Gov. Boards Approve Appointments

The Governing Boards recently approved the following appointments in various faculties of the University. Each appointee appears with academic discipline in parentheses or special title.

PROFESSORS: **H. Franklin Bunn** (Medicine), **Benjamin Gene Covino** (Anaesthesia), **John Douglas Crawford** (Pediatrics), **I. Leon Dogon** (Operative Dentistry), **Margaret Elizabeth Drolette** (Biostatistics, Faculty of Public Health), **David G. Freiman** (Pathology), and **Robert Gerdes Ojemann** (Surgery, Massachusetts General Hospital).

CLINICAL PROFESSORS: **Francis McCall Ingersoll** (Gynecology, *Emeritus*) and **Arthur F. Valenstein** (Psychiatry).

VISITING PROFESSORS: **John Darling Baxter** (Medicine); **Richard Kekuni Blaisdell** (Medicine); **Albert Fein** (Landscape Architecture); **Peter John Fergusson** (Visual and Environmental Studies); Eric David Green (Law); **William King Hall**, Thomas Henry Carroll-Ford Foundation Visiting Professor of Business Administration; **Robert Milton Hartwell** (Chinese History); **Paul Hollander** (Sociology);

Paul L. Joskow (JFK School of Government); **Leo Kanowitz** (Law); **Elisabeth B. MacDougall** (History of Landscape Architecture); **George F. Madaus** (Education); **Roy Herrick Maffly** (Medicine); **Manuel Martinez-Maldonado** (Medicine); **Angel G. Quintero-Alfaro** (Education); **Kavasseri Vaidianatha Ramanathan** (Business Administration); **Linda Joy Silberman** (Law); **Ewald Rudolf Weibel**, Visiting Alexander Agassiz Professor in the Museum of Comparative Zoology and Visiting Professor of Physiology (Faculty of Public Health); and **Louis Weinstein** (Medicine).

VISITING ASSOCIATE PROFESSORS: **Louis George D'Alecy** (Medicine), **Colin S. Diver** (JFK School of Government), **Philippe Pierre Evrard** (Neurology), **Joseph Clarence Harris** (Scandinavian: Folklore and Mythology), **Paul H. Harvey** (Biology), **Barbara Lee Heyns** (Education), **Charles Clay Lemert** (Psychiatry), **Catherine Elizabeth Snow** (Education), **Walter Henry Alfons Vandaele** (Economics), and **Eddy J. Van Meter** (Education).

VISITING ASSISTANT PROFESSORS: **John Irwin Clark** (Anatomy), **Bruce Ivor McPherson** (Education), **Massimo Pogani** (Medicine), and **Henry Pollakowski** (City and Regional Planning).

The Other Side of Depression May Be Creativity

(Continued from page 1)

that the general systems concept postulates the brain as "an open system, continually receptive to new stimuli and screening present experience through stored stimuli." The organism's behavior is then determined by its selective combination of incoming and stored symbols.

The word "mind," he continued, would be "a term defining the general systems operation of the brain as a communication and information center."

If nothing is picked up by the system, or if the system is so overloaded that processing can't occur, Dr. Catlin said, then the system will malfunction. For example, he said, to develop the proper organizing force (self-image) for the system, a child must receive adequate but not overwhelming stimuli. "The self-image," he explained, "is the sum total of one's experiences and their influence on one."

He noted that if depression heralds the breakdown of the system, then depressive symptoms are the organism's attempts to commit itself to action in an attempt to restore order to the system.

At the opposite end of the spectrum, said Dr. Catlin, creativity is "the ability to integrate and unify, without losing control of the integrating process." In machine language, creativity is "the capacity for free and open scanning of input." Wit, he added, is akin to creativity with its juxtaposition of the logical and illogical.

Dr. Catlin pointed out that to maintain this "tolerance for disorder" and to pay attention to a large number of varied messages, the creative person must have a strong sense of self-esteem, the capacity for aloneness, and the ability to be reflective without being preoccupied with loss.

For an adolescent to develop this crucial self-image, said Dr. Catlin, he or she must receive positive "input" from both parents. Failure to win approval in the eyes of the opposite-sexed parent, or lack of a role model in the same-sexed parent, he warned, could result in "the inability to maintain and utilize a stable self-image, the necessary organizer of this information processing system."

He noted that creativity equals the healthy ego function without restraints in a person who has acquired a strong self-image. One motive for creativity, he postulated, would be the awareness and fear of its opposite—depression.

"Depression is an alien state," he concluded, "and the system tries to break away, in the direction of what would be, if it went all the way, creativity."

Gazette Emporium

HOUSING

Harv. affiliate female wants rm., urgently, in apt., vicinity Cambridge St., w/in. $150. 617-876-5933.

Rmmate wanted, M or F, mature pers. to live w. grad. student, Amer. studies. $82/mo + ht. 623-1886.

MISCELLANEOUS

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Gorgeous cat: white, or. and black cap, fluffy or./black tail. Needs home of her own immediately. Jean, 495-6667(8-4); 864-8268.

Typist avail.: manuscript, thesis typing, my home, IBM Selectric typewriter. Much exper. in Latin, some Greek. 484-7859 eves., please.

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Piano, 5'6" Steinway, style M, 1937. Exc. cond. 547-0757.

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Six unusual mod. din. chairs, vinyl & walnut, $25 ea. 876-4571 eves.

Amer. Airlines half-fare coupon, $60. 498-2190 eves.

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United Airlines half-fare cpn. $70 or best offer. Laurie, 495-2595, 876-8797 eves.

Baby goods: Portacrib + bumpers, exc. cond. Mothercare Baby Bouncer. 354-4401.

Kenmore port. washing mach., exc. cond. 1 yr. old. $175. 861-8013.

AUTOMOTIVE

Skyhawk '75, strd. shift. 74,000 mi. AM/FM radio, A/C. Rear defrost. Asking $2,500. 495-4986.

Dodge Sportsman window van, '67. AM/FM, slide-out cassette, paneled, insulated, carpet, bed, 2 htrs., new elec. sys., master cyl., brakes, gd. tires. $900. 666-9852.

Chevy Kingswood wagon, '71, AM/FM, snow tires, very gd. running cond., Aug. tune-up. $650 or best offer. 484-8827.

Plymouth Fury III, '65, fall sticker, gd. eng., many replaced pts., gd. running cond. $350 or best offer. 354-1379 eves, wknds.



Robert Brustein (standing), Artistic Director of the American Repertory Theatre (ART) and Director-designate of the Loeb, discusses fundraising efforts for the troupe's first season here, scheduled to begin in March. With him at the drama center on Monday are Geno Ballotti, Director of the Committee of Boston's Permanent Charity Fund; Anne Hawley, Executive Director of the Massachusetts Council on the Arts and Humanities; ART Managing Director Robert Orchard; and Dean Henry Rosovsky (Faculty of Arts and Science). (Photo: Michael Nagy)

Brustein Discusses Funding of ART at Loeb

(Continued from page 1)

ment for the Arts, the Ford Foundation, the Andrew W. Mellon Foundation, the Educational Foundation of America, and the Shubert Foundation. Locally, the ART has received funds from The Permanent Charity Fund of Boston and the Massachusetts Council on the Arts and Humanities.

Harvard has provided the Loeb facilities as well as "a modest subsidy," Mr. Brustein said. But as a "separately incorporated, not-for-profit organization" that aims to serve New England, "we will rely heavily on the community at large for assistance in funding," ART Managing Director **Robert Orchard** said.

After moving to Cambridge in January, the 13-year-old troupe, currently at Yale, will create new productions and bring fresh talent to the stage, "while maintaining, we hope, our standards of professional excellence," Mr. Brustein pointed out.

The Harvard-Radcliffe Dramatic Club will offer four Main Stage productions a year, Mr. Orchard said. Sixteen other productions will take place in the Loeb Experimental Theatre. Other planned events include late-night cabarets with satirical and musical revues, film series, staged readings of new plays, and lunchtime concerts and poetry readings. The Loeb will also house exhibitions by local artists, including photographers and sculptors.

The ART will hold open houses, student matinees, and discussions for audiences, actors, and staff, Mr. Orchard said. Students and the elderly will be able to buy reduced-rate tickets, and special arrangements will be made for the handicapped.

ART's first Cambridge season will begin on March 21. Four plays (to be announced early next year) will comprise the initial offering, Mr. Brustein said. Loeb spotlights will beam on the premiere production of an American play, along with a new production of "a comedy classic" and two productions from the ART's repertory of more than 90 plays.

Subscription and scheduling information will be available at 547-8300, when programs are announced in January.

Case Materials Offer Direct Learning Experience

(Continued from page 3)

said, and make him aware of "the nonlinearity of life."

He outlined problems that might arise from the use of case materials. While the student gains a sensitivity to detail, he explained, it is sometimes at the expense of his sense of the general. Students must be made aware that the case fits into a larger picture.

In order to give the student a wider view, Mr. Lange urged instructors to "select a broad set of cases, be explicit about the logic of your selection, don't load the dice."

He added that the instructor must know when to bring in the theories that the case illustrates.

"This requires enormous patience," he said, "but the student has an enormous sense of discovery. The sense of discovery is a powerful teaching tool."

Steven Williams found the case study format "made to order" for the teaching of anthropology. Artifacts offer a "direct learning experience," he said, and address "the problem of dealing with the cultural history of the planet during the last one and a half million years."

One can personalize material found by another person, he said, and while archaeology in one area of the world is very different from archaeology in another, the case offers the student a capsule of life for one site. From this the student may extrapolate a variety of excavations, methods of analysis, and general history of the field.

To demonstrate the importance of the concrete object, Mr. Williams held up a greenish rock and explained that it was an artifact found by **Louis Leakey** in the Olduvai Gorge. "This real tool, grasped by a paw-like hand or hand-like paw, a million or million-and-a-half years old is as significant as a moon rock," he concluded.

The last lecture in the Harvard-Danforth Center for Teaching and Learning fall series will be December 10 at 4:30 p.m. in Science Center A.

Hazardous Waste

(Continued from page 3)

term storage and disposal of radioactive wastes throughout the country.

"We share equally with the city council the sense of frustration that an action so far removed from Cambridge should even temporarily cause a backup in liquid radioactive wastes here, and indeed in scientific laboratories and hospitals all across the country," said Mr. Milne. "This problem is clearly of national concern and will require a national solution, a solution for which we intend to work as earnestly as we can."

Dr. **Robert Alberty**, Dean of Science at MIT, and Dr. **Jacob Shapiro**, Radiological Health and Safety Engineer at Harvard, also represented their universities and answered questions from the Council.

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Gazette

November 30, 1979 Vol. LXXV

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Inside

- Harry Parker Get[s] Coach Olympic T[eam]
- Dame Helen Scor[es]
- Harvard Answers Hazardous Waste

Professor Jaffe Shares Heineman Award in Physics

Professor **Arthur Jaffe** (Mathematical Physics) and **James Glimm**, a mathematician at Rockefeller University, will share the Heineman Award for solving part of a fundamental problem in physics.

The professors, who have worked together for years, will receive the joint $5,000 award at the annual meeting of the American Physical Society in January. The Heineman Prize for Mathematical Physics, which went in 1977 to Nobel Laureate **Steven Weinberg**, Higgins Professor of Physics, is considered one of the country's highest awards for research in physics. Mr. Jaffe will also receive the New York Academy of Science Award for Mathematical and Physical Sciences at a ceremony December 6.

"The work Jaffe and Glimm have done is a mathematical *tour de force*," says **George Mackey**, Landon T. Clay Professor of Mathematics and Theoretical Science. "They tackled an important unsolved question in physics and have come a long way toward solving some aspects of it."

The problem involves the apparent "incompatibility" between special relativity, a key law that defines time and space in nature, and quantum mechanics, a set of laws which governs how elementary particles interact.

Some physicists believe that the two principles have already been reconciled according to general laws of physics. Others like Mr. Jaffe believe there is still no coherent mathematical theory that reconciles special relativity with the larger framework of quantum mechanics.

Special relativity works for the macrocosm which describes any configuration of matter larger than an atom or molecule, according to Mr. Mackey. But it doesn't by itself work for the microcosm—the world of subatomic particles. Both special relativity and quantum mechanics are needed to describe this world of elementary

(Continued on page 4)





Digging in for the winter along the Holyoke Center side of Massachusetts Avenue are, top, Joseph Volpe, an assistant engineer with the Perini Corporation (contractor for the new Harvard Square Subway station) and bottom, left to right, George MacDougall, field superintendent, Arvesta Stafford, labor foreman, and Eric Johnston, pile driver, all with the New England Foundation Company (subcontractors at the site). All four men are involved in various phases of slurry wall construction, the current focus of Red Line activity in the Square. Last Wednesday, as Volpe operated a gradall truck, the nearby trio monitored the deep-digging power of an augur. The underground slurry walls between Dunster and Boylston streets are in various stages of completion, as are those across the Avenue along the Harvard Fence. Slurry walls provide earth support during the ongoing construction and, once the new subway station is completed in 1983, become permanent structural walls. A series of photograph panels is presently on display along the inbound platform of the Harvard station. Prepared by the Cambridge Arts Council's "Arts on the Line" program, the exhibit describes the sophisticated slurry technique. (Photos: Michael Nagy)

The Other Side of Depression May Be Creative Process

The opposite state of depression may not be mania or euphoria, but creativity, according to **Randolph Catlin**, Chief of Clinical Services at the University Health Services.

