

Almanac

Tuesday, February 25, 1986

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Dialogue on Apartheid

With some 40 demonstrators chanting outside the Faculty Club, eight members of the Trustee Committee on University Responsibility met Thursday with the seven students who are under disciplinary review for occupying the President's Office January 17. The trustees were The Hon. Arlin M. Adams, David C. Auten, Richard P. Brown, Jr., Charles D. Dickey, Jr., John W. Eckman, The Hon. A. Leon Higginbotham, Jr., James A. Pappas and D. Robert Yarnall, Jr. The seven students were Susan Fisher, Wilson Goode, Jr., Mickal Kamuvaka, Keith Lotson, Vincent Phaahla, Priyethan Seebadri, and Bartholemew Yeboah—accompanied by State Representative Chaka Fattah, a degree candidate here. Afterward Mr. Brown described the meeting as a constructive and a useful dialogue: "... everybody realizes that the trustees believe what is happening in South Africa is dreadful." But two students from South Africa left the meeting 15 minutes early and told the press "We couldn't tolerate hearing the Trustees say wait 18 more months."

Harrisburg Appropriation: Asking 10.8% Increase

Governor Richard Thornburgh's Fiscal Year 1987 budget, just released, provides \$29,394,000 for the University of Pennsylvania (a 3.0% increase) but Penn is asking for \$31,631,000 (an increase of 10.8%) in the position paper that President Sheldon Hackney was to discuss in Monday's hearings in Harrisburg.

The University's request, according to Commonwealth Relations Director Alexis Van Adzin, is for 9.5% increases in some of the line items—General Instruction, Medical Instruction and Dental Clinics—while higher percentages are asked in Veterinary Instruction (11.7%), New Bolton Center (17.6%) and Food and Animal Clinics (10.9%).

A special appeal is being made with respect to a new form of funding that is in the Governor's budget: differential funding of new initia-

tives, special projects and special programs related to the educational and economic development of the Commonwealth. The concept of differential funding, based on a report by the Governor's Commission on the Financing of Higher Education, is being applied to public universities of the state system, and to the state-related institutions (such as Temple and Pitt). But Penn is in a third category, state-aided, made up primarily of special-focus institutions including medical schools. "Penn is the only broad-gauge, comprehensive university in this category," Mr. Van Adzin said. "The President is making a case for our project in cognitive sciences and artificial intelligence as a new initiative that will have a major economic impact on our region and the Commonwealth as a whole."

Penn Device for Healing Nonunion Fractures

The FDA's approval of a noninvasive device using electricity to stimulate bone growth in nonunion (unhealed) fractures has released for marketing an invention patented by two faculty members in the name of the University.

Drs. Carl T. Brighton (M.D.), chairman of orthopedic surgery in the School of Medicine, and Solomon R. Pollack (Ph.D.), associate dean of the School of Engineering and Applied Science, have collaborated for some ten years on the device, which passed FDA testing in 18 orthopedic centers here and in England.

Penn has licensed Bioelectron, Inc., to manufacture the portable fracture-healing device, known as the OrthoPak Bone Growth Stimulator. It will be marketed by Zimmer, Inc., of Warsaw, Indiana.

Electrical stimulation to treat fractures was explored but abandoned in the 19th century, according to a HUP spokesman. Research on the electrical properties of bone growth was begun in Japan in the 1950's, and in 1961 Dr. Brighton, with a fellow M.D., Dr. Zachary Friedenberg, established a link between electricity and bone growth and repair. "Prior to our research, most researchers arbitrarily picked an amount of current and applied it to bone," said Dr. Brighton. By testing precise amounts of electricity, and varying locations of electrodes, Drs. Brighton and Friedenberg produced by 1971 a semi-invasive, direct-current technique that worked—but was "not much better than bone grafts," according to Dr. Brighton, because electrodes had to be placed

beneath the skin, and the play between cast and skin would break the electrodes if the patient tried to walk.

