Fisher, a third-year law student at Penn.

Earlier in the series, five women physicians and two women medical students discussed "Women in Medicine" with women students of the University. changing, it is the University's responsibility to examine this change.

Women's studies is central to the education of women, they feel. By understanding women's traditional role in our society, they believe that college-age women may be freed to explore new roles and different courses of action for their lives. Finally, they feel that introducing female thinkers and historical figures into the curriculum will provide women with the kind of role models for their lives that have always been available to men.

Courses in the Theme

WS003 Women in Asian Societies, Priscilla Chung (History). An anthropological and historical study of social organizations in Asia comparing societal structures in China, Japan, India, Tibet, Southeast Asia and nomadic societies in the Near East. An examination is made of the different roles a particular social organization imposes on its members with emphasis on women; this is then contrasted to the present role of women in American society.

WS004 Feminist Thought, Cynthia Secor (English). Discussions of the lives and writings of feminists, giving primary attention to the way in which their particular insights were generated and justified by the circumstances of their lives.

WS005 Women in Chinese Literature, Liou-yi Yuh (Oriental Studies). The purpose of this seminar is to 1) discover women's role in society as reflected in fiction; 2) find out types of women described as well as left out of these works; 3) see in what ways women in these works differ from women in the real world through distortion on the part of male writers.

WS006 Psychological History of Women and The Family, Carroll Smith-Rosenberg (History/Psychiatry). Examines the history of women in the 18th and 19th centuries in the United States. Principal emphasis will be placed upon psychological and sociological approaches. After examining various behavioral science models, the students will explore their usefulness in interpreting the autobiographies, diaries and letters of women and what we know of the family and domestic communication networks.

WS007 Women and The Law, Sharon K. Wallis, Esq. (Law). The history and current status of the law relating to women's rights, and the dynamics of change through court action and the political process.

WS008 Women and Film, Sandra Grilikhes (Annenberg). Emphasis is placed on the importance played by the media in the socialization process and on how the creative work of women and men reflect this influence. A full schedule of films by women is screened and discussed with particular attention to the treatment of certain basic themes and on how women perceive these themes differently from men.

WS009 Women and Language, Lynette Hirschman (Linguistics). The interrelation of language as a social institution and women's place in society: how language use reflects the status of women and how linguistic behavior (on the part of both men and women) perpetuates women's inferior status in society.

WS010 Biology of Women, Eileen and Isidore Gersh (Animal Biology); Ingrid Waldron (Biology). Focuses on biology of women from the point of view of genetics, anatomy, physiology, and behavior.

WS011 Two Roles: Wife and Social Reformer, Martha Lavell (Human Resources Center). Includes an historical examination of the role of women as agents of social change and a focus on opportunities for self-realization in current movements for social reforms coexistent with performing the homemaker role. Rewards, difficulties, and advantages of the change agent role are noted, as well as the principles and methods of planned social change.

WS012 Women in Economic and Demographic Perspective, Elyce J. Rotella (Economic History). Deals with economic and demographic history of women from an empiricist viewpoint.

PRESIDENT'S CONFERENCE: FEBRUARY 19

The President's Conference will meet Monday in the Council' Room of the Furness Building from 3:30 to 5 p.m. The Conference acts as a clearinghouse for information on current developments at the University, also offers the President advice from members of the faculty, staff and student body on emerging issues.

Neutron Therapy for Cancer

A new fast neutron generator, designed specifically to treat cancer, has been developed by radiologists from the University of Pennsylvania School of Medicine and engineers from the Cyclotron Corporation, Berkeley, California.

Dr. James T. Brennan, Matthew J. Wilson Professor of Research Radiology, has announced that trial runs of a working laboratory prototype of the machine have been highly successful. He said a paper describing results of the trials has been accepted for publication in the March issue of the British Journal of Radiology.

Dr. Brennan said the new machine will provide a practical neutron source for clinical use that is relatively inexpensive and can be housed in a conventional supervoltage therapy room. Penn is negotiating an option for the first clinical machine. Delivery of the generator, to be known as the Penn Neutron Therapy Machine, is planned for some time in 1974, at a cost not to exceed \$500,000.

When radiotherapy of cancer is suitable, standard x-rays or gamma rays kill cancer cells with doses that are tolerated by normal tissues if the cancerous cells are well oxygenated. However, in many cases, cancer cells may be low in oxygen (hypoxic), and this makes them resistant to x- or gamma rays. Fast neutron therapy, however, is equally effective with both well oxygenated or hypoxic cancer cells.

One type of machine that produces fast neutrons is the cyclotron used for much physics research. One has been used in the large clinical trial at Hammersmith Hospital in London, and results on 290 patients treated there are described as favorable. However, the cost of building and operating cyclotrons is so high that their widespread use in medicine would be enormously expensive.