As part of a 10-lecture series on "Psychiatry Looks at the Creative Process" at Mt. Auburn Hospital, Dr. Catlin spoke on the topic "Creativity and Depression: Some Clinical Correlations" last Tuesday.

One may view depression and creativity as polar opposites, he said, "programmed around the central core which is our self-image."

Using the model of a "general systems concept," Dr. Catlin likened the mind to a computer or information processing system, and stressed the "centrality of the self-image" as the organizing force within the system.

Seen from this point of view, he explained, depression is an inhibition of potential—the system malfunctioning or dysfunctioning—while creativity is the system operating at its optimum.

Unlike the Freudian conception of the brain as a closed system, Dr. Catlin noted

(Continued on page 12)

Grant from National Endowment, Ford Funds Editions of American Classics

The National Endowment for the Humanities and the Ford Foundation announced this week joint funding of a nonprofit corporation that will publish hardcover editions of American literary classics under the direction of **Daniel Aaron**, Victor S. Thomas Professor of English and American Literature.

With a grant of $1.2 million from the National Endowment for the Humanities and of $600,000 from the Ford Foundation, Mr. Aaron said the corporation, Literary Classics of the United States, Inc., will produce hardcover, fine papered editions of the complete works of authors such as Henry Adams, Henry James, Emerson, Thoreau, Whitman, and Hawthorne.

Mr. Aaron said there are no editions of complete works currently in print for many classic American authors, either in hardcover or paperback. "Right now," he said, "it costs an enormous amount of money to buy the complete works of someone like Henry Adams—if you can find them."

The books will not be limited to belles-lettres or poetry, according to Mr. Aaron. "We plan to publish biography, philosophy, and criticism, works about art and travel by major American writers."

Mr. Aaron said there will be a minimum of "scholarly apparatus." The books, he said, will have short introductions, a minimum of footnotes, and be from 1,500 to 1,800 pages long. He compared the projected editions to the French literary classics produced under the Pleiade label.

The corporation is a joint venture between the academic world and commercial publishing. Its vice president is Professor **Richard Poirier** of Rutgers, and its treasurer is **Jason Epstein**, Editorial Director of Random House.

The first editions are scheduled to go on sale in the spring of 1981 at a projected price of $15 each.

Bok Urges [Flexibility] GSD Progra[m]

President **Derek Bok** re[ports] today that the faculties of [the] School of Design and the [John F. Kennedy] School of Government consider several changes to realign Harvard's programs in public policy, planning, and design.

Public Policy and Public Management

To strengthen Harvard's programs in public policy and public management, Mr. Bok recommended that the City and Regional Planning Program be transferred from the School of Design to the Kennedy School of Government. In recent years, the City and Regional Planning program has concentrated primarily on urban planning, policy, and administration while programs in the School of Government have emphasized federal policy and administration.

In practice, Mr. Bok emphasized, this division is artificial, since all these programs stress similar methods and skills, their required courses are similar in basic content, and their graduates will often move among federal, state, and local positions in the course of their careers. By being united in a single school, therefore, the two programs could be mutually reinforcing and provide a full array of courses to meet the career needs of their students.

Planning and Design

To strengthen Harvard's programs in physical planning and design, Mr. Bok recommended that the Graduate School of Design institute a program in urban and regional planning and design combining related components of several existing programs within the School.

Mr. Bok noted that physical planning and design at the urban and regional scale must integrate perspectives and methods from the several design disciplines. He added that a new program

(Continued on page 4)

Brustein to Seek Community Funds For American Rep

The American Repertory Theatre (ART) is setting the stage for its first season at the Loeb Drama Center with substantial backing from the government and foundations. But to maintain its financial footing, the group now needs matching community support, ART Artistic Director **Robert Brustein** said at a Monday press conference at the Loeb.

"It is our hope and the key to our future that the Boston region will support—like most other large metropolitan areas—a major residential-professional theatre company on the scale of the American Repertory Theatre," the Loeb Director-designate said.

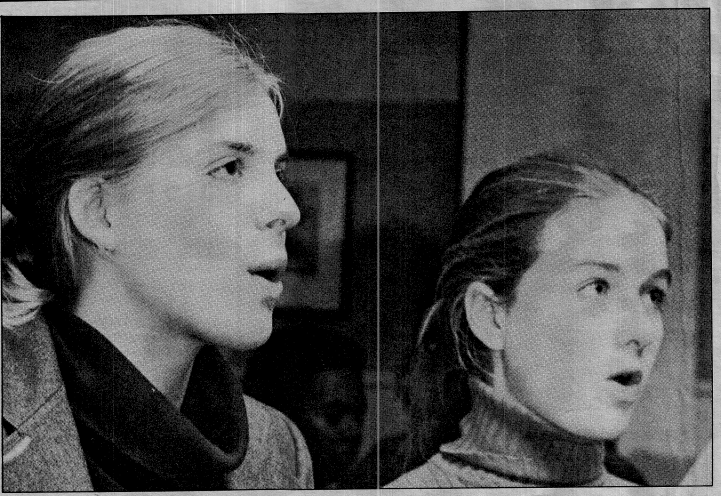
ART Associate Manager **Patricia Quinn** will coordinate local fundraising.

Institutional contributions and pledges exceed $200,000—more than half the funds needed for the upcoming season.

"We have a lot of gratitude to express for the kindness, hospitality, and support that we've been getting before we've even staged a single production," Mr. Brustein said.

Donors include the National Endow-

(Continued on page 12)



Sing We Noel Once More. The Harvard University Choir will present a Christmas Carol Concert, featuring music of diverse periods, on December 10 (8:15 p.m.) and 11 (4:30 and 8:15 p.m.) in The Memorial Church. Admission is free, but donations are welcome. All proceeds will benefit the Oxfam Cambodian Relief effort. Rehearsing here are Anne Manson '83 and Ann Piaget '80. (Photo: Michael Nagy)

"True 'relevance' must always be relevance to *me*"

Relevance, Like Happiness, Is a Matter of Serendipity

"Genuine relevance is, I think, like happiness: it's most often found when it isn't looked for," Dame **Helen Gardner** reflected on Monday.

Examining "The Relevance of Literature" in her second Norton Lecture, Dame Helen attacked current trends in literary instruction and criticism that scour the past, radically reinterpret it to create "relevant" reflections of the present, and leave the reader unable to meet authors on their own terms. Although an expert of the modern period, she had stern words too for the utilitarian-inspired preoccupation with 20-century literature in university coursework.

"I'm not just attempting to be paradoxical when I [say] that studying the literature of past ages has greater relevance to our ability to live and act justly in the modern world than a concentration on the literature of the present and the more immediate past." In confronting our larger literary heritage, we develop "our individual values and aesthetic criteria." We discover "standards of permanence" that help shield us from the pervasive fashions of Madison Avenue. And we expand our minds "to the possibilities of human nature."

"True 'relevance' must always be relevance to *me*," she declared, speaking for the individual reader. "—Something in a poem or a novel that engages me personally, so that I can reread again and again at different periods of my life in altered circumstances." Current educational practice often inhibits students in discovering such relevance for themselves.

What does literature actually do? First, it gives enjoyment, the "satisfaction we find in the exercise of our faculties—physical, mental, spiritual." Lest anyone think this a "trivial conception," Dame Helen reminded her listeners that an ancient Scottish catechism and the Psalmist variously cite the "enjoyment" of God as "the very end of our being."

Amusement of this "superior" sort was **T. S. Eliot**'s very definition of poetry, Dame Helen explained. In such a state, the reader, distracted from self-concern, recaptures the "radical innocence" of childhood. All poetry worth reading "must have the power of engaging attention and alluring curiosity," she said.

Eliot speaks also of "feeling the full surprise and elevation of a new experience of poetry." Unlike scientific creation, artistic creation conveys this heady feeling on paper. "Something 'travels,' " as Sir **Peter Medawar** has written. A scientist's work may give intellectual pleasure to a colleague, but it gives the fellow scientist "no sense of participation in the discovery," the Nobel Prizewinning zoologist observed.

Quoting **C. S. Lewis**'s *Experiment in Criticism*, the Norton Lecturer agreed that " 'in reading we seek an enlargement of our being. We want to see with other eyes . . . to feel with other hearts as well as with our own. . . . Here, as in worship, in love, in moral action, and in knowing, I transcend myself and am never more myself than when I do.' "

Reading literature guarantees neither salvation nor moral superiority. But literature does contain moral values. It most successfully transmits them when it "involves us in a world of moral choice . . . through our 'fond participation' in imagined adventures, crises, joys, and distresses."

Literature performs even larger functions. Without it, a society can lose its sense of identity and cohesion, Dame Helen observed. For literature "of all the arts has the power to take us back into what it felt like to live in past ages and to discover certain constancies in human experience—and certain differences."

Precisely because human beings need to preserve "certain long-established virtues," emerging African nations have begun to write down their vast oral literature before it disappears.

"Nobody could possibly think this has any relevance whatever to the grave political and economic problems" facing these countries. But the African nations clearly consider the oral tradition essential to "their identity, their dignity, and their status as human societies," she said.

Great literature exercises our noblest capacities—for celebration, praise, and wonder, said Dame Helen, who still finds herself "laughing aloud with a sudden sense of glory" when reading Dickens. Poetry scales the highest elevations, she feels. And in Chaucer, Spenser, Shakespeare, and Milton—"the common inheritance" of all who speak English—she finds "our supreme masters of wisdom and eloquence."

In 1939, **W. H. Auden** celebrated the poet's "supportive role" in an elegy for **William Butler Yeats**. Dame Helen closed with its concluding lines:

Follow, poet, follow right
To the bottom of the night
With your unconstraining voice
Still persuade us to rejoice;
With the farming of a verse
Make a vineyard of the curse,
Sing of human unsuccess
In a rapture of distress;
In the deserts of the heart
Let the healing fountain start,
In the prison of his days
Teach the free man how to praise.

Police and FBI Seek Stolen Fogg Jade

The Federal Bureau of Investigation has been called in to investigate the theft of a priceless Chinese jade container from Harvard University's Fogg Art Museum. The loss was discovered during afternoon exhibit hours Monday, November 26. The F.B.I. is working with the Boston, Cambridge and Harvard University Police Departments in investigating the theft.

The covered jade tripod censer, six inches high by seven inches wide, has translucent stone sides of mottled bright green color. It is carved with a pair of dragon handles which support loose rings and has a jade cover with lion and cub finial design.

The missing artifact is part of an exhibit of 70 objects donated to the Museum from the collection of Ernest B. and Helen Pratt Dane. It is listed as a late 18th- or early 19th-century piece from China's Ch'ing dynasty. The Dane Collection of Chinese ceramics and jade has been on display at the Fogg since October 4.

The last theft at the Museum occurred in 1973, when a collection of Greek and Roman coins was stolen. Almost all of those pieces have subsequently been recovered, the Fogg's Deputy Director **Suzannah Doeringer** reports.

Notes on People

■ **Ernest M. Gould Jr.**, Forest Economist at the Harvard Forest (Petersham, Mass.) and Senior Lecturer on Biology, has received an appointment to the National Forest Service Advisory Committee (NFSAC). The only Northeasterner on the 12-member panel, he will serve until September 1981.

During the past eight years, Mr. Gould has worked in land management planning for the White Mountain National Forest of Maine and New Hampshire.

The NFSAC, created by the National Forest Management Act of 1976, advises the Secretary of Agriculture on planning and management for the country's 154 national forests.

■ **Moshe Safdie**, Director of the Urban Design Program at the Graduate School of Design (GSD), recently was chosen by the Boston Redevelopment Authority to develop a plan for the redesign of the last major area of downtown Boston that needs rehabilitating. The 70-acre site which centers on North Station and the Boston Garden, includes the Bulfinch Triangle and land extending to the Charles River.

Mr. Safdie, an internationally known architect and urban designer famous for his work on Habitat in Montreal for Expo 67, has designed similar large-scale, high-density urban housing complexes throughout the world. He has been Visiting Professor of Architecture at McGill University, Davenport Professor of Architecture at Yale University and director of the Desert Architecture and Environment program at Israel's Ben Gurion University.

Mr. Safdie, the second director of the GSD's 15-year-old Urban Design Program, heads his own firm, Moshe Safdie and Associates, with offices in Montreal, Jerusalem, Baltimore and Boston.

■ Architect **Edward Larrabee Barnes** '38, AM '42, whose most recent project is the 46-story IBM skyscraper under construction in midtown Manhattan, has been named the first Eliot Noyes Visiting Design Critic at the Graduate School of Design. Mr. Barnes will spend part of the fall term working with architecture students on the design of a 200-acre botanical complex near Walden Pond, focusing on the relationship of the built form to nature.