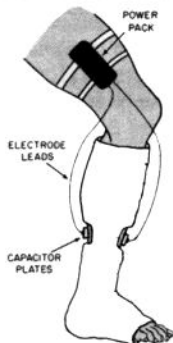
Dr. Pollack, a professor of bioengineering, entered the collaboration in 1970. By 1976, the team had developed the concept of "capacitive coupling," which led to the present device which does not need to invade the skin.

It is based on precisely measuring the existing current in bone in unhealed fracture—and matching it. A physician applies a time-varying electrical signal to the fracture site by means of two small, stainless steel surface electrodes (see illustration). The miniaturized device supplies the treatment signal and also monitors the time, voltage and current. Since the phase relation between the applied current and voltage is capacitive, the process is referred to as capacitive coupling. Alternative devices previously on the market use inductive coupling.

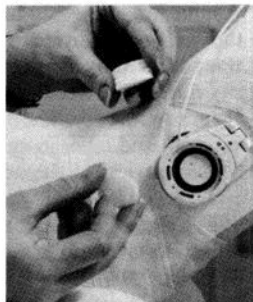
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Dr. Brighton



The battery-operated bone-growth stimulator



Dr. Pollack

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SENATE

From the Chair

On the Special Meeting of the Faculty Senate

As it has been announced, on Monday, March 17, the first day after the spring vacation, the Faculty Senate will have a special meeting with only two topics for discussion and action; i.e., the report of the Senate Committee on Administration involving some important changes in the Faculty Senate, and the report of the Senate Committee on the Economic Status of the Faculty on the salary discussions and the proposed changes in employee benefits. Are the topics of sufficient importance to justify a special Senate meeting? (The regular spring meeting is scheduled a month later on April 16 and will include several other quite important matters.)

The Faculty Senate faces some major questions, and all are connected with the kind of Faculty Senate we would like to have at Penn in the immediate future. To start with, there seem to be two distinct generic visions about the Senate. One is a view of a Senate as a "sleeping elephant" that typically carries a set of routine functions and pre-scheduled consultations but which is ready to rise to the defense of the faculty, the students or the University when a crisis arises. The other is a view of a more activist Faculty Senate which involves itself routinely with more essential university functions. The choice between the two options may have major ramifications for the future of this university and its style of governance. The choice, however, or more accurately the push towards either option, should not be made by any small group of faculty. It should reflect as much as humanly possible the preferences of the large majority of the faculty. Accurate representation of faculty preferences is essential in this major issue as well as in many other somewhat smaller but, nevertheless, quite important issues. The recent past has also indicated that the current style Senate Executive Committee, as well as the SEC appointed committee's, can choose positions which are indeed in conflict with the sentiment, and preferences of the faculty at large. It is for these reasons, as well as because the faculty needs to feel that it is fairly well represented, that it is imperative that we should explore quite intensively what kind of Executive Committee the Senate should have and whether we should have the Senate leadership selected through elections by the faculty at large or selected by a Nominating Committee.

The matters of salary increases and the proposed changes of employee benefits are of equal importance. If I focus here only on the matter of employee benefits as proposed by the administration, there are at least three aspects of the matter that need serious faculty (and staff) consideration. The first is the introduction of flexibility in benefits, as proposed for the life insurance program, a very welcome and needed feature. The second is the introduction of deductible expenses and other modifications of the medical and dental health program. The objective here is to

increase efficiency of the funds expended by the insured and the University on medical health insurance.

