

Almanac

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NEWS IN BRIEF

DIVISION OF LABOR IN MEDICINE

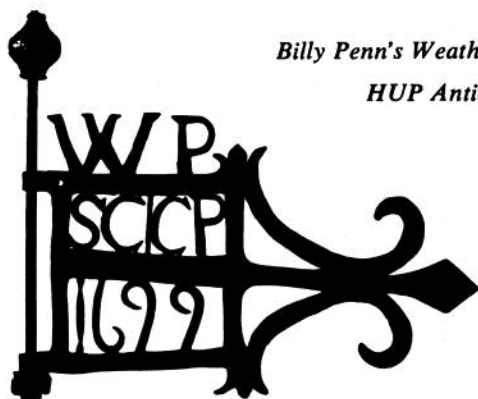
President Martin Meyerson announced last week the division of responsibility for the School of Medicine and the administration of the University's two hospitals.

The responsibility has been combined since Dr. Alfred Gellhorn took office as Dean of the School and Director of the University Medical Center in 1968. He continues as Dean, and a new position will be established for administration of HUP and Graduate Hospital. Both the Dean and the chief administrator of the hospitals will report to Dr. Robert D. Dripps, Vice President for Health Affairs.

Dr. Dripps cited the increasing scale and complexity of problems and challenges facing teaching hospitals and schools of medicine as reasons for the change. Among these: cutbacks in Federal and other funding, and the addition of the development and evaluation of new health care delivery systems to the traditional tasks of teaching and research.

*Billy Penn's Weather Vane at the
HUP Antiques Show . . .*

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DEDICATION IN GEOLOGY

Geological research laboratories in the new South Annex of Hayden Hall will be dedicated this Friday in a program which includes the annual Henry Darwin Rogers lecture.

Funds for the Annex were given by the University; the Department of Health, Education and Welfare; and the Henry L. and Grace Doherty Foundation. In addition to new lab facilities there are four new display areas for the Department's collections and a new library for U.S. Geological Survey maps dating back to the Civil War.

At private inauguration ceremonies, members of the department will report on their current research and the Rogers lecturer, John Rodgers of Yale, will speak on Henry Rogers, founder of Penn's geology department, and his brother William, who founded the department at M.I.T.

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COUNCIL

Winding Up the McGill Report

Council completed its action on the seven recommendations based on the McGill Committee's report on faculty appointment and promotion procedures at the March 21 meeting. Only two motions remained—#6 on Academic Review Committees in the schools and #7 on women and other special groups—but an additional motion on Administration reversal of faculty personnel decisions was introduced.

Academic Review Committees

Noting its earlier approval of a similar motion based on Development Commission recommendation #36, Council approved the sixth McGill recommendation:

6. Each school of the University should have an Academic Review Committee which would have the responsibility of carrying out a continuing examination of the various departments and programs of the school in order to determine their overall quality and effectiveness. The committee would be appointed by the dean of the school and would submit its recommendations to him. The recommendations of the committee should be subject to the approval of a University committee with the same function, which might be the Academic Planning Committee.

Women and Minorities

Council adopted neither the McGill recommendation #7—which specified “no preferential treatment of women (or any other special group), even though directed toward the redressing of inequities that may have existed in the past”—nor the substitute offered by Dr. Phoebe Leboy which called for “special consideration . . . at this juncture” for both women and minorities where candidates possess “substantially co-equivalent scholarly qualifications.” (For texts of both, see *Almanac* October 10, 1972.) The Leboy substitute failed in a tie vote, but Dr. Irving Kravis's substitute motion passed unanimously:

That the present policies, which are based on the spirit of the Cohn report extended to cover minority groups as well as women, be endorsed by the Council.

The Cohn resolution he referred to was adopted June 22, 1971, in a special session on the Status of Women, and read in full:

1. That the Council reaffirm the existing policy that in all appointment, reappointment, and promotion decisions the best candidate shall be chosen or promoted and that the same scholarly and professional standards shall be applied to men and women. Because of the present inequitable ratio of men to women on the faculty, particularly at the higher ranks, it is further resolved that when it is not possible to make a clear choice between a man and a woman on the basis of qualifications, special consideration shall, at this juncture, be given in favor of the woman. This policy to be reviewed annually.

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On Life in the Stationary State

In 1970 the University ended a period of sustained growth in faculty size. Taking into account such considerations as the projected topping out of growth in the college student population, the competitive position of private universities vis-a-vis state universities and cost trends which are likely to prohibit much upward adjustment in faculty-student ratios, there is little reason to anticipate that our faculty size will rise significantly above the 1970 level over the next 15 or 20 years.

When a faculty grows, it grows primarily at the younger end, with the result that the percentage of untenured faculty rises. While there are some inflows and outflows outside of the normal progression, by and large the number of 50-year-olds reflects the hiring rates of 20 years ago, the number of 40-year-olds those of ten years ago and the number of 30-year-olds current hiring rates.

When the faculty stops growing, the hiring rate for assistant professors declines, while those hired in the recent past move inexorably toward the point of tenure decision. Unless promotion rates for assistant professors are sharply reduced, the bulge moves into the middle-aged tenured group. The percentage of tenured faculty rises and must continue to rise so long as the number of assistant professors promoted to tenure each year exceeds the number of retirements, deaths and other net losses of tenured faculty (i.e., resignations less new appointments to tenured positions).