Mr. Barnes' completed projects include the Walker Art Center in Minneapolis, Haystack School of Crafts in Maine, Neiman-Marcus Shopping Center in Texas, and 40-story Cabot, Cabot and Forbes tower in Boston.

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and Peru, and expert knowledge in these areas is necessary. Salary dependent on qualifications and experience. Application should be in the form of a letter and full C.V. to Giles Constable, Director, Dumbarton Oaks, Washington, D.C. 20007. Deadline: February 1, 1980. (11/9/79)

Temporary Clerical Skills Instructor. CASUAL PART-TIME POSITION. Under the direction of the Manager of Staffing and Services, conducts classes for applicants with minimal typing skills to improve speed and accuracy. Plans daily courses to be taught, monitors attendance and progress of students. Hours preferably 2-4 pm or 3-5 pm daily. Minimum requirements: College degree, with major in business education; some actual teaching experience required, preferably with adults; must be certified to teach typing. (10/19/79)

PART—TIME EXEMPT POSITIONS

PT Research Associate. Req. 29984. School of Public Health. A one-year, part-time appointment to join multi-disciplinary group evaluating medical technology. Minimum requirements: Ph.D. in statistics or mathematics, plus experience in theory of medical decision-making; must have strong background in quantitative methods and operations research; in-depth knowledge of decision analysis and multi-attribute decision problems. (11/16/79)

PT Assistant Surgeon. Req. 32345. Position in the University Health Services. Provides surgical care in an ambulatory clinic setting. Minimum requirements: Board qualifications in general surgery; must have an association with a hospital in the Cambridge-Boston area. (11/23/79)

PT Registered Nurse. Req. 32356. Performs full range of standard nursing duties in the Inpatient Department of the University Health Services. Schedule: 7:00 am - 3:30 pm, 3 days per week to be arranged, with occasional rotation. Minimum requirements: Massachusetts Nurse's Registration; 2 years' medical-surgical experience; some emergency experience preferred; knowledge of IV therapy. (11/23/79)

PT Research Assistant II. Req. 32309. Business School. Involves library research using NLRB reports and data sources to identify companies unionized in last 5 years. Identifies field research sites. Performs field research to result in the development of cases. Develops survey instrument based on data collected. Minimum requirements: MBA degree or equivalent; excellent research skills; course work in labor relations or related areas; familiarity with business administration cases and case analysis; excellent interviewing and writing skills. (11/16/79)

PT Assistant Director, Summer School. Req. 32291. Position in the Summer School of Arts and Sciences and of Education. Assists Director and Associate Director with: long-range planning; curriculum development, including awareness of meeting students changing needs; recruitment of faculty from Harvard and from other local schools; coordination of special programs; and logistical support for summer arts events, including scheduling of space, equipment, security, and other materials, services and personnel. Compiles various statistical and demographic reports and assists with overall marketing strategies. Works with all levels of personnel. Minimum requirements: MA required; Ph.D. preferred; familiarity with Harvard structure and policies preferred; some administrative experience; effective verbal and interpersonal skills required. (11/9/79)

PT Temporary Adult Nurse Practitioner. Req. 32228. One-year position in the University Health Services. Performs a full range of ambulatory nursing procedures, including assessment of patients, knowledge of laboratory and therapeutic procedures within the ambulatory department. Schedule: 3 days per week, day time hours with occasional rotation and weekends. Minimum requirements: Massachusetts Nurse's Registration; at least 2 years' medical and surgical experience; formal adult practitioner program required. (10/26/79)

SUPPORTING STAFF POSITIONS
(Grade 6 and above)

Research Assistant I or II. Req. 30720. Medical School. Involves production of lymphocyte somatic cell hybrids; in vitro maintenance of cell lines; immunologic screening of hybrids for specific function using hemagglutination; solid phase radioimmunoassays and in vitro culture methods; cloning of cell lines in agar or by dilution; and cell freezing. There will be an opportunity to participate in developing new techniques for improving hybrid yield and screening procedures, as well as methods for isolating and studying hybrid products. Minimum requirements: Bachelor's or Master's degree, preferably in biology; minimum 2 year commitment due to nature of work; experience in tissue culture highly desirable. (11/30/79)

Secretary III. Req. 30712. School of Public Health. Performs secretarial duties for the head of a department with particular emphasis on running and coordinating the graduate training program for laboratory. Handles routine correspondence. Drafts material for reports. Types manuscripts for publication. Proofreads and edits manuscripts. Types grant applications and project progress reports and assists in their preparation. Conducts library research. Arranges appointments and meetings. Maintains radioactive material reports and forms. Maintains departmental library. Performs related duties as required. Minimum requirements: secretarial or business school training beyond high school; 3-5 years' secretarial experience; ability to work under pressure and allocate work priorities. (11/30/79)

Secretary III, Technical. Req. 30709. School of Public Health. For a multi-disciplinary research center concerned with health care, provides secretarial assistance to professional staff. Coordinates typing workload, Sets priorities and distributes workload to support staff. Consults with Assistant Director in hiring permanent or temporary staff as necessary. Maintains personnel records. Performs manuscript and technical/statistical typing. Types correspondence. Attends meetings and reports to supervisor. Prepares forms. Assists in grant application process. Prepares administrative reports. Implements policy and planning decisions made by supervisor. May perform special related assignments as required. Minimum requirements: College degree preferred; minimum of business school training beyond high school; 3-5 years' secretarial experience; 50-60 wpm technical and manuscript typing; ability to handle several projects simultaneously. (11/30/79)

Staff Assistant III. Req. 30702. Medical School. Assists in the preparation of analyses of budgets and actual operating expenses for 5 departmental accounts. Acts as liaison with the Department of Buildings and Grounds regarding building problems and status of job orders. Prepares and maintains all departmental, financial, and personnel records pertaining to the West Quadrangle Administration to assure compliance with university requirements. Interacts with vendors and users of services to insure the accuracy of charges. Performs billing functions for mail, chemical stores, xerox, and office supply areas. Composes and types correspondence. Prepares statistical reports. Performs related duties as required. Minimum requirements: College degree preferred; minimum of business training beyond high school; 3-5 years' office experience required; 50-60 wpm typing; ability to handle complex and confidential material. (11/30/79)

Staff Assistant III. Req. 30701. Medical School. Under direction, organizes and implements recordkeeping. Processes gifts received. Files donor-giving records. Handles processing for acknowledgements. Gathers data and prepares administrative reports. Does simple statistical analyses of giving data. Sets up and maintains records. Acts as principal source of information regarding gift receipts and pledges. Acts as liaison with related offices within the Medical School and in Cambridge. Answers inquiries relating to development activities. Composes and types correspondence, proposals, reports, and other materials. May coordinate office purchasing and maintain expenditure records. May supervise other clerical support personnel. Minimum requirements: College degree preferred; minimum of business training beyond high school; 3-5 years' office or related experience; 50-60wpm accurate typing; organizational ability; attention to detail; accuracy; ability to work with minimal supervision and to handle complex and confidential materials. (11/30/79)

Staff Assistant III. Req. 29999. Medical School. Under direction, develops plans and methods for researching individual, foundation, and corporate prospects for giving. Gathers materials to provide basis for assessing suitability of approaching prospects. Prepares call briefings for Deans' visits to prospects. Abstracts relevant information from files. Obtains, organizes, and evaluates library of resource materials (directories, annual reports, journals, and other publications). Acts as liaison with related offices within the Medical School and in Cambridge. Answers inquiries relating to development activities. Composes and types correspondence, proposals, reports, and other materials. May supervise other clerical support personnel. Performs related office duties and assists with other developmental activities as required. Minimum requirements: College degree preferred; minimum of business training beyond high school; 3-5 years' office or related experience; 50-60 wpm accurate typing; organizational ability; attention to detail; accuracy; ability to work with minimal supervision and to handle complex and confidential material. (11/30/79)

Research Assistant I or Sr. Research Assistant I. Req. 29995. Medical School. Works in a laboratory concerned with mechanisms of gene expression in Drosophila. Isolates and manipulates DNA and RNA from Drosophila and recombinant DNA from E. coli. Performs experiments mapping restriction sites in DNA, and hybridizations with radioactive probes. Depending on background and experience, may participate more independently as a Senior Research Assistant I. Minimum requirements: BS; laboratory experience working with nucleic acids and growth of bacterial cultures highly desirable; for Sr. Research Assistant I, BS plus 2-3 years' experience, or Master's degree. (11/30/79)

Research Assistant I or II. Req. 29994. Medical School. Conducts research in the area of the role of metals in nucleic acid synthesis and function. Duties include fractionation of cells, purification of DNA and RNA polymerases, kinetic analysis of their function, separation of various classes of RNA, determination of their purine and pyrimidine base composition, preparation of metal free buffers, chemicals, etc. Depending on background and experience, may participate more independently as a Sr. Research Assistant I or Research Assistant II. Minimum requirements: for Research Assistant I, BS in biochemistry or biology with good biochemical lab experience; for Sr. Research Assistant I or Research Assistant II, BS plus 2-3 years' relevant experience or MS degree. (11/30/79)

Research Assistant I or Sr. Research Assistant I. Req. 29988. Medical School. Conducts research in the areas of oxidoreductases, metabolism of ethanol and other alcohols. Duties include spectrophotometric enzyme assays, protein purification and characterization, electrophoretic analysis, affinity and adsorption chromatography, graphical and computer-assisted analysis of kinetic data. Minimum requirements: Bachelor's degree in chemistry or biochemistry with experience in enzymology and enzyme kinetics, chromatography, electrophoresis; previous experience with High Performance Liquid Chromatography highly desirable. (11/23/79)

Secretary II, Technical. Req. 29976. School of Public Health. Working for a microbiology professor, will type manuscripts, correspondence and grant applications, incorporating graphs, charts and tables. Greets and refers visitors, answers telephones, maintains reprint and laboratory files, and orders supplies. Minimum requirements: Business school training beyond high school; at least 2 years' experience and ability to perform technical typing; 60 wpm manuscript typing. (11/9/79)

Mechanical Technician III. Req. 29945. School of Public Health. Assists in research on large and small-scale air pollution control equipment in pilot plant. Assembles and operates heavy experimental pollution control equipment. Measures physical and chemical processes. Records data. Prepares tables and graphs. Minimum requirements: 2-year technical degree and 2-5 years' related experience preferred; skills in pipe fitting, electrical wiring, mechanical assembly highly desirable. (10/26/79)

Financial Assistant. Req. 29941. Medical School. Grade 6. Processes invoices for payment for all HMS administrative departments. Prepares and reviews purchase requisitions for completeness. Follows up on listings to assure proper payment is made to correct accounts. Maintains files. Handles student activity accounts. Prepares inventory of administrative office equipment. Serves as liaison between the HMS Business Office and Purchasing. Investigates unidentified invoices and statements. Handles extensive telephone inquiries. Prepares periodic statements of expenditures and assists Accounting Clerk IV in funding of appointee salaries. Minimum requirements: business school training beyond high school preferred; 3-5 years' related office experience. 40-50 wpm typing. (10/26/79)

Secretary II or Secretary III. Req. 32354-Biology. Performs administrative and secretarial/clerical duties for biochemistry professor with large research group of about 20 people. Acts as source of information on laboratory and department policies and procedures. Composes and types correspondence. Types and edits scientific manuscripts. Prepares course materials. Administers all expenditure records and budgetary duties for laboratory. Compiles information relating to grant proposals and other assignments. Prepares budgets and types proposals. Answers telephones. Arranges appointments. Acts as liaison with staff, faculty and students. Performs related duties as required. Title and level will depend on background and previous experience. Minimum requirements: College background or degree preferred; some knowledge of biochemistry or biology helpful; 65wpm typing; previous secretarial experience; good organizational skills; ability to use dictaphone; ability to relate well to people; must be able to work with minimal supervision. (11/23/79)

Futures and Options Bookkeeper. Req. 32352. Treasurer's Office. Under general supervision, performs skilled bookkeeping/accounting duties relative to trusts and options. Reviews and verifies terms and prices of futures contracts. Records closing and exercising of futures. Prepares and maintains cash flow and income records. Maintains escrow accounts. Serves as liaison with brokers exercising futures business. Handles all phases of option trading, including profit and loss figures, recording and reporting option transactions, and computing commission and taxes on trade. Performs related duties as required. Minimum requirements: AA or BS degree in accounting or bookkeeping; 3-5 years' bookkeeping experience, including experience in securities bookkeeping necessary. (11/23/79)