The Penn fast neutron generator can be manufactured at about one-fourth the cost of a cyclotron, and would require only one engineer to keep it functioning. A cyclotron costs \$5 million to build and install, requires three full-time engineers and takes ten times more floor space than a neutron generator.

Total cost of building the Penn neutron generator, making necessary structural renovations to house it, and installing it is estimated at less than \$1 million. Clinical use of the machine for two years is estimated at perhaps another \$1 million over and above what can be recovered from patient charges.

Dr. Brennan said that a course of conventional radiation therapy costs between \$800 and \$1200 and that neutron therapy with the Penn machine would cost from \$1200 to \$1600.

The Penn neutron generator uses the deuterium-tritium reaction. Deuterium ions (heavy hydrogen) and tritium ions (heavy heavy hydrogen) are accelerated into a target, producing neutrons. Because these collisions also produce heat, the lifetime of targets in the past has been limited to about 100 hours, and neutron output was at best one-fourth of that desired for clinical purposes. The new concept of target design employs copper covered by a thin layer of chromium, creating an optimal combination of neutron-producing and target-cooling properties.

Studying the High-Speed Line

The Philadelphia-Lindenwold High-Speed Line has had "a modest positive impact on suburban residential property values" in New Jersey, researchers from the University say in a study released last week by the U. S. Department of Transportation. These changes in property values have been in proportion to the "travel cost and time savings" for users of the High Speed Line.

Dr. David E. Boyce and Dr. Bruce Allen led a team of researchers from the Regional Science and Transportation Department of the Wharton School to develop this Phase One report on "Impact of Rapid Transit on Suburban Residential Property Values and Land Development."

Phase Two will refine the tentative results using collected data on about 20,000 residential property transactions during 1964-1971 in Camden and Gloucester Counties.

The impact of the new rapid transit facility has not, the professors write, "substantially altered the type, density and location of land development." One other part of their findings indicates that where apartment and commercial developments were built near the High-Speed Line those developments produced a surplus of tax revenues over the costs they caused for their municipalities and schools.

The team will shortly announce results of a parallel study which analyzes "The Impact of Access Distance and Parking Availability on Suburban Rapid Transit Station Choice." In it, Drs. Boyce and Allen use data from the Philadelphia-Lindenwold High-Speed Line to set up a model for locating stations and determining their parking capacities.

Civil and Urban Engineering

In another study Dr. Vukan R. Vuchic and his graduate student Richard M. Stanger have compared the Lindenwold Rail Transit Line in Philadelphia with Shirley Highway Express Bus Lines in Washington. Their report shows clearly that the two lines serve very similar areas, but Lindenwold has a much higher performance. Its much higher speed, reliability, frequency of service and passenger comfort more than offset the advantage of buses in branching out into many lines in suburbs. The study shows that both modes are greatly underutilized in our cities, but that modern rail transit is superior to buses in performance: Lindenwold attracts 70% more passengers than Shirley.

The study also shows that, contrary to some opinions, public transportation can attract a *substantial* number of automobile drivers in cities if adequate investments in its modernization are made; the present policies of subsidies to parking and neglect of transit should therefore be reversed.

APPOINTMENTS

BUILDINGS AND GROUNDS

Anthony G. Biddle has been named Superintendent of Grounds in charge of the care and maintenance of the land-scaped areas of the University. He attended the American Landscape School at Rutgers University and Pennsylvania State University and has been golf course superintendent at Ashbourne Country Club and St. Davids Golf Club.

HEALTH AFFAIRS

Mrs. Frances S. Hardy, formerly of the President's Office, is now Assistant to the Vice President for Health Affairs in 110 College Hall.

HEALTH LAW PROJECT

The University has signed an agreement naming Lucas, Tucker and Company as the auditors of the Health Law Project. The black-owned public-accounting firm was established in New York in 1938 and has since then aimed to provide training for members of minority groups. The company has branches in five American cities and handles both private and government accounts.

PLANNING, DESIGN, AND PROJECT MANAGEMENT

Two staff members of the planning office have been promoted, director Arthur Freedman announced. Titus D. Hewyrk, who has been Assistant Director for the past three years, is now Associate Director. He will oversee the campus development plan and capital improvement program.

Frank D. Galbraith Jr., has become Assistant Director for medical center planning. Before coming to the University in 1969, he served on a special staff at the Mayo Clinic to evaluate the effect of facilities design on work habits of hospital personnel. At Penn, he has been director of the Joint Integrated Management program at HUP and Childrens Hospital. In 1970, he began a consulting group specializing in health care delivery systems and developed a planning process now being used at the Medical Center.