Essentially a university facing this situation has three alternatives (which may be used singly or in combination): (1) to permit the percentage of tenured faculty to rise; (2) to reduce the promotion rate for assistant professors or (3) to reduce the number of years that a faculty member normally spends in a tenured position (by extending the probationary period and lowering the retirement age).

The first of these involves the least immediate pain. It might well be the preferred course for us, if the University did not begin with the percentage of tenured faculty already relatively high and with this faculty relatively young, so that any increase in the tenure ratio which we now permit will be with us for a number of years before it can be reversed through a substantial increase in retirements. It will be difficult to escape some increase in the percentage tenured above the current level, which is close to 70 percent. The question is how high a percentage we can tolerate over a fairly prolonged period without so limiting the inflow of new talent as to damage the quality of the University. Is 80 percent too high? Is 90 percent too high?

The second alternative, a substantial reduction in the promotion rate for assistant professors, is the most painful to the untenured faculty who are now here. Furthermore, too low a promotion rate will impinge upon our ability to recruit the best of the young scholars. It is, for example, a high-risk strategy to spend six years as an assistant professor at an institution where the chances are no better than 1 out of 2 for promotion at the end of the probationary period. For the promotion rate, as for the percentage tenured, it will be difficult to escape some unfavorable change; but we are limited in the magnitude of the reduction we can tolerate

without serious damage both to the morale of our existing untenured faculty and to our recruiting capability.

The third alternative—reducing the time normally spent in the tenured ranks by extending the probationary period and reducing the retirement age—involves changes in long-run policies, which may be difficult to reverse. In general it is not wise to solve a self-correcting difficulty—even though it is one that may trouble us for the next 15 years—through changes in basic policy, unless these changes are desirable in and of themselves.

The initial effect of either an extension in the probationary period or a lowering in the retirement age is a one-shot reduction in the number of tenured faculty. This results in one case through a relatively short moratorium on inflows into the tenured ranks and in the other case through a speeding of outflows, as a number of those between 65 and 70 take advantage of a newly available and attractive early retirement option. After the initial impact the inflows and outflows for the tenured group will be much the same as before. Clearly a one-shot reduction in the percentage tenured will make it easier to tolerate the rising trend in that percentage which—in the absence of rather drastic reductions in the promotion rate for assistant professors—we undoubtedly face.

It should be noted that a compulsory reduction now in the retirement age of newly tenured faculty will have its initial impact sometime after the year 2000 and thus has no relevance whatsoever for our immediate difficulties. It can only be justified on quite different grounds. An attractive early retirement option, on the other hand, could well have an immediate, though modest, effect. To the extent that it was successful it would probably involve some increase in cost though it is not clear at this point how significant the cost would be.

The initial impact of an extension of the probationary period from seven to nine years would presumably occur about 1980. At least it is far from clear that any currently employed assistant professor could be denied tenure once his period of employment exceeds six years without notice of termination having been given.

Turning now to the long-run effects of a nine-year probationary period, it can be shown that, *given the percentage tenured*, the longer period leads to a reduction in the number of assistant professors hired each year but permits a considerably higher promotion rate at the end of the probationary period. For the young scholars whom we may wish to attract in the future, it is not clear to what extent a longer period of uncertainty will be compensated for by a greater chance of promotion in the end. Furthermore, if the extension of the probationary period is accompanied by a *permanent* reduction in the percentage tenured then the favorable effects on the promotion rate are largely lost, since the latter is strongly affected by the percentage tenured.

A reduction of five years in the normal retirement age, again with the percentage tenured held constant, can be shown to have only a small favorable effect on the promotion rate in the long run. Basically the justification of this

policy must lie in the advantages to the University of having a younger, more vigorous and more recently trained tenured faculty and in the advantages to the individual faculty member of having an attractive alternative to continued employment after the age of 65.

While prediction is always risky in a field to inadequately researched, we can probably expect to see both an increase in the percentage of the faculty having tenure and a decrease in the percentage of assistant professors promoted to tenure over the next few years. These changes can be moderated if we extend the probationary period and/or reduce the average retirement age, but such structural modifications probably should not be undertaken unless we judge their long-run effects to be desirable.

Jan Crockett

ACADEMIC ADMINISTRATION

JULES SCHWARTZ: ASSISTANT DEAN AT WHARTON

Jules J. Schwartz has been appointed Assistant Dean of Continuing Education, beginning June 15. Plans for the continuing education program will be presented later by Mr. Schwartz, but Dean Carroll indicated in an announcement to the Wharton Graduate Alumni executive group that both short regional seminars and six-week courses on campus on various subjects are among advanced-management programs being discussed.

Mr. Schwartz took his B.A. in mechanical engineering at the University of Delaware in 1953. He has held posts in technical management at the Sperry Gyroscope and Thiokol Chemical companies and taught management at the University of Delaware while studying for his M.B.A. there. Now a candidate for a doctorate in business administration at Harvard, Mr. Schwartz has been a trustee for U.S. District Court bankruptcy procedures and is a member of the consulting faculty of the General Staff College of the U.S. Army Command in Boston.