Penn has already seven options for medical health insurance with variable coverage and cost to the subscriber. As of now, the cost of the program for a family holding, for example, Blue Cross/Blue Shield/Major Medical/Program 100/plus dental, is about \$3000 per year, about half as much as the cost in such companies as General Motors. The deductible expenses for such a subscriber would be, according to the proposed changes, \$600 deductible plus \$480 for the remaining \$2400, a total of \$1080, or 36% of the present cost. According to all expectations, the introduction of the initial \$600 deductibles plus the 80/20 co-pay would also produce significant decreases in the actual medical program expenses, decreases which some estimates place as high as 40% of the present program. Should that happen, the new actual cost would be around \$1800, of which the subscriber would pay (\$600 + \$240 =) \$840 and the insurance \$760, or about 32% of the current cost. Currently the program premiums are \$74.80 for each subscriber per month, while the University contributes \$145.63 + \$27.20 = \$172.83, to a total monthly premium of \$247.63. The proposed program includes a reduction of the faculty's premium by \$40 to \$34.80. However, should the new program cost only around 32% of the current program the premiums also should be expected to be reduced accordingly. If that happens, then the total monthly premium would be reduced to about 32% x \$247 = \$79.30 (a saving of \$247.80 - \$79.30 = \$168.50 per month). It seems clear that the new program has more room for more savings for each participant (more than the proposed \$40 per month savings) and for the University, and room for even better coverage for the program itself. After all each individual would have to foot the first expense before the insurance has even been asked to pay anything.

The third aspect of the proposed changes is the introduction of medical tax sheltered accounts which will permit participants who can project their medical expenses to pay such expenses before taxes (saving thus the taxes on these expenses), another quite welcome introduction made possible because of the recent Federal tax legislation.

I hope the faculty will study the material which is being published and mailed to them and will come to the special meeting to discuss and act on the recommendations of the SCESF. After all, the issues are of direct interest to the faculty and only the faculty can indicate what are their preferences that should be transmitted to the administration as suggestions by the Faculty Senate.



Healing Fractures (continued from page 1)

The stimulator based on capacitive coupling is considered a breakthrough because it can cover a greater area of fracture and volume of bone to be healed, besides being portable: the power source is a nine-volt battery similar to those in radios, and the device works under weight-bearing conditions with "gross motion" of five degrees in any plane.

The technique can be used on any well-established nonunion fracture, Dr. Brighton said. It can be applied as soon as the cast is put on. Healing takes approximately 24 weeks and the procedure is covered by Blue Cross/Blue Shield and most major private medical insurers.

The actual mechanism by which a time-varying electrical field can stimulate the growth of bone tissue is still unknown, Dr. Brighton said. "One possible theory is that appropriate electrical signals to bone and cartilage cells stimulate osteogenesis, or bone growth, by increasing cellular cyclic AMP or cytosolic calcium, both of which may act as intracellular second messengers."

To Dr. Pollack, part of the breakthrough is that it is an outstanding example of the "one university" concept at work. "There are no barriers here. We had no difficulty working across the disciplines. Several Ph.D.'s have come out of the project, and a great deal of theoretical scholarship went into it. It's an example of first-class scholarship taken to the logical next step of making a device and putting it out where people can benefit."

A Message from the Office of the Vice Provost for Research

On Animal Care and Use

February 20, 1986

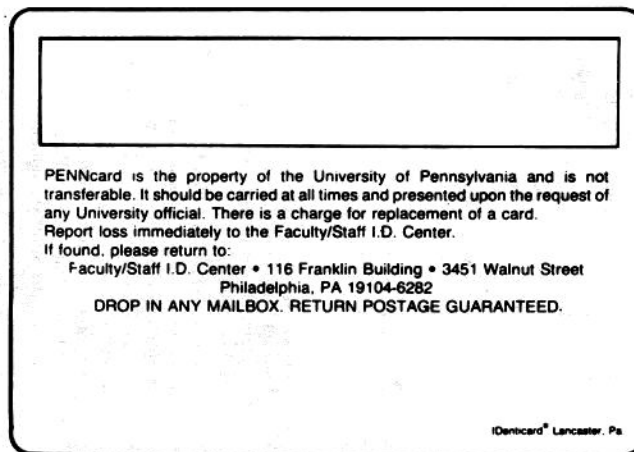
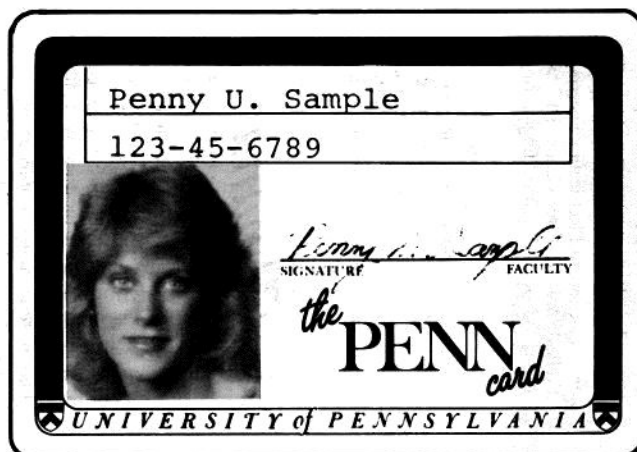
To the University Community:

I write to bring you up-to-date on recent developments concerning the University's animal care and use program. The University submitted its Animal Welfare Assurance for the care and use of laboratory animals to the National Institutes of Health (NIH) on December 26. This submittal was followed by a visit from an NIH site inspection team to the University during the week of January 27, 1986, for the purpose of reviewing Penn's Assurance. The review included the inspection of animal holding, surgical, and laboratory facilities at the University as well as a comprehensive review of the administrative and oversight components of the University's laboratory animal program.

The site inspection team responded favorably to Penn's Animal Welfare Assurance and to the improvements the University has made in both its facilities and program. Several revisions to the University's Assurance, focusing primarily on management elements of the Assurance, were suggested by the team. In response, a revised Assurance was prepared

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Phasing in A New I.D.

Starting in a few weeks, the University will recard all faculty, staff and students for a new identification card called PENNcard, coded with a magnetic, machine-readable strip.

The effort starts with students in March, and for faculty and staff in April. A team from Human Resources will travel from area to area all spring and early summer, setting up photographic equipment to make cards on the spot. Advance notice will be given to faculty and staff in each area.

The photo I.D. (see sample) will come with different background colors for undergraduates, graduate/professional students, faculty and nonacademic staff. It will also have a special laminate over the photograph to make forgery difficult. The card is expected to last about four years with normal use.

Senior Vice President Helen O'Bannon expects the majority of Penn's 25,000 students, faculty and staff to have their new cards by fall. "This is a massive undertaking," she said, "We have a transition year ahead of us, and will need the cooperation and support of everyone in the University."

The first use of PENNcard will be in Dining Services (where students must now carry a

second card for meals). The Libraries are planning for its use in 1987.

But applications are expandable, according to Judy Zamost, who headed the team to choose a card and explore systems for using it. Building Administrators have been briefed on options that an encoded card offers for "keyless access." Residential Living may consider it as a reinforcement of receptionists' screening at dorm entrances.

"The first job is to get everyone recarded," Ms. Zamost emphasized. "We deliberately chose a card that could be used for a variety of access and control functions." She thanked UMIS, Dining Services, Public Safety, Business Services and the Libraries for help in the yearlong planning.

Beginning in April the scheduling of departments and offices for recarding of faculty and staff on-site or in nearby buildings will be coordinated by Human Resources' Staff Relations Office and members of the Human Resources Council. The year-round carding operation that has been in Public Safety for several years will move to two I.D. Centers: a student center at Dining Services' 3800 Locust Walk facility, and one for faculty and staff at Human Resources/Records' Franklin Building office.

COUNCIL

Synopsis of Minutes: February 12

Professor June Axinn, chair of the Council ad hoc Committee on Sexual Harassment, in an initial progress report, stated that the following major issues have been identified as foci for the committee: a) expectations of behavioral standards, b) resources and support mechanisms for both victims and the accused, c) informal and formal procedures, d) sanctions, e) appeals, and f) recording mechanisms.

Professor Nicholas Constan presented the recommendations of the President's Seminar on the Freshman Experience regarding residence (*Almanac*, 2/11/86). The report supported the SCUE "White Paper" as it bore upon this area and proposed that all freshman, with the exception of commuters, reside in "freshman halls" which would provide a full living-learning experience. Discussion was concentrated on the issue of allowing freshman to live in the college houses, culminating in the adoption of a resolution that it be the recommendation of the Council that the report be amended to give freshman the option of living in college houses.