Secretary III. Req. 32319. Under direction, performs complex secretarial and administrative duties requiring knowledge of Real Estate and University policies and procedures for the President and Treasurer of Harvard Real Estate, Inc. Answers correspondence. Performs stenographic functions. Arranges meetings and keeps appointment calendars. Sets up and administers Real Estate office systems and procedures. Acts as source of information on established Real Estate policies and procedures. Prepares minor financial reports and assists supervisors in the preparation of major projects concerning Real Estate budget, planning and management issues. Responsible for company's personnel records and payroll functions. Analyzes problems and directs them as appropriate. Assists with planning functions such as personnel, budget and space requirements. May distribute work and direct the work flow of office clerical employees. May screen applicants for clerical positions. Minimum requirements: Business training beyond high school required; college degree preferred; 3-5 years' secretarial experience; accurate prose and statistical typing, 55-60 wpm; good shorthand skills preferred; ability to present ideas and problems effectively both orally and in writing. Not on Harvard payroll. (11/16/79)

Secretary III. Req. 32314. Secretary to the Associate General Counsel and one attorney. Performs complex secretarial and administrative duties for the Associate General Counsel and professional staff. Organizes and follows through on all clerical procedures and keeps track of action taken and action required on legal and formal grievance matters. Composes and types correspondence, arranges meetings and takes notes at labor negotiations and grievance meetings. Screens calls. Organizes and maintains all departmental records. May coordinate meeting arrangements, requiring knowledge and understanding of specific materials and subject matter to be discussed. Performs office manager functions (payroll, petty cash, ordering supplies, etc.). Performs related duties as required. Minimum requirements: Business school training or some college helpful; 3-5 years' secretarial experience preferred; legal secretarial experience helpful; some note-taking ability; 50-60 wpm typing. (11/16/79)

Secretary III. Req. 32313. Position as secretary to the Director of University Development Office and Administrative Assistant. Performs complex secretarial and administrative duties. Answers correspondence and performs stenographic functions for supervisors. Arranges meetings and appointment schedules. Gathers, compiles and reports information relevant to supervisors' assignments. Assists with required administrative reports. Assists in preparation of departmental financial and personnel records. Aids in planning functions. Performs related duties as required. Minimum requirements: College degree preferred; 3-5 years' secretarial experience required; excellent shorthand/dictaphone skills; fund raising knowledge preferred; 60 wpm typing. (11/16/79)

Staff Assistant III. Req. 32305. Kennedy School of Government. Provides secretarial and administrative support to the Associate Dean. Types correspondence, memoranda and course material. Answers questions regarding school's policies and procedures. Screens calls. Schedules meetings and appointments. Makes travel arrangements. Sets up and maintains complex filing system which includes personal files, school files, and building construction files. Researches and gathers materials relevant to courses. Acts as liaison with new faculty and staff. Answers questions related to internal construction projects, telephone ordering, room changes, and temporary staff help. Supervises work study students. Administers parking applications and stickers. Performs related duties as required. Minimum requirements: College degree preferred; 3-5 years' secretarial experience, at least 2 within the University helpful; 65 wpm typing; shorthand or speedwriting required; dictaphone experience and organizational skills required. (11/16/79)

■ **The following jobs, described in previous issues, are still open and are posted in the Personnel Office.**

Post-doctoral Fellow. Req. 30479.
Research Fellow. Req. 30477.
Research Fellow or Research Associate. Req. 30433.
Research Associate. Req. 30417.
Electronics Technician III. Req. 30408.
Research Assistant II. Req. 30265.
Research Associate. Req. 30257.
Director of Financial Aid. Req. 30254.
Research Associate. Req. 30251.
Associate in Biological Chemistry. Req. 30069.
Research Assistant II. Req. 29948.
Editorial Assistant II. Req. 29936.
Research Assistant II. Req. 29935.
Research Assistant I or II. Req. 29931.
Secretary II, Technical. Req. 29896.
Research Fellow or Associate. Req. 29874.
Post-doctoral Research Fellow. Req. 29689.
Principal Research Associate. Req. 29650.
Secretary III. Req. 32263.
Mechanical Technician III. Req. 32256.
Coordinator, Development Information. Req. 32229.
Applications Programmer. Req. 32227.
Assistant Registrar of the Summer School. Req. 32225.
Registered Nurse. Req. 32224.
Maintenance Technician III. Req. 32222.
Temporary Master Lighting Technician. Req. 32193.
Temporary Costumer. Req. 32192.
Temporary Master Technician. Req. 32189.
Boat Builder. Req. 32184.
Secretary III. Req. 32183.
Temporary Sr. Research Associate. Req. 32182.
Planned Giving Officer. Req. 32157.
Publications Coordinator. Req. 32156.
Experimental Research Machinist. Req. 32153.
Secretary II, Languages. Req. 32152.
Internal Audit Supervisor. Req. 32148.
Communications Analyst. Req. 32144.
Systems Programmer/Analyst. Req. 32123.
Sr. Data Communications Analyst. Req. 32080.
Graphic Arts Buyer. Req. 32079.
Sr. Small Computer Analyst. Req. 32076.
Secretary II. Req. 32063.
Accountant/Analyst. Req. 31993.
Research Assistant II. Req. 31991.
Experimental Research Machinist. Req. 31989.
Television Studio Production Manager. Req. 31987.
Faculty Librarian. Req. 31953.
PT Crew Supervisor. Req. 31880.
Associate Director. Req. 31851.
Application Programmer/Analyst. Req. 31804.
Electrical Engineer. Req. 31660.
Project Scientist/Engineer. Req. 31659.
Psychiatrist. Req. 31617.
Systems Programmer/Analyst. Req. 31517.
Senior Accountant. Req. 31319.
Sr. Applications Programmer/Analyst. Req. 31194.
PT Registered Nurse. Req. 31082.
Librarian of Harvard College. Req. 31063.
Director of the Office for Information Technology. Req. 28587.
Assistant Professor. Req. 28394.
Assistant Professor. Req. 28393.
PT Assistant Physician. Req. 28380.
Electronics Design Engineer or Physicist. Req. 28324.
Research Fellow. Req. 28177.
Mechanical Systems Engineer. Req. 28133.

Calendar

Events sponsored by the University—its departments, schools, centers, organizations, affiliated hospitals, and its recognized student organizations—are published in the Calendar. Events sponsored by outside organizations cannot be included.

Notices should be typewritten or printed (release blanks are available on request). They should reach the Calendar Editor at the *Gazette* office, Holyoke 1000, **by the Friday a week before publication.**

Talk

Friday 30 Nov

"Poetic Transformations and Mythic Structure in the Autobiography of the Archpriest Avvakum."‡ (Russian Research Center) Literary luncheon talk by Assistant Professor Priscilla Hunt (Russian), Amherst College. Lounge, second floor, Coolidge Hall, 1737 Cambridge St., 1 p.m.

Workshop† (Henry A. Murray Research Center, Radcliffe) To introduce researchers and students to the Center and its resources of social science data on educated women. Buckingham House, 77 Brattle St., 2 p.m. (Call 495-8140 if interested in attending or for more information)

"The Legacy of Hiroshima and Nagasaki: The Evolution of Japan's Postwar Peace Movement."† (Japan Forum) Lecture with Professor Tadatoshi Akiba, Dept. of Mathematics, Tufts University, and U.S. coordinator of the Hibakusha Travel Grant Program sponsored by the Hiroshima Internat'l Cultural Foundation. Seminar Room 2, Coolidge Hall, 1737 Cambridge St., 4 p.m.

"Electron Conduction and Localization in Two Dimensions."† (Division of Applied Sciences) Atoms, Molecules, and Condensed Matter Seminar with Robert C. Dynes, Bell Laboratories. Room 209, Pierce, 4 p.m.

Talk† (Eliot House) At special opening of "Primary Care in the 1930s. Working People Consulting the Doctor: 56 Photographs from the Farm Security Administration." (See Exhibitions.) By Dr. John D. Stoeckle, Associate Professor of Clinical Medicine and Chief of Clinics, MGH; Mark D. Smith, medical student, University of North Carolina at Chapel Hill; and Roswell Angier, photographer and Director of Photography, Eliot House. Eliot House, 8 p.m.

"Jewish Philosophy and the Renaissance."† (H–R Hillel) Lecture by Alfred Ivry, Walter S. Hilborn Professor of Judaic Studies, Brandeis University. Riesman Center, 74 Mt. Auburn St., 8.45 p.m.

Sunday 2 Dec

"Poland and the 20th Century."† (Polish Cultural Institute of New England–Russian Research Center) Lecture by Adam Ulam, Gurney Professor of History and Political Science. Phillips Brooks, 2 p.m.

"Blacks and the Reality of Economic Discrimination."† (Leverett House Black Table–H–R Black Students Association) Panel discussion. Lecture Hall A, Science Center, 3 p.m.

"Modern Spain and the Jews."† (H–R Hillel) Lecture by Yosef Yerushalmi, Jacob E. Safra Professor of Jewish History and Sephardic Civilizations. Riesman Center, 74 Mt. Auburn St., 4 p.m.

Monday 3 Dec

Lecture‡ (Management Consulting Club, Business School) By Resources Planning Associates. Room 110, Aldrich Hall, HBS, 3 p.m.

"Contributions of Gas Phase Ion Equilibria Towards Understanding of Stabilities and Solvation of Ions."† (Dept. of Chemistry) Organic Colloquium with Professor F. Kebarle, University of Alberta. Room MB-23, Mallinckrodt, 4.15 p.m. Refreshments, Room MB-9, lower lobby, 3.45 p.m.

"Further Thoughts on the Question of Human Nature in Ancient China."† (Council on East Asian Studies) Pre-modern China Seminar with Benjamin I. Schwartz, Leroy B. Williams Professor of History and Political Science. Seminar Room 1, Coolidge Hall, 1737 Cambridge St., 4 p.m.

"Was Religious Doubt Regarded as a Sin in the Middle Ages?"† (Dept. of History) Lecture by Alexander Murray, Lecturer in History, University of Newcastle-upon-Tyne. Room 104, Harvard Hall, 4 p.m.

"Management and Control of Distributed Processors."† (Program on Information Resources Policy) Seminar with Richard A. MacKinnon, Manager, Cambridge Scientific Center, IBM. Room 241, Aiken Computation Lab., 4 p.m.

"Authority, Power, and Hegemony: Internat'l Regimes and Alternative Patterns of National Development."† (Center for Internat'l Affairs) Seminar on North–South Relations with Professor John Ruggie. Room 2, Coolidge Hall, 1737 Cambridge St., 4 p.m.

"Jet Lag for Pedestrians; Circadian Rhythms in Red Tide."† (Dept. of Physics) Colloquium with Professor William T. Vetterling. Room 250, Jefferson, 4.30 p.m. Tea, Room 461, 4 p.m.

Lecture‡ (Finance Club, Business School) By Armand Hammer, Chairman and CEO, Occidental Petroleum. Room 30, Burden Hall, HBS, 4.15 p.m.

"Shakespeare Today."† (Charles Eliot Norton Lectures) Third of six lectures on "Wanted: A New Humanism." By Dame Helen Gardner, Professor of English Emerita, Oxford University. Room 105, Emerson, 4.30 p.m.

"Antropologia del Tema Celestinesco."† (Dept. of Romance Languages and Literatures). Lecture in Spanish by Professor Francisco Marquez (Romance Languages and Literatures). Auditorium, Boylston, 8 p.m.

Tuesday 4 Dec

"Barcelona: From Gothic to Gaudi."† (Fogg Art Museum) Lecture by José Luis Sert, former Dean, Graduate School of Design. Fogg, 10.30 a.m. and 8 p.m. (Admission $7; Friends of the Fogg $5—for reservations, call 495-4544)

Lecture‡ (CAE Club, Business School) By James Shepley, President, Time, Inc. Room 30, Burden Hall, HBS, 2.45 p.m.

Lecture‡ (Real Estate Club, Business School) By Ezra Grossman and Barry Wilder, Goldman Sachs. Lounge, McCulloch Hall, HBS, 3.30 p.m.

"A Direct Test of Relativistic Time Dilation."† (Dept. of Physics) Third in a series of four Morris Loeb Lectures by Emilio Picasso, Morris Loeb Lecturer on Physics. Room 256, Jefferson, 4 p.m.

"Odysseus Elytis: The Sun, the Sea, and Immortality."† (Dept. of Comparative Literature–George Seferis Chair of Modern Greek Studies) Lecture by George P. Savidis, George Seferis Professor of Modern Greek Studies, on this year's recipient of the Nobel Prize in literature. Auditorium, Boylston, 5 p.m.

Job Seminar* (Internships Sub-Committee, Student Advisory Committee, Institute of Politics) On finding summer jobs in the public sector. With former Governor Michael Dukakis; former Congressman Michael Harrington; Rick Howard, OCS-OCL; Susan McLane, Fellow, IOP, state Senator-elect, from New Hampshire. Room 150, Kennedy School of Government, 7.30 p.m.

"Intimacy versus Explanation: The Divergence of Japanese and Western World Views."† (H–R Buddhist Studies Association) Lecture and discussion with Tom Kasulis, Mellon Faculty Fellow in East Asian Languages and Civilizations, and Assistant Professor of Philosophy, University of Hawaii. Junior Common Room, Lowell, 8 p.m.