JOB OPENING: OFFICE OF THE PROVOST

Executive Assistant to the Provost: An academic administrator, preferably with a Ph.D. and University teaching and research experience as well as experience in management and administration, to assist the Provost in executing his academic and administrative duties. Should have good analytic and writing skills, a high ability to relate and communicate with others and abundant energy. Salary to be determined. Position is available immediately but must be filled by July 1, 1973.

TO MEMBERS OF THE COLLEGE FACULTY

For the academic year 1973-74, the College will need at least two new Assistants to the Dean. These positions are part-time involving about ten hours per week—and they pay an annual stipend of \$2,000. The Assistants to the Dean perform the invaluable function of providing College students with counseling and academic advice of all sorts. They work with the Assistant Dean, who will for next year be Professor Alan Teger of Psychology.

Should you be interested in applying for one of these positions, or should you have questions about the job, please contact either Vice Dean Edwin Hartman (Ext. 6656) or Associate Dean Peter Conn (Ext. 7321).

—William E. Stephens, Dean

Superconducting at 60° K.

Superconductivity—a household word at least in Penn households since Dr. Robert Schrieffer's Nobel Prize was announced last fall—is the phenomenon in which certain metals and alloys lose their resistance and become perfect conductors of electricity when chilled to near absolute zero. Ever since Onnes discovered the phenomenon in 1911, and particularly since the Bardeen-Cooper-Schrieffer Theory explained it in 1957, the tantalizing question has been how to make it occur at higher temperatures—or if indeed such a thing might be possible.

Last week at the American Physical Society, Penn Physics Professors Alan J. Heeger and Anthony F. Garito reported on experiments at LRSM in which “the fluctuations generally associated with superconductivity have been observed at transition temperatures of 60° Kelvin.” The temperature is three times higher than previously observed, and exceeds what has been regarded as the theoretical and experimental limit for the phenomenon.

Drs. Garito and Heeger were working with organic crystals, rather than metals or alloys, when the fluctuations began to occur. Since 1969 they have been studying conducting organic solids, and they had previously clarified the requirements for achieving the metallic state from organic origins. They had demonstrated how proper molecular design and chemical synthesis could incorporate the features of metals into organic solids, much the way the properties of cotton or wool can be incorporated into synthetic fabrics such as dacron or orlon.

Their work has been conducted under grants of the National Science Foundation and the Advanced Research Projects Agency. Last week's paper was co-authored by the two professors with two postdoctoral fellows, Dr. Daniel J. Sandman and Dr. Frederick G. Yamagishi and with graduate students Lawrence B. Coleman and Marshall J. Cohen.

Not Yet Stabilized

The research team has not yet stabilized the superconducting state in the organic salt they used—dimethyltetrathiofulvalene-tetracyanoquinodimethane or (ATTF)(TCNQ)—but propose doing so by fine tuning the chemical structure of variations on (ATTF)(TCNQ). Although the organic materials currently being studied are in the form of molecular crystals, there is every indication that the understanding and procedures developed in the basic research can be generalized and applied to a variety of organic and polymer solids.

Even without knowing whether or not superconductivity could ever be made to occur at higher temperatures, a worldwide technology has been getting ready for such a breakthrough. Experimental railways in Germany and Japan use expensive liquid helium to create superconducting magnets that not only propel the cars but float them above the rails. A memory element for superfast computers has also been designed, and there are proposals for improving the stabilization of plasma; the removal of pollution solids from water; and the capture of fine particles in mining.

If the Heeger-Garito process can stabilize superconductivity at levels as high as 60°K, the technology can already begin to operate in the range of liquid nitrogen instead of liquid helium, for example. That alone will stimulate still further research as the cost of experimenting with superconductivity comes down.

An Associate Professor of Psychology tested his own teaching techniques in the College's largest lecture course last fall.

On the Audio-Visual Approach in Psych 1

by C. R. Gallistel

The problem of how best to handle the very large enrollments in the introductory courses at this, and all other major universities is one of the problems that has concerned the Development Commission as well as a great many other faculty and students. Last semester's Psych 1 course provided an opportunity to compare two approaches to this problem—the enormous lecture approach and the audio-visual approach. I am writing this article because I believe a number of people would like to know the results of this comparison.

BACKGROUND

At the first Psych 1 lecture, I made an enthusiastic pitch for the audio-visual format, in a successful attempt to encourage a large number of students to volunteer to try that format as an alternative to the large lecture. Four hundred and sixteen students volunteered. From this list of volunteers we chose 58 at random to actually take the A-V version of the course. In this way, we could compare the performance of the 58 A-V students with the performance of the students who volunteered for the A-V format but were *not* chosen. In making this comparison one does not have to worry about the question of whether students who volunteer for things like this are brighter or dumber, etc., than students who do not volunteer.

The 58 A-V students were asked *not* to attend the large lectures in Irvine. Instead, I had recorded in advance lectures very similar to the ones I was to deliver in Irvine. These recorded lectures followed the same outline as the lectures to be delivered in Irvine. They differed only in that they made more extensive use of visual materials (mostly diagrams). Probably, they also were, on the whole, better and more smoothly phrased than the live lectures, but lacked the spontaneity and humor that characterized the live lectures on some occasions. In order to listen to the lectures, the A-V students went to the Medical Library any time from 7 a.m. to 12 p.m., checked out an audio tape plus accompanying slides from the circulation desk, and listened to the tapes in carrels that were equipped for the presentation of slides in synchrony with an audio tape. The student could listen to the lecture at his or her own pace, going back over any passage if desired. Each week the professor held a one-hour meeting with the A-V students, at which time he gave demonstrations and led a discussion of the material in the lectures.