A presentation on and discussion of safety and security was reported on in some detail in *Almanac*, 2/18/86.

and submitted to NIH on February 12, with the understanding that NIH would respond as quickly as possible.

We hope that the interim suspension of new funding for research involving vertebrate animals will be lifted within the next several weeks. I stress, however, that it is important to maintain the momentum that we have established over the last few months so as to meet the obligations we have undertaken. In addition, and consistent with its stated policy, NIH will be closely monitoring progress toward our stated goals. We should assume that such monitoring will include unannounced site visits.

In the meantime, a major program of renovation and construction of laboratory animal facilities is underway, which should result in all of our facilities meeting or exceeding NIH requirements. We estimate that work to be carried out over the next 6-9 months will have a total cost of \$4-5 million.

Several important administrative changes are also in effect. These include the appointment of an Institutional Animal Care and Use Committee (IACUC), and the creation of the position of University Veterinarian.

The IACUC is composed of University investigators and veterinarians who both care for and use laboratory animals, other University faculty, Penn administrators, and community representatives. The Committee has University-wide responsibility for the oversight of our laboratory animal program, including the inspection of laboratory animal facilities

and the review of protocols and programs utilizing laboratory animals, to ensure compliance with new University Guidelines governing the care and use of laboratory animals (distributed in draft form in December 1985.)

The IACUC will work closely with the Office of the University Veterinarian. This recently established Office, to be directed by the University Veterinarian, will have responsibility for administering our entire laboratory animal care and use program for both research and training. An active search is underway to fill the position of University Veterinarian. We are seeking an individual with distinguished academic qualifications and proven administrative ability. This individual is expected to maintain an academic research program, and to qualify for appointment as a tenured full professor on our faculty. We hope to fill this important position by late spring or early summer. In the interim, the Office of the Vice Provost for Research in association with appropriate deans will continue to direct our efforts in the laboratory animal program.

In closing I express my gratitude to all of those in the University community who worked long and hard in the preparation of our Assurance Statement and in meeting with the NIH site visit team last month. I count on your continued cooperation as we move to implement fully the various aspects of our animal care and use program so as to make it a source of pride for the University.

—Barry S. Cooperman, Vice Provost for Research

CONFERENCE

28 Literature & Psychoanalysis: A Short Session: Samuel Weber, University of Minnesota; William Kerrigan, University of Maryland; 10 a.m.-5 p.m., Bodek Lounge, Houston Hall. Information: Ext. 6836 (Comparative Literature Association of Students, The Center for the Study of Art and Symbolic Behavior, Department of English).

EXHIBITS

Now

An exhibition of drawings by Graduate School of Fine Arts students in architecture, landscape architecture, urban design and city planning; 9 a.m.-5 p.m., Monday through Friday, Fine Arts Galleries, Meyerson Hall. Through February 27.

FILMS

Films shown at International House. Tickets: \$3; \$2.50: members, students and senior citizens. Information: 387-5125, Ext. 222.

27 Whitney Video IV: part of the Whitney Biennial Film Exhibition, a series of film works curated by the Whitney Museum of American Art and circulated by the American Federation of Arts; 7:30 p.m.

28 Born In Flames: an independent feature length film fantasy of a feminist revolution within a new socialist state of America; 7:30 p.m.

MEETINGS

27 The Lesbian/Gay Faculty-Staff Association will hold its monthly luncheon meeting at noon. Bring your own lunch. For location and more information: Bob Schoenberg Ext. 5044, Elizabeth Kerwin 386-1530, or Larry Gross Ext. 5620.

MUSIC

28 Late Nite with Quaker Notes, an evening of a cappella music and humor will feature guests "The Yale Spizwinks", "Villanova Spires", and a cast of thousands. 8 p.m., Harrison Auditorium, University Museum; Tickets: Locust Walk and at the door for \$3.50/\$4. Information: Lisa Kim Barre, 222-1146.