Reading† (Harvard Advocate) By John Irving, from his works. Lower Common Room, Adams House, 8 p.m. (Admission $2; students $1.50—for more information, call the Advocate at 495-7820)

"Sports and Diplomacy."† (Kennedy School of Government) Talk by Arnold "Red" Auerbach, General Manager, Boston Celtics. Forum, Kennedy School, 7.30 p.m.

Wednesday 5 Dec

"Photosynthetic Adaptations to Sun and Shade Environments."† (Dept. of Biology) Special Natural History Seminar with James Teeri, Dept. of Biology, University of Chicago. Main Lecture Room, Biological Labs., 12 noon. Bring your own lunch.

Women In Industry: Seminar and Site Visit† (Radcliffe Forum) First National Bank of Boston offices. Bus leaves from Cronkhite Graduate Center, 3 p.m.

"Portraits and Elegies."† (Bunting Institute, Radcliffe) A poetry reading by Gjertrud Schnackenberg, poet, Bunting Institute. First floor, Agassiz House, Radcliffe Yard, 4 p.m.

"Mechanical Properties of Ultrafine Filamentary Composites."† (Division of Applied Sciences) Applied Mechanics Colloquium with Associate Professor Joze Bevk (Applied Physics). Room 209, Pierce, 4 p.m. Coffee, Brooks Room, following

Lecture‡ (Transportation Club, Business School) By J. Willard Marriott, Jr., President, Marriott Corp. Room 20, Burden Hall, HBS, 4 p.m.

"Women's Studies and Contemporary Consciousness."† (Isabel MacCaffrey Lectures on Women's Studies) Lecture by Associate Professor Catharine R. Stimpson (English), Barnard College, and Editor of "Signs." Auditorium, Boylston, 7.30 p.m. Ticknor Lounge, following

"Alaska: Our Unknown State."† (Master of Public Health Program, SPH) Subtitle: "A Native Alaskan Reflects on These Changing Times." Lecture and slide show by Dr. Ted Mala, MPH student. Kresge G-1 Auditorium, SPH, 677 Huntington Ave., Boston, 4.30 p.m.

"What's Happening Inside America's Children."† (United Ministries–First Parish in Cambridge–Lowell Institute–MIT Chaplains) Cambridge Forum series "Problems and Prospects." With Thomas J. Cottle, Lecturer in Psychology, sociologist, author. 3 Church St., 8 p.m.

"Superconductivity."† (Science Center) Research Lectures for Non-Specialists series with Professor Michael Tinkham (Physics), and Gordon McKay Professor of Applied Physics. Lecture Hall B, Science Center, 8 p.m.

Thursday 6 Dec

"Diversity of Trees in Tropical Australian Forests."† (Dept. of Biology) Natural History Seminar with Joseph Connell, Dept. of Biology, University of California, Santa Barbara. Main Lecture Room, Biological Labs., 12 noon. Bring your own lunch.

Lecture‡ (International Business Club, Business School) By Alfred Brittain, III, Chairman, Bankers Trust Co. Room 30, Burden Hall, HBS, 3 p.m.

Lecture‡ (Marketing/CAE Club, Business School) By Robert Summer, President, RCA Records. Burden Hall, HBS, 4 p.m.

"VLA Observations of M87."† (Center for Astrophysics) Colloquium with Frazer N. Owen, National Radio Astronomy Observatory. Phillips Auditorium, 60 Garden St., 4.30 p.m. Tea, 4 p.m.

"Some Topic on Explanation."† (Harvard Philosophy Club) Lecture by Assistant Professor Barbara Klein (Philosophy), Yale University. Room 305, Emerson, 4 p.m.

"A Possible Electromagnetic Detector for Gravitational Waves."† (Dept. of Physics) Fourth in a series of four Morris Loeb Lectures by Emilio Picasso, Morris Loeb Lecturer on Physics. Room 256, Jefferson, 4 p.m.

"The Long Gestation of the Neutrino."† (Dept. of the History of Science) Lecture by Professor David L. Anderson (Physics), Oberlin College. Room 108, Emerson, 4 p.m.

"Recent Research on Soviet Regional Development."† (Ukrainian Research Institute) Seminar in Ukrainian Studies with Professor Ivan Koropeckyj (Economics), Temple University. Seminar Room, 1583 Mass. Ave., 4 p.m.

"The Medieval Poem in its Manuscript Context."† (Dept. of English and American Literature and Language) Lecture by Professor Fred Robinson, Yale University. Forum Room, Lamont Library, 4.30 p.m.

Harvard–MIT Inorganic Colloquium† (Dept. of Chemistry) With M. Stanley Whittingham, Exxon Research and Engineering Corp. Room 4-370, MIT, 5 p.m.

"Archaism or Cultural Recycling in Ancient America."† (Semitic Museum) Cambridge Archaeological Seminar with Clemency Coggins, Peabody Museum. Semitic Museum, 6 Divinity Ave., 5.15 p.m.

"The Lantern of Ely Cathedral."† (Harvard Mediaeval Society) Lecture by Professor L. E. Goodman (Civil Engineering), University of Minnesota. Holiday party following. Junior Common Room, Lowell House, 7 p.m.

"Why Did Moses Have a Sister?"† (Dept. of Anthropology–Peabody Museum) Lecture by Sir Edmund Leach, F.B.A., former Provost, King's College, Cambridge, and former president, Royal Anthropological Institute. Lecture Hall, Geological Museum, 24 Oxford St., 8 p.m. Reception

Poetry Reading† (Lamont Library) By Stephen Dobyns. Poetry Room, Lamont, 8 p.m. Refreshments

Friday 7 Dec

"The Psychological and Social Predictors of Coronary Heart Disease."† (Dept. of Psychology and Social Relations) Departmental colloquium with Dr. David Jenkins, Boston University Medical School. Room 1, William James Hall, 4 p.m.

"The Recent U.S.–Japan 'Trade War': Images and Realities."† (Japan Forum) Lecture by Edward J. Lincoln, economist, U.S.–Japan Trade Council, Washington, D.C., and Professorial Lecturer, School of Advanced Internat'l Studies, Johns Hopkins University. Seminar Room 2, Coolidge Hall, 1737 Cambridge St., 4 p.m.

"ERA: Now or Never."† (Radcliffe Forum) Friday at the Forum Lecture by Betsy Dunn, Gutman Library. Radcliffe Forum, Agassiz House, Radcliffe Yard, 5 p.m.

"FSA Photographers and FSA Photography."† (Eliot House) Lecture by Dr. Robert Coles, Professor of Medical Ethics and Research Psychiatrists, UHS. In conjunction with the exhibit "Primary Care in the 1930s. Working People Consulting the Doctor" (see Exhibitions). Eliot House, 8 p.m.

Sunday 9 Dec

"Honoré Daumier, 1808–1879."† (Fogg Art Museum) Gallery talk by James Cuno, organizer of the Daumier exhibit. Fogg, 2.30 p.m.

Religion

Harvard Islamic Society†
Fri., Nov. 30—*Juma* prayers. Peabody Room, third floor, Phillips Brooks, 1 p.m.

H–R Hillel Society†
Fri., Nov. 30—Orthodox, 3.58 p.m. Traditional Egalitarian, 3.58 p.m. Reform, 5.30 p.m. Conservative, 7.30 p.m.
Candlelighting time: 3.53 p.m.
Weekdly Bible portion: Genesis XXVIII, 10-XXII, 3; Hosea XII, 13-XIV, 10
Sat., Dec. 1—Orthodox, 9 a.m. Traditional Egalitarian, 9.30 a.m. Worship and study, 10 a.m.

All services held at Riesman Center, 74 Mt. Auburn St.

Memorial Church†
Sunday Services—11 a.m.
Dec. 2—Rev. Jeffrey P. Cave, Assistant Minister in the Memorial Church
Dec. 9—Rev. Peter J. Gomes, Minister in the Memorial Church
Dec. 16—Rev. Jeffrey P. Cave
Dec. 23—*A Service of Lessons and Carols,* conducted by Mr. Gomes
Morning Prayers—8.45 a.m.
Dec. 3—Rev. Linda Brebner, Old Cambridge Baptist Church, Cambridge
Dec. 4—Preston N. Williams, Houghton Professor of Theology and Contemporary Change
Dec. 5—Samuel Counter, Associate Professor of Biology
Dec. 6—David Aloian, Gen'l Sec'y, Associated Harvard Alumni
Dec. 7—Loretta Gerarda Welsh, Merrill Fellow
Dec. 8—Rev. Edwin Lane, United Ministry at Harvard and Radcliffe (Unitarian)
A Service of Holy Communion will be held in Appleton Chapel at 12.15 p.m., Sun., Dec. 2 following the 11 o'clock service. Rev. Gomes will conduct the service.

H–R Episcopal Chaplaincy†
Sun., Dec. 2—Communion Service. Christ Church, Zero Garden St., 5 p.m.

Christian Science Organization*†
Tues., Dec. 4—Regular weekly meeting including readings from the Bible and the works of Mary Baker Eddy, testimonies and discussion. Shepherd Room, Phillips Brooks, 6.15 p.m.

Medicine

Peter Bent Brigham Hospital‡
Fri., Nov. 30—Medical Grand Rounds: "Orthostatic Hypotension: Physiological Considerations in Treatment." Dr. Aram Chobanian, Professor of Medicine, Boston University School of Medicine. 10 a.m.

Fri., Dec. 7—Medical Grand Rounds: "The Coagulation System in Malignancy." Dr. James L. Tullis Chief of Medicine, New England Deaconess Hospital. 10 a.m.

—Main Amphitheatre, PBBH

Mass. Mental Health Center†
Fri., Nov. 30—Somatic Therapy Lecture Series: "T.L.E. and Schizophrenia, the Catacolamine Connection." Dr. Janice Stevans. 11 a.m.

Wed., Dec. 5—Lecture: "The Myth of the Therapeutic Alliance With Borderline Patients." Dr. Gerald Adler, Lecturer on Psychiatry. 12 noon

—Chapel, MMHC, 74 Fenwood Rd., Boston

Laboratory of Human Reproduction and Reproductive Biology†
Fri., Nov. 30—Seminar: "Neural Control of Prolactin and Gonadotropins in the Rhesus Monkey." Dr. Harold Spies, Chairman, Division of Reproductive Biology, Oregon Regional Primate Research Center, Beaverton, Oregon.

Fri., Dec. 7—Seminar: "Sperm Transformations During Fertilization." Dr. Frank J. Longo, Professor of Anatomy, College of Medicine, University of Iowa, Iowa City.

—Roy O. Greep Seminar Room, LHRRB, 12.15 p.m. Tea and coffee, 12noon

Mt. Auburn Hospital†
Mon., Dec. 3—Ob/Gyn Grand Rounds: "Colposcopy." Dr. Steven Sandler, Ob/Gyn Staff, MAH. 7.30 a.m.

Tues., Dec. 4—Surgery Grand Rounds: "Update on Hyperalimentation." Dr. Douglas Wilmore, Associate Professor of Surgery. 8 a.m.

Psychiatry Grand Rounds: "Creativity and the Paranoid Process." Dr. William Meissner, Associate Clinical Professor of Psychiatry, and Faculty, Boston Psychoanalytic Institute. 12.15 p.m.

Thurs., Dec. 6—Medical Grand Rounds: "Molecular Mechanisms of Viral Induced Disease." Dr. Bernard Fields, Peter Bent Brigham Hospital. 8.15 a.m.

—Auditorium, Mt. Auburn

Dept. of Psychiatry, HMS–Cambridge Hospital*
Mon., Dec. 3—Grand Rounds: "Psychoanalytic Psychotherapy of Chronic Patients in the Community: Focus on Transference." Dr. George S. Sigel, Director, West Broadway Unit, Bay Cove Mental Health Center, and Associate Clinical Professor, Tufts School of Medicine. Auditorium, Nurses Residence, Cambridge Hospital, 12 noon

Dept. of Pathology, HMS†
Mon., Dec. 3—Combined Pathology Grand Rounds and Seminar: "The Issue of Macrophage Heterogeneity in Immune Induction." Dr. Emil R. Unanue, Professor of Immunopathology. Main Amphitheatre, Peter Bent Brigham Hospital, 12.30 p.m.

Dept. of Biological Chemistry, HMS*
Mon., Dec. 3—Seminar: "Inheritance of the Antibody Repertoire." Dr. Malcolm L. Gefter, Dept. of Biology, MIT. Cannon Room, fifth floor, Bldg. C, HMS, 4.30 p.m. Refreshments, Room 543, 4 p.m.

Countway Library†
Tues., Dec. 4—Seminar series on Major medical reference works: "Health Care Delivery." Planned by Medical Area librarians. Auditorium, fifth floor, Countway, 11.45 a.m. (Seating limited—call Vickie Van Dop, 732-2134; coffee and tea, bring your lunch)

Dept. of Radiology, PBBH*
Tues., Dec. 4—Radiology Grand Rounds: "Quantitative Radionuclide Assessment of Ventricular Performance." Dr. B. Leonard Holman, Associate Professor of Radiology. Main Amphitheatre, Peter Bent Brigham Hospital, 12.30 p.m.