The volunteers who were not selected for the A-V format did exactly as the students who did not volunteer, that is, they came (or did not come, as the spirit moved them) three times a week to the large lectures in Irvine.

All students were encouraged to join the professor for discussion at the coffee hours held nearby in Houston Hall twice a week *immediately* after lectures. All students were further encouraged to attend one or more of six weekly section meetings. Each of the six sections was conducted by a different graduate student. The section leaders answered questions about the material in the lectures and readings and also pursued topics of special interest to the section leader.

The Psych 1 evaluation was not a pure comparison of the

A-V format *vs.* the large lecture format because the regular students had access to an "informal" A-V version of the course. The lectures actually delivered in Irvine were taped live by the Language Lab and made available to *any* student (regular or A-V) who came to the Language Lab to hear them. During the large lecture, all blackboard type material was shown by overhead projector. This material was posted in the Language Lab after each lecture. Thus, all students had access to a recorded version of the course. Of course, only regular students actually made use of the Language Lab recordings.

There were two mid-term exams and a final. The questions were all multiple choice. There were 35 questions on each of the mid-terms and 70 on the final. All students (both regular and A-V) took the exams at the same time in Irvine. The total number of correct answers given by any one student on all three exams combined (140 questions) ranged from 35 to 128 with a mean of 90. The grades were determined by curving this distribution.

At the end of the course, all students (both regular and A-V) were asked to fill out a questionnaire concerning their attitude toward the large lecture *vs.* the A-V format.

DATA

1. *Performance data.* In the class as a whole, 15% of the students received A's; 30% B's; 33% C's; 16% D's; and 6% F's. The figures for the actual A-V students and the A-V students who volunteered but were not chosen (the control students) are shown below. The A-V students did better than the controls, who in turn did somewhat better than the class as a whole.

Grade Received	A-V Students		Control Group	
	Number	% of Total	Number	% of Total
A	12	22%	55	17%
B	19	35%	103	31%
C	15	28%	115	35%
D	6	11%	45	14%
F	2	4%	9	3%
Total:	54		327	
Attrition:	4	7%	31	9%

It should not be concluded from these figures that the A-V format is better at producing mastery of the material. The better performance of the A-V students might be ascribable to the Hawthorne effect. The Hawthorne effect is the psychologists' term for the fact that participants in an experimental program frequently feel "special" and work more conscientiously as a result of this feeling. Nonetheless, an A-V format can clearly work at least as well as a large lecture format.

2. *Attitudes.* The results of the attitude questionnaire are shown in the accompanying table. An overwhelming majority of the A-V students preferred that format. A slight majority of the regular students thought they would prefer the A-V format, and a sizeable percentage (29%) of the regular stu-

ATTITUDES OF A-V AND REGULAR STUDENTS TOWARD THE AUDIO-VISUAL FORMAT

A-V Students (n = 47)		Regular (large lecture) Students (n = 486)	
1. In retrospect which do you think you would have preferred?		1. In retrospect which do you think you would have preferred?	
a. The large lecture	9%	a. The large lecture.	46%
b. The A-V approach more or less as it was.	91%	b. Hearing the lectures on tape and attending a smaller weekly demonstration and discussion section led by the professor.	54%
2. How often did you attend the weekly discussion meeting?		2. How often did you use the tapes in the Language Lab?	
a. Never	19%	a. Never	39%
b. Occasionally	32%	b. Once or twice	32%
c. Almost always	49%	c. Frequently	27%
		d. Always; seldom went to lecture	2%
3. Did you in fact stay away from the large regular lecture?			
a. Yes	91%		
b. No, I didn't like tapes and started going to the lectures instead.	9%		

dents made frequent use of the A-V material that was available to them.

3. *Voluntary attendance at discussion sections.* Despite the large number of students enrolled in the course, the attendance (by regular students) at each of the eight weekly small group meetings (two coffee hours and six section meetings) ranged from eight to 20 with an average of about 15 faithful attenders for each session. In other words, less than an eighth of the class availed itself of the opportunity regularly to attend any one of a wide variety of small group discussion sections aimed at improving the students' mastery of the material and at the pursuit of a variety of special topics in a small group format. About 50% of the A-V students regularly attended the weekly discussion section held specifically for them.

CONCLUSIONS

The data suggest that the A-V format as a way of handling large introductory classes may offer a more satisfactory alternative to the present large lecture format. I believe, however, that the discussion meeting with the professor was an important part of the A-V format employed in Psych 1. It would, I believe, be a serious mistake to rely exclusively on the recorded presentations. In fact, I believe that the greatest advantage of the A-V format is that it can increase the amount of productive interchange at the introductory level between students and professors.

Even if large numbers did not present an insurmountable obstacle, the discussion or question-and-answer format has serious drawbacks at the introductory level. It is difficult to hold an interesting discussion with students who have yet to be exposed to the facts and ideas under discussion. In the A-V format, the students arrive at the discussion or question-and-answer period having already heard the professor present the

relevant material and the professor's point of view. Furthermore, if attendance at the discussion sessions is voluntary and if no new material *directly* relevant to the exams is presented, then students who have not "done their homework," or have but are not interested, can be relied upon to stay away. Thus, the use of the A-V format can improve student-professor interchange by producing discussion sections that contain only the better informed and more interested students.