BULLETINS

BADMINTON: FEBRUARY 15

Lee Burling, former member of the Hubert Cup Team and ranked fourth nationally in badminton, will participate in a demonstration sponsored by the Department of Recreation this Thursday in Weightman Hall at 8 p.m. Members of the Wissahickon Badminton Club will be among the other players.

BLOOD DONOR CLUB: FEBRUARY 14, 22

The student Blood Donor Club has opened its drives to faculty and staff, as announced in last week's Almanac; and information about the dates and locations of blood drives will be published every month. Tomorrow, donations will be accepted at the Phi Gamma Delta house, 3619 Locust Walk, from 10 a.m. to 5:30 p.m. On February 22, the drive will be at International House, 2 to 7:30 p.m.

UMTA GRANTS IN TRANSPORTATION

The Transportation Studies Center will award UMTA grants of the U. S. Department of Transportation to graduate and undergraduate students specializing in some aspect of urban transportation. Scholarships of variable amounts up to \$4000 are granted for one year, including study in the summer of 1973. Students must be recommended by the heads of their departments. Deadline for applications is March 15. For more information, telephone the Transportation Studies Center, Ext. 8481.

FOR SEPTA RIDERS

In the event of a public transportation strike, free parking will be available for University employees at garage #26, 32nd and Walnut Streets, and River Field. Please show University ID cards to the attendant to gain admittance.

UNEMPLOYMENT COMPENSATION

All forms received pertaining to Unemployment Compensation must be directed to the attention of Mrs. Shirley Brown, Benefits Section, in the Personnel Office.

This procedure is necessary in order to process all claims accurately and promptly. Your immediate attention to this matter would be greatly appreciated.

James J. Keller, Director of Personnel Services

NEWS IN BRIEF Continued

BENDER, WOLFGANG, SPECTER: FEBRUARY 18

Two University faculty members will participate in a special program concerning the death penalty to be broadcast at 12 noon, Sunday, February 18, on WPVI-TV, Channel 6. Appearing on the "Focus" program will be Paul Bender, Professor of Law, and Dr. Marvin E. Wolfgang, Professor of Sociology and Director of the Center for Studies in Criminology and Criminal Law. Another guest on the program will be District Attorney Arlen Specter.

STATE OF THE DENTAL SCHOOL

"Endodontics in the General Dental Practice" is the program of study for the twenty-first annual Alumni-Faculty-Senior Day at the School of Dental Medicine tomorrow. Alumni will receive eight AGD credit hours for the program and seniors will be honored at a dinner at the Bellevue Stratford, where Dean Walter Cohen will deliver a "State of the School" message. Drs. Louis I. Grossman, George Stewart, Arnold Feldman, Frederic Chacker and Seymour Oliet will give seminar courses.

ART AUCTION: FEBRUARY 24

The Wharton Graduate Alumni Club of Philadelphia will auction oils, water colors, lithographs, etchings and engravings by artists from the eighteenth to twentieth centuries February 24 at the Bellevue Stratford. Names that will go on the block include Utrillo, Toulouse Lautrec, Chagall and Peter Max; at a similar auction of the New York Club, prices went as high as \$600 but half the sales were closer to \$75. Admission is \$2.50 to the 7 p.m. exhibition and the 8:30 p.m. auction, in the Rose Garden and Terrace Rooms at the Bellevue.

NEW FROM THE NEARLY NEW

Funds from the Nearly New Shop staffed by the Doctors' Wives Committee and the Board of Women Visitors at HUP have paid for three machines recently installed in the hospital. The Committee collected more than \$15,000 from sales at the shop at 26 East Athens Avenue in Ardmore. The equipment includes a pulsatile perfusion machine which preserves cadaver kidneys for transplant surgery, a Faxitron x-ray unit for detecting cancers in breast tissue at a very early stage, and, for training nurses, an arrhythmia machine which monitors cardiac danger signs by means of an EKG tape.

NEW AWARD TO PUBLIC-SPIRITED STUDENTS

The Vice Provost for Undergraduate Studies has announced new awards to be given annually to students who make "orderly and constructive social and educational change within or outside the University community". These awards are financed by the Sol Feinstone Fund, are worth \$500 each and up to three awards may be made each year preferably to a sophomore, a junior and a senior. Any member of the University community may nominate a candidate for one of the awards, but nominations will be most effective if accompanied by a written supporting statement which should be sent to a member of the Sol Feinstone Award Committee before February 23. The faculty members of the committee are Kenneth Atkins (Chairman), Werner Gundersheimer and Nancy Leonard. The student members are Annette Levinson and Thomas Schaffer.