Beth Israel Hospital†
Tues., Dec. 4—Seminar in Medicine: "Pseudocysts of the Pancreas." Alexander J. Walt, Wayne State University School of Medicine, Detroit, Sherman Auditorium, BIH, 4 p.m.

Thurs., Dec. 6—Medical Grand Rounds: "Cost Control." Dr. Mitchell T. Rabkin, Associate Professor of Medicine and General Director, BIH. Sherman Auditorium, 9 a.m.

Children's Hospital Medical Center*
Wed., Dec. 5—Pediatric Postgraduate Seminar: "Hemangioma, Nevus, Cleft Lip and Palate." Dr. George H. Gifford, Jr., Assistant Clinical Professor of Surgery. 11 a.m.

Medical Grand Rounds: "Management of Increased Intracranial Pressure in Acutely Ill Patients." Dr. Mark Rogers, Director, Pediatric ICU, Johns Hopkins Hospital. 12 noon

—Jimmy Fund Auditorium, 35 Binney St., Boston

Dept. of Nutrition, SPH*
Wed., Dec. 5—Seminar: "A Vitamin E-Responsive Anemia in the Owl Monkey." Paul S. Brady, Research Fellow in Nutrition. Room 102, Nutrition Library, Bldg. 2, SPH, 665 Huntington Ave., Boston, 4 p.m.

Dept. of Pharmacology, HMS†
Wed., Dec. 5—Seminar: "The Mode of Coupling Between the Adenosine Receptor and the β-Adrenergic Receptor to Adenylate Cyclase." Dr. Alexander Levitzki. Cannon Room, fifth floor, Bldg. C, HMS, 4.30 p.m.

Committee on Immunology, HMS†
Wed., Dec. 5—Seminar: "The Regulation of the Immune Response by Anti-Idiotypic Antibodies." Dr. Gregory W. Siskind, Division of Allergy and Immunology, Cornell University Medical College, New York. Amphitheatre, Bldg. D, HMS, 5 p.m. Coffee, 4.30 p.m.

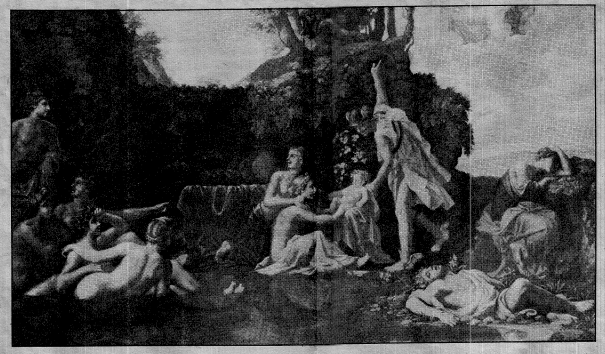
Mass. General Hospital†
Wed., Dec. 5—Research Lecture Series: "Transport II." Dennis Ausiello, Chief, Renal Research, MGH. Ether Dome, Bulfinch Bldg., fourth floor, MGH, 5 p.m.

Dept. of Anatomy, HMS†
Thurs., Dec. 6—Seminar: "A Fluid Dynamical View of Some Cell Phenomena." Professor Harvey P. Greenspan (Applied Mathematics), MIT. Room 349, Bldg. B, HMS, 4 p.m.

Dept. of Neurobiology, HMS*
Thurs., Dec. 6—Lecture: "A Golgi-Electron Microscope Study of the Rat Visual Cor-

(Continued on page 8)

"Dionysos and His Circle," a two-month exhibition on the Greek god of wine, opens on December 10 at the Fogg. Through sculpture, graphic art, ceramics, and coins, the show will survey images of the god from the sixth century B.C. to the present in selections made from Harvard collections by Caroline Houser, Assistant Professor of Fine Arts at Smith. TOP: Poussin's 1657 oil *The Infant Bacchus Entrusted to the Nymphs.* BOTTOM: *Head of Dionysos* (silver coin, obverse); wine-mixing bowl showing *Bacchus and Satyrs* (ca. 500 B.C.); and reverse of the coin at left.









† Open to the public
* Open to members of the University
‡ Open only to those with a professional interest in the subject
§ Tickets at the Holyoke Center Ticket Office

(Continued from page 7)

tex." Alan Peters, Boston University School of Medicine. Cannon Room, fifth floor, Bldg. C, HMS, 4.30 p.m.

Joint Center for Radiation Therapy†
Thurs., Dec. 6—Seminar: "Measurements of Carcinoma of the Human Breast and Their Meaning for Therapists." Professor R. H. Thomlinson, Mt. Vernon Hospital, Marie Curie Research Wing, Northwood, England. Room 122, Shields Warren Radiation Lab., 50 Binney St., Boston, 4.30 p.m. Coffee, 4.15 p.m.

Harvard Medical School†
Thurs., Dec. 6—Annual Macomber Lecture: "Prenatal Hormones and Human Sex Related Behavior." Dr. Anke Ehrhardt, Pediatric Behavioral Endocrinologist in Psychiatry Service, Columbia-Presbyterian Medical Center, New York. Amphitheatre, Bldg. E, HMS, 7 p.m.

Music

Dunster House Music Society†
Fri., Nov. 30—Clementi and Beethoven piano trios. Members of the Mather House Chamber Music Program, 5.30 p.m.

Sun., Dec. 2—Brandenburg Party. Experienced strings invited to an open reading of Brahms: Tragic Overture; Mozart: Horn Concerto No. 3, soloist, James Ross '81; Liszt: Piano Concerto No. 1 in E Flat, soloist, Robin Avery '80. Conductors: Joshua Gilinsky '81; Michael Pakaluk '79; Christ Palmer '80. Bring your own stand. Sherry and cookies. 3 p.m.

Wed., Dec. 5—Shubert: Op. 144, Alegro Fourhand concert (Lebensstuerme) in A Minor. Leon Kirchner and Lisa Goldman. Mozart: Sonata K 521 in C Major; Schubert: Op. 10, Variations in E Minor. 5.30 p.m.

Fri., Dec. 7—Haydn and Mozart: Piano trios. Members of the Mather House Chamber Music program. 5.30 p.m.

Sat., Dec. 8—Cage: Concert for Piano. Stephen Drury, piano. Bach: Preludes and fugues; Chopin: Etudes. 5.30 p.m.

Sun., Dec. 9—Ravel: Jeux d'eau. Alfred Shapere '82, piano. Schubert: Moments musicaux; Beethoven: Sonata, Op. 109; Chopin: Ballade in G Minor. 3 p.m.

—Library, Dunster

Kirkland House Music Society†
Sun., Dec. 2—Christmas Choral Music, including Bach's Cantata #142: Uns ist ein Kind geboren. The Cambridge Chorale. Ken Seitz, musical director. Junior Common Room, Kirkland, 4 p.m.

Fogg Art Museum†
Sun., Dec. 2—Deborah Nathan, flute; and Pauline Lederev, piano. Classical flute literature of Bach, Prokofiev, Boehm.

Sun., Dec. 9—The Harvard University Choir. Christmas carols. John Ferris, choirmaster.

Sun., Dec. 16—Much Ado, A Renaissance Consort: Medieval and late 15th-century carols and festive music. Chapel Bell Choir, United Church of Christ, Medfield.

—Fogg, 4 p.m. (Tickets $2, Friends of the Fogg $1.50—for reservations, call 495-2387)

Lowell House Musical Society†
Sun., Dec. 2—Vocal recital by Elsa Shane, soprano; Alice Wathne, piano; Suzanne John, flute. J.S. Bach: Two Sacred Arias; Schubert: Op. 10, Variations in E Minor. songs. Junior Common Room, Lowell, 4 p.m.

H-R Hillel Society†
Sun., Dec. 2—Chichester Psalms. The Hillel Choir. Riesman Center, 74 Mt. Auburn St., 8 p.m.

Busch-Reisinger Museum†
Thurs., Dec. 6—James Johnson, organ. Works of Bach, Couperin, Mendelssohn.

Thurs., Dec. 13—James Johnson, organ. Works of Bach and Mozart.

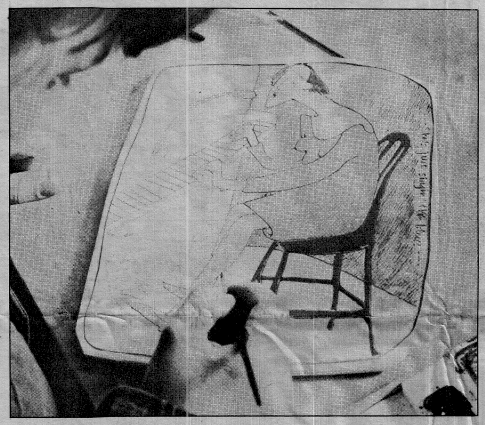
—Busch-Reisinger, 12 noon

Dept. of Chemistry†
Fri., Dec. 7—Concert in memory of A. Sprague Coolidge. Piano quartets: Mozart, G Minor, Brahms, C Minor. Also unannounced encore of work never previously performed in this area. Luise Vosgerchian, piano; Janet Packer, violin; Mary Hadcock, viola; and Fred Goldstein, cello. Paine Hall, Music Bldg., 4 p.m. (Contributions for an endowment fund for the concerts welcome—make checks out to Harvard University, Coolidge Concert Fund, and send to Chairman's Office, Dept. of Chemistry)

The Kuumba Singers†
Fri., Dec. 7—Annual Christmas Concert. Featuring original and contemporary gospel works, jubilees, and spirituals. Memorial Church, 7.30 p.m.

Harvard-Radcliffe Graduate Chorale†§
Fri., Dec. 7—Christmas Concert: Bach: Cantata No. 61; Poulenc: Christmas Motets; Vivaldi: Gloria. Conducted by Mary Beekman. Harvard-Epworth Church, 1555 Mass. Ave., 8 p.m. (Tickets $2—HCTO or at the door)

Harvard-Radcliffe Collegium Musicum-Collegium Festival Orchestra†§
Fri., Sat., Dec. 7, 8—J.S. Bach's Christmas Oratorio, Parts I-III. Hazel O'Donnell, soprano; Jeffrey Gall, countertenor; Ray deVoll, tenor; and Matthew Dooley, bass. Sanders Theatre, 8 p.m. (Tickets $5 and $4; students $2—at HCTO or at the door—for more information, call 495-5730)



Mimi Kirchner, a member of the Radcliffe Pottery Studio, glazes a hanging plaque in preparation for this year's Holiday Show and Sale. Opening festivities are scheduled for Thursday, December 13, from 5 to 9 p.m. The sale, which includes handmade ceramics of all varieties, will continue through Saturday, December 15. For more information, call 354-8705 or 495-8680. (Photo: Polly Ham)

Harvard Group for New Music†
Sat., Dec. 8—Six new works by Reich, Bourland, Brief, Blauvelt, Myska, and Kyr. Holmes Hall, 56 Linnaean St., 8.30 p.m.

Harvard Wind Ensemble†
Sun., Dec. 9—Concert, featuring Kenneth Radnofsky, saxophone soloist in the Ingolf Dahl saxophone concerto. Works of Khachaturian, Wagner, Work, Beethoven, Hindemith, and Schubert. Conductor: Thomas G. Everett. Paine Hall, Music Bldg., 3 p.m.

Memorial Church†
Mon., Tues., Dec. 10, 11—Traditional Carol Services. University Choir under the direction of John Ferris, University Organist and Choirmaster. Memorial Church, Mon. at 4.30 p.m.; Tues. at 4.30 and 8.15 p.m.

Theater

Loeb Drama Center†
Fri.-Sun., Nov. 30-Dec. 2; Wed.-Sat., Dec. 5-8—"The Royal Family," by George S. Kaufman and Edna Ferber. A Harvard College Production. Loeb, 8 p.m., except Sun., Dec. 2 at 2.30 p.m.