TENTATIVE RECOMMENDATIONS

Based on my experience in Psych 1 this year and on the data I have presented above, I would recommend the following approach for Psych 1 and other large introductory courses:

The professor should be given a summer and one semester in order to prepare a complete set of recorded lectures. This is assuming that the professor has previously given the course at least twice. Once the lectures are available in recorded form, the professor can divide the large course into 3 sections and meet each section once a week during the time appointed for lectures. For the most part, these once-weekly meetings would begin with a demonstration or a movie showing one of the phenomena being discussed in (or otherwise related to) the recorded lectures. This 5-15 minute demonstration would be followed by a question-and-answer discussion. Occasionally, these weekly meetings might be used for a guest lecture on a special topic, given by other members of the department (or visitors).

Attendance at the weekly meetings should be voluntary and the meetings should avoid introducing *new* material *directly* related to exams. There should also be several voluntary weekly sections conducted by graduate students and devoted primarily to clarifying the lectures and readings.

I have found that demonstrations are an extremely effective stimulant to discussion, particularly of the free-ranging question-and-answer type. I have further found (and law school students could verify) that profitable question-and-answer discussions can be conducted with a group of 100 students in any of several amphitheater-type lecture halls on campus. The voluntary nature of these sessions will insure that no more than half the students will attend any one meeting. Thus, the actual discussion groups would be 100 or less in a course with 600 students (divided into 3 sections of 200 each).

Once the professor has prepared the taped lectures (no small task), the demand on his time would be less than in the large lecture format—assuming that preparing for a free-ranging question-and-answer session stimulated by an opening demonstration demands less time and psychic energy than preparing for a large lecture. Yet, *I believe that the students' sense of interchange with the professor would be greater than in the large lecture format and so would the professor's sense of contact with the students.* Finally, the amount of basic information and conceptualization conveyed by the course as a whole could be as great or greater than in the large lecture format.

There are a number of attractive sidelights in the proposed use of recorded lectures at the introductory level. The approach can insure that all the students taking the introductory course are given the *same* basic introduction (over a period of 3-5 years)—hopefully by one of the department's professors who likes and is good at introductory teaching. This uniform introduction will be readily available, so that teachers in advanced courses can refer students to it. Taped lectures are easily revised, updated and/or replaced in a piecemeal fashion, so the recorded course would not be prey to the immediate outdatedness that afflicts textbooks. One could even have a brief questionnaire filled out by students as they return the lectures. In this way one can identify the parts that are causing confusion and improve them from year to year.

Antiques for Sale or for Seeing

Even if your living room is *not* in crushing need of an "eighteenth-century breakfront with unusual small writing desk, inkstand and leaded glass doors; cabinetwork of burled walnut in fine condition," you can still look at and dine surrounded by such treasures at the University Hospital Antiques Show and Sale.

Fifty-some antiques dealers from all over the country will be showing these and other objets d'art at the Show, which opens April 10. This is the twelfth annual production of the Hospital's Board of Women Visitors, and the tours and dinners they have planned in addition to the show itself will bring enlightenment to antique-fanciers as well as benefit HUP (see program, next column).

While providing an antiques show of local and national distinction, the Board of Women Visitors has brought in funds for the chapel on the first floor of Dulles; two intensive care units and the renovation of the Piersol Rehabilitation Center. Last year, the proceeds were given for equipment and renovation of the Hospital's emergency service; this year funds will be donated to the Department of Obstetrics and Gynecology.

Some of the most pedigreed antiques will not be for sale, but in the loan exhibit "A Tribute to William Penn." Belongings the Penn family brought from Britain, an armchair by Thomas Affleck—a sample of early Philadelphia furniture—and documents and scientific instruments will be on display. Mrs. Robert D. Dripps is chairman of the Gallery Tours, which will be given by guides from the Philadelphia Museum of Art who have volunteered to lead small tours through the exhibits and dealers' displays before the show opens each morning at noon. The show catalogue describes the exhibits and antiques in general. Illustrated articles are about Pennsbury Manor, Penn's country seat on the Delaware; his English background and philosophy, his furniture, his papers and Penn family portraits. The sixth article is on a Philadelphia collection of pre-Civil War naval prints.

In the unlikely event that Philadelphia doesn't know the Show is coming, members of the Board of Women Visitors and dealers from the Show are appearing on radio and television to remind us. Today at 12:30 p.m., Vice President and Mrs. Dripps, both connoisseurs of antiques, were guests on the Ralph Collier show on WFLN-FM. Frank Ford of WFLN-AM will host Dr. Thomas F. Schutte of the marketing department on April 4 at 11 a.m. An antiques dealer himself, Dr. Schutte will discuss the economy and psychology of antiques-buying. Also on April 4, at 9:10 a.m. on Channel 6, Mrs. Stuart Andrews, co-chairman of the Show, and Ted Hayes will discuss antiques on "Conversation with Connie."