ON STAGE

28 Philadelphia Showcase '86, the 8th annual National Showcase for the Performing Arts for Young People, open to sponsors of performing arts for young audiences; continuous 45-minute performances, 8:30 a.m.-12:15 p.m., and 2 p.m.-5:45 p.m., Zellerbach Theatre and Annenberg School Theatre. Fee: \$50. Information: Ext. 7038. Additional date: March 1.

TALKS

26 Acute Leukemia: At Home and Abroad; Dr. Peter Cassileth; HUP, 4 p.m., 7 Silverstein Con-



The Morris Arboretum is once again captured on film. Winning entries from the Arboretum's 8th Annual Photography Contest are now on exhibit in the Hillcrest Avenue Pavilion entrance. Photographs were judged in categories such as Outstanding Trees of the Arboretum, Seasons of the Arboretum, Arboretum Scenes and vistas, and Arboretum Fauna. Admission to the exhibit, which runs through March 30, is free with admission (\$2 adults, \$1 children and senior citizens) to the grounds.

ference Room. (Department of Medicine).

Getting To, From and Around Penn Safely; the basics of travel, street, and personal safety; noon-1 p.m., Faculty Club (Department of Public Safety).

27 Biology and Replication of Oncogenic Poxviruses; Julian Leibowitz, department of pathology, University of Texas; 4 p.m., Room 96 of Med Labs Building. (Microbiology Graduate Group).

Social-Cognitive Development in Adulthood: Levels and Variations; Kurt W. Fischer, professor of psychology, University of Denver; 3 p.m., Room D-9 of GSE Building, (Psychology in Education Division, Graduate School of Education).

Structure-Function Relationships of Influenza Hemagglutinin; R.S. Daniels, National Institute for Biological Standards, London, England; 11 a.m., 235 Johnson Pavilion (Microbiology Graduate Group).

Deadlines

The weekly update deadline for calendar entries is Monday, a week before the Tuesday of publication. The deadline for the April pullout calendar is Monday, March 10. Send to *Almanac*, 3601 Locust Walk/6224, (second floor of the Christian Association).

Spring Break: No Issue

During Spring Break, March 9-16, there will be no issue of *Almanac* published. Therefore, the March 4 issue's Update March On Campus will span an extra week—including events from March 4 to March 19. The deadline for the March 18 issue is Monday, March 10.

Uses of 'The University'

All faculty and staff are reminded that University equipment, stationery, and intramural mail service are to be used solely for University business by authorized University personnel and by officially recognized campus organizations.

In addition, the University name must not be used in any announcement, advertising matter, publication, correspondence, or report in connection with personal or unofficial activities of faculty members or staff, if such use in any way could be construed as implying University endorsement of any project, product or service.

—Thomas Ehrlich, Provost

—Helen O'Bannon, Senior Vice President

Alice Paul Awards

The Association of Women Faculty and Administrators invites nominations for the Alice Paul Awards, cash awards given to outstanding undergraduate and graduate women to recognize service to women on the part of Penn students. Dr. Paul, a suffragist leader, founded the National Women's Party, authored the Equal Rights Amendment, and was an internationally known humanitarian who devoted her entire life to the emancipation of women. The deadline for nominating candidates is March 7. Send letters of nomination to Kristin Davidson, assistant dean for administration, School of Nursing, 472 NEB, 420 Service Drive/6096.

Music Lessons for High School Girls

The Curtis Organ Restoration Society has been asked to participate in a grant program that will provide the necessary scholarship funds for musical enrichment and vocational training in the areas of piano and organ. The grant provides free music lessons to qualifying female high school students who are Philadelphia residents, from single parent or no parent families and meet the academic and financial guidelines of the Charles Ellis Foundation. The lessons will be given on an individual basis and tailored to the abilities of the student. The application deadline is March 18. Contact the Curtis Organ Restoration Society, 110 Houston Hall/CM, Ext. 2848.

Correction: In the Preliminary University Budget for Fiscal Year 1987 (*Almanac* February 18) the total figure in the second column of the table showing Preliminary Tuition and Fees for Academic Year 1986-87 should read 15,074, not 14,074.

Almanac

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