—Tickets $3.50, except Sat. $4.50—at the Loeb Box Office, 864-2630

Harvard Gilbert & Sullivan Players†§
Fri.-Sun., Nov. 30-Dec. 2; Wed.-Sat., Dec. 5-8—"The Mikado." Producer: Mark Stone; director: Shipley Musnon; musical direction: John Posner. Agassiz Theatre, Radcliffe Yard, 8 p.m. except Dec. 1 and 2 at 2 p.m. (Tickets $3 and $4 weeknights and matinees; $4 and $5 Fri. and Sat.—HCTO and at the door if still available)

Currier House Drama Society†
"The Norman Conquests": *Three plays by Alan Ayckbourn.*
Sat., Dec. 1; Wed., Dec. 5; Fri., Dec. 7—"Table Manners." Dec. 5 at 8.15 p.m.; Dec. 1 and 7 at 11 p.m.
Fri., Nov. 30; Wed., Dec. 5; Thurs., Dec. 6—"Living Together." Nov. 30 and Dec. 6 at 8.15 p.m.; Dec. 5 at 11 p.m.
Fri., Nov. 30; Sat., Dec. 1; Thurs., Dec. 6; Fri., Dec. 7—"Round and Round the Garden." Dec. 1 and 7 at 8.15 p.m.; Nov. 30 and Dec. 6 at 11 p.m.
—Tickets $2; $5 for the series—available at the door

Films

Carpenter Center-Center Screen†
Fri., Nov. 30—"The Build Up" by Yasuzo Masumura. 7 and 9.30 p.m.
Sat., Dec. 1—"Pigs and Battleships" by Shohei Imamura. 2.30 and 5 p.m.
—Two films above sponsored by Japan Institute presented with Harvard Film Archive. At Carpenter Center, no charge.
Sat., Sun., Dec. 1, 2—"The Whole Shootin' Match" by Eagle Pennell. New England premiere. Carpenter, 7.30 and 9.30 p.m. (Admission $2)
Fri., Dec. 7—"The Ceremony" by Nagisa Oshima. 7 and 9.30 p.m.
Sat., Dec. 8—"Summer Soldiers" by Hiroshi Teshigahara. 2 and 4.30 p.m.
—Two films above sponsored by Japan Institute presented with Harvard Film Archive. At Carpenter Center, no charge.
Sat., Sun., Dec. 8, 9—"Deep Hearts" and "Dead Birds" by Robert Gardner. 7.30 and 9.30 p.m. (Admission $2)
Fri., Dec. 14—"Solar Eclipse" by Satsuo Yamamoto. 7 and 9.55 p.m.
Sat., Dec. 15—"The Far Road" by Sachiko Hidari. 2.30 and 5 p.m.
—Two films above sponsored by Japan Institute presented with Harvard Film Archive. At Carpenter Center, no charge.
Sat., Sun., Dec. 15, 16—"The Spiders" by Fritz Lang. Carpenter Center, Part I, 7.30 p.m.; Part II, 9.30 p.m. (Admission $2)

Law School Dormitory Council†
Fri., Nov. 30—"The Producers." Mel Brooks. Dining Room, Harkness Commons, 8 and 10 p.m. (Admission $1.25)

Quad Films†
Fri., Sat., Nov. 30, Dec. 1—"The Exterminating Angel." The surrealistic banquet film by Luis Bunuel. 8 p.m. Fri.; 8 and 10 p.m. Sat.
Fri., Sat., Dec. 7, 8—"Mr. Hulot's Holiday." First film by Jacques Tati, starring himself. A Cannes prizewinner. 8 p.m. Fri.; 8 and 10 p.m. Sat.
—Cinema, Hilles Library (Admission $1)

Dunster House Film Society†
Fri., Sat., Nov. 30, Dec. 1—Dada, a Surrealism festival. "Bambi Meets Godzilla"; Nixon's "Old Glory Speech"; Bunuel's "Las Hurdes" and "Un Chien Andalou"; also, four Man Ray shorts. Dining Hall, J-Entry, Dunster, 8 and 10 p.m. (Admission $1)

Adams House Film Society†
Fri., Sat., Nov. 30, Dec. 1—"The Sound of Music." Winner of five Academy Awards: Rodgers and Hammerstein score; directed by Robert Wise. Lecture Hall B, Science Center, 7 and 10 p.m. (Admission $1.50)
Fri., Sat., Dec. 7, 8—"Meet Me in St. Louis." Musical of 1903 World's Fair with Judy Garland. Dining Hall, Adams, 8 and 10 p.m. (Admission $1)

H-R Hillel Society†
Sat., Dec. 1—"Funny Girl." Riesman Center, 74 Mt. Auburn St., 7.30 and 10 p.m. (Admission $1.50)

United Ministries†
Sun., Dec. 2"Winstanley" (1975), by Kevin Brownlow and Andrew Mollo. Boston Premiere.
Thurs., Dec. 6—"Rain or Shine" (1930), by Frank Capra. With Joe Cook, Tom Howard, Louise Fazenda. First Boston showing in almost 50 years.
Sun., Dec. 9—"Brothers and Sisters of the Toda Family" (1941), by Yasujiro Ozu.
Thurs., Dec. 13—"Yolanda and the Thief" (1945). By Vincent Minelli with Fred Astaire.
Sun., Dec. 16—"An American in Paris" (1951), With Gene Kelly, Leslie Caron, Oscar Levant.
—Harvard-Epworth Church (United Methodist), 1555 Mass. Ave., 7.30 p.m. (Contribution $1.50)

Black Star Theatre†
Sun., Dec. 2—"Women in Sports" and "The Flashettes" (inner-city girls' track team). Lecture Hall A, Science Center, 8 p.m.

Harvard Film Archive Series†
Thurs., Dec. 6—"Shoot the Piano Player" (1960), by Francois Truffaut, and "Frank Film" (1973), by Frank Mouris.
Thurs., Dec. 13—"Mr. Smith Goes to Washington" (1939), by Frank Capra, and "Max Linder: Comic Genius" (1905-1912), by Gabrielle Leville.
—Lecture Hall, Carpenter Center, 5 p.m. (Contribution $1—students with ID 50¢)

Carpenter Center†
Thurs., Dec. 6—*Visions at T Minus Zero*, a collection of short films and film clips reflecting some of the vast spectrum of human interaction with the universe, produced and introduced by John Teton '70, filmmaker. "A Trip to the Moon" (Georges Melies, 1902); "The Flying House" (Winsor McKay, 1916); "Betty Boop's Ups and Downs" (Max and Dave Fleischer, 1932); "When Worlds Collide" (Rudolph Mate, 1951—excerpt); "Powers of Ten" (Charles Eames, 1978); "B'raesheet" (John Teton, 1973); "Spaceborne" (NASA/Phil Dauber, 1977); "Lapis" (James Whitney, 1966); "Music of the Spheres" (Jordan Belson, 1977). Lecture Hall, Carpenter, 8 p.m. (Admission $1—students with ID 50¢)

Exhibitions

Arnold Arboretum
Administration Bldg.: New England Gardens Open to the Public, 35 platinum

Faculty of Arts and Sciences—Memorial Minute

At a meeting of the Faculty of Arts and Sciences on October 16, the following Minute was placed upon the records.

Isabel G. MacCaffrey

A Scholar and Wit, She Excelled also in Administration



Isabel Gamble MacCaffrey

The facts of **Isabel Gamble MacCaffrey**'s bright but brief career may be quickly told. The daughter of **Dr.** and **Mrs. Thomas Gamble** of Albany, New York, she began her education at the Girls Academy in that city, took her first degree at Swarthmore in 1946, and the next fall entered Radcliffe to study for the Ph.D. In 1949 an instructorship in English inaugurated her long and affectionate association with Bryn Mawr College, where — after time off for a Fulbright Fellowship at Cambridge in 1950-51 and a Radcliffe Ph.D. in 1954 — she rose serenely up the academic ladder to a full professorship in 1966. In 1959, three years after her marriage to **Wallace MacCaffrey**, the publication of her remarkable *Paradise Lost as Myth* earned for her a reputation that was duly signalized by a stream of honorific appointments: election to the Supervisory Committee of the English Institute in 1967, a fellowship at Girton College in 1968, a Guggenheim Fellowship in 1971, a seat on the editorial board of PMLA and a fellowship at New Hall, Cambridge, in 1975, and honorary degrees at Holy Cross and Smith in 1973 and 1978. On her husband's move from Haverford to Harvard she was named to a professorship at Tufts in 1969, and two years later to the Kenan chair at Harvard. Here, in what was to be the final phase of her career, she quickly made her vital presence felt, not only in the Department of English and in the Committee on History and Literature but also as a Syndic of the Harvard Press, an associate of Lowell House, an acting Senior Fellow in the Society of Fellows, and a brisk and forceful member of many departmental and university committees. With a gallant disregard for failing health — and despite her heavy duties in teaching and administration — in 1976 she crowned her long devotion to Renaissance literature with her masterful study of *Spenser's Allegory*. A projected work on English philosophical poetry was cut short by her untimely death on May 19, 1978.

To record the routine facts of an illustrious career — degrees conferred, books published, appointments secured, honors bestowed — is an easy ceremonial gesture on occasions such as this, but to convey something of Isabel MacCaffrey's peculiar strength and charm requires that we recapture, if we can, her most uncommon blend of delicacy with power, of mind with feeling, of an imperious and sometimes ruthless intellect with a compassionate response to frailty and failure, of the most fastidious scholarship with stunning flights of intuition, of unblinking professional probity with a gourmet's skill in cooking. Binding these and many such antitheses together was a monolithic strength of character that found expression in a roguish grin and that was rooted in a salty sense of humor. High spirited, quick, and witty, she loved to banter — at times hilariously — about the quirks of academic potentates and the foibles of the would-be great, for which she had a piercing and unerring eye. Herself an impeccable scholar and an invigorating teacher, her freedom from pretense enabled her to work effectively within the boundaries of her own capacious skills. Her invincible integrity was stamped like a signature on everything she did or wrote. Invulnerable to the customary disabilities of egotism, pride, and prickly sensitivity, she was also undaunted by pain and sickness and misfortune. Fortified by her formidable intelligence (to say nothing of her robust common sense and valor), she looked at the world cheerfully, hopefully, and a little wryly, and she was prepared for almost anything.

It was well that this was so, for her appointment as Chairman of the Committee on History and Literature required that she *had* to be prepared. Her adroit management of the students, tutors, and professors in a field where delicate sensibilities tend to be as common as high intelligence will remain a model of luck and pluck and academic cunning. Drawing on her deep reserves of patience, wit, and candor, she not only kept the peace; she also played a decisive role in negotiations that enlarged the scope and functions of this small but vital field of concentration.

The skillful academic politician was also one of the most perceptive scholar-critics of her generation. Although her lesser things — which range from the Elizabethans through Marvell and Wordsworth to Wallace Stevens — reveal the working of a mind both supple and profound, it is for her full-length books on the two greatest narrative and philosophical poems in our language — *Paradise Lost* and *The Faerie Queene* — that she will most likely be remembered. With their easy authority over voluminous and challenging materials, their strength of structure, and their wonderful lucidity of style these works stand proudly eminent in the swarm of modern studies of the English Renaissance; but they rise even higher for their boldness of conception and their range of speculation on the ways a poet's thinking is expressed in language and on the kind of knowledge it conveys.

These books, like Isabel MacCaffrey's whole career, exemplify a quality of mind and character that, as noted in the citation of her posthumous honorary degree from Smith, Milton recognized as "of a quick, ingenious and piercing spirit, acute to invent, subtle and sinewy to discourse, not beneath the reach of any point the highest that human capacity can soar to." To all who knew Isabel MacCaffrey, the relevance is clear.

Bernard Bailey
Warner Berthoff
John Clive
Herschel Baker *(Chairman)*

News Briefs

■ **Blood Drive.** The 1979 Harvard-Radcliffe Fall Blood Drive will continue today and December 3 through 7 in Memorial Hall. In the Medical Area, faculty, staff, and students can give blood on December 3 and 4 in Vanderbilt Hall.

Hours in Cambridge today and December 3, 4, and 7 will be 9:45 a.m. to 3:30 p.m. On December 5 and 6, the doors will open at 2 p.m. and close at 8 p.m. to accommodate people who cannot donate during the daytime.

To arrange a donation, fill in the registration card (mailed to all faculty and staff), indicate the best time for you, and return it to the Red Cross. Or, you may call the Red Cross at 354-7800 (Cambridge) or 536-6000 (Medical Area) to make an appointment. You can also stop by Memorial or Vanderbilt Halls during the times listed above.

Volunteers are needed to assist with telephone calls, to type registration forms, and to help staff the canteen. Those who wish to help should call **Trudy Merson**, 495-2010.

■ **Educational Aid Counseling.** Harvard faculty and staff who will have a student or spouse entering or returning to post-secondary education in the next few years might want to consider attending one in a series of Financial Aid Counseling Service seminars sponsored by the Office of Fiscal Services. Scheduled for Wednesday, December 5, the first session will take place in Room 141, Personnel Office Training Center, Memorial Hall at 4:30 p.m.

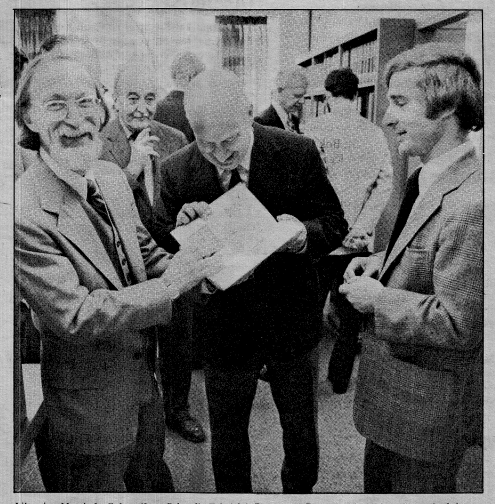
Additional sessions have been scheduled for Wednesday, December 19, Countway Library Auditorium, Harvard Medical Area, 12 to 1 p.m.; Friday, January 11, Room 120, Science Center, 12 noon; and Monday, January 14, Countway Library Auditorium, Harvard Medical Area, 4:30 to 5:30 p.m. If none of the scheduled dates are convenient, faculty and staff may contact **Richard Black**, 495-2761, Coordinator for Financial Aid, for individual appointments.