Mrs. Moreau D. Brown, founder and honorary chairman of the Show, will speak at a "Wednesday for Women" program with Mrs. Truman G. Schnabel, Jr., and Philip Bradley, who deals in English antiques. The 45-minute program is sponsored by the City Representative's Office and will be held on April 4 in Room 220 of City Hall at 3:15 p.m. The Antiques Show will also be covered by three or four area television newscasts and Channel 3's Marciarose will have a small antiques show of her own with out-of-town dealers as guests at 12:30 p.m. April 9.

THINGS TO DO

UNIVERSITY HOSPITAL ANTIQUES SHOW AND SALE. A series of tours and dinners accompanies the annual HUP benefit, April 10-14, 103 Engineers Armory, 33rd Street north of Market. Show hours: April 10-13, noon-10 p.m.; April 14, 10 a.m.-3 p.m. Admission: \$3.

Preview Reception. Refreshments, dinner and parking service. April 9, 5:30-9:30 p.m. Tickets: \$50 (\$42.50 tax deductible). Seatings: 6:30, 8 p.m.

Gallery Tours. Volunteer guides from the Philadelphia Museum of Art will lead walking tours before the show opens, April 11-13, 10:30 a.m. Tickets: \$5 (including admission to the show).

Town House Tours. Visits by bus to colonial and contemporary houses with guides, April 12, 13. Morning tours leave 29th Street exit of 30th Street Station at 10 a.m., return to Armory at 12:45 p.m. **THURSDAY AFTERNOON TOUR,** April 12, bus will leave Armory at 1:30 p.m. and return via 30th Street Station at 4:30. Tickets: \$10 (including admission to show).

Supper at the Show and Penn-y's Worth Auction. Guests bid on pieces valued at \$100 or less; at the end of the evening the highest bidder in this "silent auction" wins each piece. April 12, 5:30-9:30 p.m. Tickets: \$15 (including supper and admission to show). Seatings: 6:30, 7:15, 8 p.m.

Reservations for all events are necessary and may be sent to: University Hospital Antiques Show, 206 Almur Lane, Wynnewood, Pa. 19096. Checks should be payable to the Board of Women Visitors.

REFRESHMENTS are available during the Show:

Penn's Grove Buffet Luncheons, April 10-13, noon-2 p.m. Reservations advised: \$4.

Eagle Coffee House. Cold platters, sandwiches, etc., April 10, 11, 13, noon-9:30 p.m.; April 12, noon-3 p.m., April 14, 10 a.m.-2:30 p.m.

YOUR FIFTEEN MINUTES. Audience-participation sculpture is inspired by Andy Warhol's assertion that everybody needs 15 minutes of fame. Phillips Simkin's work, part of the "Made in Philadelphia" exhibit at the Institute of Contemporary Art, has transformed the entrance of the Fine Arts Building into a forum since Friday and will continue until April 27. Some scheduled performances: Woffie Bubbles making an "event" with environmental costumes; Lt. Barnaby Ruhe of Annapolis on the history of sea power; Robert Grigor-Taylor, director of the Philadelphia Print Club, orating on an unknown topic; Musica Orbis in a rock concert and alumnus Walt Christopher Stickney reading from his poetry. Anyone who has been looking for his name in lights—or a chance to schedule an open-air class—may reserve time (it can be more than 15 minutes) with ICA Director Suzanne Delehanty, Ext. 7108.



NEWS IN BRIEF Continued

VETERINARY SCHOOL: COMPARATIVE MEDICINE

The World Health Organization has named the School of Veterinary Medicine the first world center for training and research in comparative medicine. The Center will serve as a training and research resource for examining relationships between animal diseases and human health; especially the study of disease mechanisms common to animals including man.

The designation recognizes the leading international role the school's faculty has taken in the development of the modern field of comparative medicine. Research areas fall into three broad lines: the use of animals as indicators of environmental quality; identification of animals as environmental hazards in urban communities and the development of animal models of human diseases. Clinical studies already instituted at the Veterinary School in neoplastic, parasitic and infectious diseases and in immunology and diseases of specific organ systems are among the Center's teaching and laboratory projects.

NEW SCHOLARSHIPS FOR DENTAL STUDENTS

The Dental School has received a four-year \$60,824 grant from the Robert Wood Johnson Foundation for scholarship and loan awards to dental students who are female, members of racial minorities or from rural areas. The American Fund for Dental Education is administering the funds according to Foundation guidelines. Individual recipients and amounts of funding will be set by the 56 dental schools which share in the \$4.1 million grant.

The scholarships are designed particularly for students who are likely to establish practices in rural and inner-city areas. Women, blacks, Mexican-Americans, mainland Puerto Ricans and American Indians are among those eligible for funds. Eligibility as a "rural student" is based on residence at the end of pre-professional education.

MEDICINE: APRIL 15

The John Polachek Foundation for Medical Research has announced the availability of grants for scientific research in cardiovascular disease, arthritis and allied disorders. Grants will be awarded for one year with the possibility of extended support for an additional year or two in amounts from \$2500 to \$5000. A candidate for the grant must be nominated by a sponsoring institution; he/she should be a doctor of medicine of established competence or a person having a doctor's degree in any basic science who has done creditable scientific research.

Applications are available at the Office of Research Administration, 409 Franklin Building, Ext. 7293. Deadline: April 15.

HUMANITIES: SEPTEMBER 30

The National Endowment for the Humanities has again awarded a large grant to the American Council of Learned Societies in support of its grant-in-aid program. This program is for support of small research projects (\$2500 or under) by faculty members who have already completed degree work. Grants support the scholar's personal expenses for research in progress. Applications should be made before September 30, 1973, to the Office of Fellowships and Grants, American Council of Learned Societies, 345 E. 46th Street, New York, New York 10017.

GRANTS

A Summary of Contracts and Grants for Research and Related Activities Received by Faculty Members During January 1973

PUBLIC HEALTH SERVICE: *M. Fox* (Nursing School) "Problems of Chronic Illness" \$2,910 . . . *P. Braun* (Biochemistry/Medicine) "Structure, Function, and Assembly of Nerve Membranes" \$43,992 . . . *H. Bright* (Biochemistry/Medicine) "Mechanism of Enzyme Action" \$59,552 . . . *G. Cohen* (Microbiology/Dental) "Antigens of Herpes Simplex Infected Mammalian Cells" \$25,000 . . . *B. Cooperman* (Chemistry) "Pyrophosphatase Mechanism-Adenylate Affinity Labels" \$32,392 . . . *D. Detweiler* (Animal Biology) "Comparative Cardiovascular Studies Unit" \$372,983 . . . *A. Fishman* (Medicine) "Response of Lung to Injury" \$359,512 . . . *J. Flaks* (Biochemistry/Medicine) "Metabolism of Normal and Bacteriophage-Infected *E. Coli*" \$58,429 . . . *D. Garfinkel* (Pathology) "Computer Modeling of Biochemical Systems" \$111,310 . . . *G. Gerstein* (Physiology) "Studies of Interactions Between Neurons" \$69,347 . . . *L. Henderson* (Medicine) "Study of Purification of Uremic Blood" \$62,000 . . . *P. Leboy* (Biochemistry/Dental) "Isolation of Nucleic Acid Methylase Mutants" \$18,310 . . . *R. Marshak* (Clinic Studies) "Herd Resource for Bovine Lymphosarcoma Research" \$87,572 . . . *M. Pring* (School of Medicine) "Medical School Computer Facility" \$308,987 . . . *J. Snow* (Otolaryngology) "Histopathology of the Temporal Bone" \$10,220 . . . *S. Winegrad* (Physiology) "Excitation-Contraction Coupling in Muscle" \$33,215 . . . *G. Gerbner* (Annenberg School) "Cultural Indicators" \$62,691 . . . *H. Jordan* (Psychiatry) "Regulation of Food Intake and Hunger in Man" \$31,523 . . . *O. Pollak* (Sociology) "Implicit Suicides of Terminal Hospital Patients" \$131,651.

ATOMIC ENERGY COMMISSION: *S. Frankel* (Physics) "Synchrotron Research and Operating" \$90,000.

NATIONAL SCIENCE FOUNDATION: *J. Bryan* (Biology) "Biochemistry and Genetics of Microtubule Subunits" \$20,000 . . . *J. Hobstetter* (VP-Research) "Institutional Grant for Science" \$54,685 . . . *R. Hochstrasser* (Chemistry) "Ultrafast Spectroscopy" \$37,000 . . . *R. Ricklefs* (Biology) "The Nature of Adaption with Particular Reference to Physiological and Evolutionary Constraints" \$35,000 . . . *J. Smith* (Biology) "Display Behavior: Recombinable Display Components, Messages, and Message Assortment" \$41,900 . . . *B. Storey* (Johnson Foundation/Biophysics) "Molecular Mechanism of Energy Conservation in the Mitochondrial Membrane" \$40,000.

NATIONAL ACADEMY OF SCIENCES: *F. Aizenberg Selove* (Physics) "Panel On Nuclear Data Compilations" \$10,985.

COMMONWEALTH OF PENNSYLVANIA: *V. Vuchic* (Towne School) "Transit Modernization Program" \$42,165.

Private Foundations, Research Organizations and Associations, and Industry:

ALLENTOWN PRODUCTS: *K. Bovee* (Clinic Studies) "Experimental and Clinical Renal Failure in Dogs" \$36,968. AMERICAN FOUNDATION OF NEGRO AFFAIRS: *H. Davies* (School of Medicine) "Biomedical Science Preceptorship" \$5,000. CALIFORNIA INSTITUTE OF TECHNOLOGY: *M. Wolf* (Towne School) "Investigation of the Double Exponential in the Current Voltage Character of Silicon Solar Cells" \$9,994. EXXON EDUCATION FOUNDATION: *W. Seider* (Moore School) "Development of a Chemical Engineering Calculating System For Use in Education" \$40,050. MILES HODSON VERNON FOUNDATION: *L. Rowland* (Neurology) "Encephalitis Research Fund" \$40,000. MUSCULAR DYSTROPHY ASSOCIATION: *J. Steiner* (Neurology) "Post-Doctoral Fellowship for Dr. John C. Steiner" \$14,500. PHARMACEUTICAL MANUFACTURERS ASSOCIATION: *M. Reichgott* (Medicine) "Effects of Nonsteroidal Anti-inflammatory Agents on the Release of Vasocative Substances by Endotoxin" \$5,000.

SUMMARY: Contract and Grant Awards July 1972 through January 1973: 383, totaling \$23,700,400.

HONORS

HALL OF FAME

PRESIDENT MARTIN MEYERSON and BENJAMIN FRANKLIN PROFESSOR LOREN EISELEY have been named to the College of Electors of the Hall of Fame for Great Americans at New York University. They are among 44 distinguished men and women joining the 136-member body which chooses candidates for enshrinement in the long colonnade of portrait busts at the University Heights campus of NYU.

HEALTH AFFAIRS HONORS

DR. ROBERT D. DRIPPS, Vice President for Health Affairs, is one of ten to receive 1973 Awards for Distinguished Achievement from the journal *Modern Medicine*. He was cited for his work in anesthesiology.

DR. MORTON AMSTERDAM, Professor of Periodontal Prosthesis, was chosen as the first Annenberg Lecturer to Great Britain. The lectureship was established this year by Ambassador Walter H. Annenberg.

IEEE SECTION AWARD

DR. CARL C. CHAMBERS, University Professor and former Vice President for Engineering Affairs here, won the Philadelphia Section Award of the Institute of Electrical and Electronics Engineers for 1973. He was honored for leadership in the development of international standards and progressive leadership in engineering education as well as for service to IEEE and the Delaware Valley community.

BOOK AWARD NOMINEES

Three Pennsylvania professors have been nominated for the National Book Award this year: DR. DANIEL HOFFMAN (English) for *Poe Poe Poe Poe Poe Poe Poe*; JERRE MANGIONE (English) for *The Dream and the Deal*; and DR. RICHARD DUNN (History) for *Sugar and Slaves*. They are among 109 nominees for the \$1000 awards in ten categories.

BULLETINS

TEA CLUB: ANNUAL ELECTIONS

The annual meeting of the Faculty Tea Club for the election of officers will be held in the Faculty Club on April 10 at 1:30 p.m. Dr. James O. Freedman will speak on legal developments in divorce, adoption, contraception and delinquency in a talk on "Emerging Issues in Family Law" at 2 p.m., after the elections.

ARTIFICIAL DESEMINATION: MARCH 30

The Demography Colloquium will present Dr. Donald Bogue, Professor of Sociology and Director of the Community and Family Study Center at the University of Chicago, at 2 p.m. in Room 286 McNeil. His topic is "Artificial Desemination: Inducing Fertility Decline in the Developing Countries."

SURPLUS FURNITURE, LUNCH TRUCKS

John Hetherston, Vice President for Facilities Management and Construction, is establishing a system for redistribution of surplus furniture within the University. "Surplus furniture" includes items such as chairs, desks, tables, file cabinets, typewriters, calculators, blackboards, air conditioners and other equipment used in offices, but not personally owned.

Reports of the availability of such items—or requests for same—should be sent to Maurice S. Burrison, 748 Franklin Building. Requests will be filled on a first-come, first-served basis.

Mr. Hetherston's office is also in charge of any problems arising out of the increased presence of street vendors on

University property. When vendors interfere with campus pedestrian traffic or create sanitation problems, reports should go to his office for handling. Arthur Freedman at Ext. 5831 is in charge of locations and Donald Shultis will be responsible for enforcement.

COUNCIL continued

In a set of Provost's Memoranda the policy was later extended to cover minority groups as well. The Affirmative Action Plan submitted to HEW in May, 1972, gives the Cohn resolution and continues: "The principle of selecting female and minority members for appointment, where two or more candidates are equally qualified, to further the goals of equal opportunity, has been approved by the central administration. It is being applied to increase the representation of women and minority groups."

In the debate that preceded the vote, President Martin Meyerson likened the affirmative action question to the issue of inbreeding that came up at Pennsylvania in the 'fifties. As a result of discussions at that time, departments and schools began consciously to seek Ph.D.'s from institutions other than Penn and to give "a fair amount of weight" to the outside degrees. The present policy on affirmative action "assumes that in a University which has a sizable number of women and blacks, in a world that has a sizable number of women and blacks, we do want to take cognizance of their presence."

At Provost Eliot Stellar's request, President's aide Dr. Bruce Johnstone explained three possible levels of affirmative action: minimally, the widening of pools of applicants; second, the choosing of the underrepresented-group candidate when other qualifications are equal; and third, the assignment of special value to blackness or womanhood in specific situations.

Reversal of Faculty Advice

Council also debated but did not act on Dr. Jean Crockett's new resolution offered in connection with the McGill Committee report:

That the Council reaffirms the following statement from the *Manual of the University of Pennsylvania, Volume 1, Administrative Organization Policies and Procedures*, page I-B-11:

A nomination for appointment, reappointment or promotion to the rank of Assistant Professor or above is made only after the President has received the advice of the faculty concerned and, except in extraordinary circumstances, only upon the affirmative recommendation of that faculty. In the extraordinary case where the President feels that an appointment, reappointment or promotion must be made contrary to the advice of the faculty concerned, he informs that faculty in writing of his intended action and his reasons for it.

She reported complaints that in two cases the Administration has reversed the negative vote of the faculties and has recommended candidates to the Trustees without properly informing the Personnel Committees of their action. President Meyerson said that of the two cases discussed, one was the result of a grievance process and the other involved a split in the school. Administrative action was taken to protect the individual, he noted, and the Administration informed the deans of the faculties involved. Council voted to send Dr. Crockett's motion to the Steering Committee. It was noted that the 1957 statement did not take into account the existence of the Provost's Staff Conference, and that the grievance process being developed by the Faculty Affairs Committee will affect the implementation of such a statement.

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