■ **Designing Courses.** The Graduate School of Design's Continuing Education Program will offer a dozen noncredit early and late evening courses beginning mid-February. Titles include: "A Beginner's Guide to Landscape Design." "Advanced Solar Design and Energy Conservation," "Planning for the 80's," "Architecture for Non-Architects," "Buying and Developing Country Land," "Coordinating the Building Process," "Workshop in Small-Scale Condominium Conversion," "Buying a Condominium," "Land-Use Law and Development," "Advanced Real Estate Financial Analysis," and "Economics of Historic Rehabilitation Development." For more information, contact **Carol Kort** at 495-2578.

■ **Coolidge Memorial Concert.** The annual chamber music concert, established in honor of the late **A. Sprague Coolidge**, Lecturer on Chemistry, will be held Friday, December 7, at 4 p.m. in Paine Hall, Music Building.

This year's program of piano quartets will feature the Mozart G Minor and the Brahms C Minor.

Admission is free but donations to the Coolidge Concert Fund will be accepted.



Librarian Morris L. Cohen (Law School); Friedrich Baron von Dungern, Consulate-General of the Federal Republic of Germany; and Associate Dean David N. Smith (International Legal Studies) examine one of more than 80 new arrivals to the Law School's German legal collection. Purchased with part of a fund from the Deutsche Forschunggsgemeinschaft (West Germany's leading national science foundation), the recently published books were formally presented at last Wednesday's annual ILS luncheon for German graduate students and visiting scholars from Germany. Baron von Dungern, prime mover in the donation, had surprising news in a brief talk: the great poet Goethe gave books to Harvard some 150 years ago. The Law School houses roughly 120,000 law books in German—more than half on Germany—giving it one of the world's most comprehensive collections of German legal materials. (Photo: Michael Nagy)



Examining the Carpenter Center's new 35mm equipment are Christine Gratto, Director of Learning From Performers, Spanish filmmaker Carlos Saura, and Vladimir Petric, Acting Curator of the Film Archives, Carpenter Center/Visual Arts. Hosted by Learning From Performers, Mr. Saura attended a three-day festival of his films, including *The Hunt*, *The Garden of Delights*, and *Cria*, and discussed his work with students. (Photo: E.B. Boatner)

CRP Transfer, Design Programs Urged by Bok

Continued from page 1)

integrated along these lines would reinforce existing programs in Architecture and Landscape Architecture and thereby strengthen Harvard's capabilities for preparing professionals for private and public careers in planning and design.

According to Mr. Bok, "We now have greater flexibility than we will ever have again to realign our public policy and our design programs in a manner that will allow us to pursue sound educational objectives more effectively. Our proposal will allow the School of Design to achieve greater coherence and unity by orienting all of its programs around a central focus on the design of physical environments.

"At the same time," Mr. Bok observed, "we will consolidate in the Kennedy School our professional programs for public service at the local, state, and national levels and thus avoid a division in the field of public policy and administration that would make no greater sense than the maintenance of two separate business schools, one for heavy industry and the other for retail management. I am pleased that present circumstances enable us to consider a reorganization that will surely serve both Faculties well over the long run."

Mr. Bok recommended that the School of Government assume administrative responsibility for the City and Regional Planning program on July 1, 1980, but indicated that a complete physical transfer of the program would have to be delayed by a few years to allow time to build new office space and classrooms at the School of Government. He added that this was an opportune time to consider the long-term location of City and Regional Planning, since that program will soon require the construction of additional space at one location or another, as well as the raising of endowment for permanent professorial appointments.

Mr. Bok also stated that the proposed changes have been explored with the Dean of the School of Government, the Dean-designate of the School of Design, and the Chairman of the Department of City and Regional Planning, and that all of these individuals join him in endorsing the recommended actions. Mr. Bok has asked the Faculties involved to discuss these proposals and the details of their implementation so that he may reach a final decision in the near future.

Crime Program to be Held at Burden

Law enforcement officials and community leaders from across the Commonwealth will meet in Burden Hall on Monday for a Crime Prevention Training Conference.

The day-long seminar will focus on vandalism; physical security; planning, developing, and managing crime prevention programs; and crime prevention for the business community. The conference, first of its kind in the state, will become an annual event.

Participants will include Secretary of Public Safety **George A. Luciano** (representing Governor **Edward King**), Middlesex County Sheriff **John Buckley**, and Boston Police Commissioner **Joseph Jordan.**

The program will emphasize the importance of community participation, says **Saul L. Chafin**, Director of Police and Security at Harvard. "We strongly urge community leaders, citizen's groups, and law enforcement personnel to attend."

Registration (free of charge) runs from 8 to 9 a.m. in Burden Hall. The seminar begins at 9 and ends at 5 p.m. Participants may lunch at Kresge Hall from noon to 1:30 p.m. For more information, please call Sergeant **Lawrence Fennelly** of the Harvard Police Crime Prevention Unit at 495-1795.

The seminar is cosponsored by the National Council on Crime and Delinquency, the Massachusetts Crime Prevention Officers Association, the Harvard University Police and Security Department, the Massachusetts Criminal Justice Training Council, the Massachusetts Crime Watch Program, the Massachusetts Police Institute, the Massachusetts Hands-Up Program, and the Neighborhood Action Program for Safety (Office of Public Safety, City of Boston).

Mathematical Tour de Force Wins Heineman

(Continued from page 1)

particles.

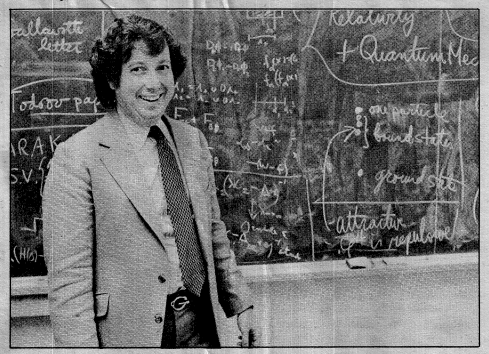
According to scientists, quantum mechanics describes the interaction of elementary particles such as protons, neutrons, and electrons. To explain how electrons and atomic nuclei interact, a physicist can use the "language" of quantum mechanics without special relativity. But if he wants to explain how protons and neutrons collide at extremely high nuclear energies, special relativity becomes important.

"At high energies, these particles come very close to each other and move through each other, converting energy into new matter," explains Mr. Jaffe. "Einstein's theory of special relativity must be used to understand this conversion of energy into new particles."

For the past decade, Professors Jaffe and Glimm have attempted to develop mathematical theory that would reconcile quantum mechanics and special relativity. Recently, the two theoretists developed a mathematical theory showing a compatibility between special relativity and quantum mechanics in a wide variety of simplified models of elementary particle interactions.

What remains unsolved is the construction of a similar theory for the complex equations now being used by particle physicists to describe actual elementary particle interactions.

Mr. Jaffe has trained a large number of the younger mathematical physicists now working at universities in this country and in Europe.



Professor Arthur Jaffe (Mathematical Physics) shows how he and his colleague, James Glimm, resolved mathematically an apparent "incompatibility" between special relativity and quantum mechanics. Professors Jaffe and Glimm will share this year's Heineman Award in Physics. (Photo: Michael Nagy)

Harvard United Way: Doer's Profile



NAME: Debora Rice, Receptionist for the Deans
HABITAT: Building A, Medical School
WHY I GAVE: "I've been poor. When I was, there were charities to help. You have to be there to realize how badly the help is needed."
MOST RECENT ACCOMPLISHMENT: Received a B.A. in sociology from Southeastern Massachusetts University
GOALS: To help solve community problems in Boston
QUOTE: "Life isn't worth living unless you're doing something that's love."
LAST BOOK READ: *Ourselves and Our Children* by the Boston Women's Health Book Collective
HOBBIES: Working with parents' groups, crocheting, weight lifting for tone-up
FAVORITE CHARITY: United College Fund

prints by Cymie R. Payne, whose photographs appear in the recently published book of the same name, and other rarely seen photographs (through December)

Baker Library
Lobby, Popular Views of Money, Credit, and Speculation: 16th–19th Centuries, prints from the Brunner Collection of the Kress Library (through Nov.)
Reading Room: Explorations in Wax and Watercolor by Peggy Coulson-Graceffa (through Dec. 20)

Cabot Science Library
First Floor: A Cambridge Chronicle, pictorial essay of Cambridge by Sharon Hamer, in collaboration with the staff of the Cambridge Public Library (through Dec. 14)
First Floor: Inquiry: The Making of a Magazine, prepared by the staff of the new undergraduate magazine (through Dec. 14)

DuBois Institute
Canaday B. Basement: African Art, A Sampling, exhibit designed by Anne Higonnet '80 (through Dec. 16)

Eliot House
Primary Care in the 1930s. Working People Consulting the Doctor: 56 Photographs from the Farm Security Administration. A unique selection from FSA photographers such as Dorothea Lange, Russell Lee and John Collier (through Dec. 30—for information, contact George Abbott White, 495-5821)

Gund Hall
Lobby: Design Process: Olivetti 1908–1978, a retrospective exhibit of the Olivetti firm's multi-faceted design contributions; architectural photographs and drawings, industrial and graphic design models, and taped interviews with designers (through Dec. 7)

Fogg Art Museum
David Smith: Sculpture, Drawings and Paintings (through Nov. 25)
Honoré Daumier, 1808–1879: Prints, drawings, paintings, and sculpture (through Dec. 30)
The Song of the Brush: Japanese Paintings from the 15th–19th Centuries in the Sanso Collection, a major exhibition of Japanese scroll paintings (through Jan. 13)
Dionysos and his Circle, the image of Dionysos over 2,500 years (Dec. 10–Feb. 3)
Japanese Prints: Surimono, New Year's Cards (Dec. 18–Jan. 20)

Harvard Neighbors
Basement Hall, 17 Quincy St.: Collages and a Few Odds and Ends, by Laurie Lingham, graduate of Boston's Museum School (through Dec. 14)

Harvard–Yenching Library
Instruments, Scores, Illustrations and Paper-Cuts, relating to traditional Chinese music (through Nov.)

Law School
Langdell Mezzanine Gallery: Summer Light: Paintings by Jo Anne Young, 12 large watercolors (through Dec. 20)
Langdell Reading Room, South Colonnade: Watercolors and Drawings by Robert Liberty, 2L (through Dec. 15)
Joseph Story: Bicentennial Exhibition (through January)
Elevator Hallway, Langdell 2: The Personal Story
ILS Lobby: The Work of Joseph Story: Reactions Abroad
Pound Bldg. Entrance: Joseph Story
Library Entrance, Langdell 4: Joseph Story: HLS Portraits
Reading Room, Langdell: Story the Judge and Story the Scholar

Museum of Comparative Zoology
Fishes from a Coral Reef, underwater photographs from the Caribbean and the Pacific by Phillips Lobel, G (through Dec. 28)

Peabody Museum
First Floor: Masterpieces of Art at the Peabody Museum (through Jan.)
Fourth Floor: Asmat Woodcarving, prepared by Fine Arts students (through Jan.)
Fifth Floor: African Musical Instruments, student exhibition (through Jan.)

Tozzer Library
Samaria Revisited, an exhibit on Harvard University's 1908–10 archaeological excavation at Samaria (through March 1980)

WHRB Radio

Program highlights of **Harvard–Radcliffe Radio, 95.3 F.M. from Memorial Hall.**

Fri., Nov. 30
Spectrum. Exploring the complete spectrum of jazz composition, 2 p.m.

Sat., Dec. 1
Streetcorner Symphony. The unforgettable Doo-Wop sound of the '50s. 6 p.m.

Sun., Dec. 2
Live at Passim's. Bill Staines and Ed Snodderley perform live from Harvard Square, 3 p.m.

Mon., Dec. 3
Music for the Collector: Glinka, Medtner, Tchaikovsky. 8 p.m. Special Concert. The Harvard–Radcliffe Orchestra: Haydn, Kirchner, Mahler. 9 p.m.



Cultivating and Weeding the Fields. This ink on paper hanging scroll by Ikeno Taiga, 1723–1776, is on display at the Fogg until January 13 as part of the "Song of the Brush" exhibition.

Tues., Dec. 4
Harvard hockey. Harvard vs. Boston University, 7:20 p.m.

Wed., Dec. 5
Harvard Journal, 7:45 p.m. Music From the Gardner Museum. The Aulos Ensemble, performing on Baroque instruments, recorded April 8, 1979. 8 p.m.

Thurs., Dec. 6
Richard Strauss as Performer, Part I, in conjunction with continuing Strauss opera series. 9 p.m.

Sat., Dec. 8
Harvard hockey. Harvard vs. Brown, 7:20 p.m.

Sun., Dec. 9
Live at Passim's. Billy Novick, Guy Van Duser, and Lewy Collins. 3 p.m.

Notes Current

Education for Action is now taking applications for Student Board membership; the deadline is Sun., Dec. 2 at 5 p.m. The group is a student-run, multi-cultural Radcliffe organization which works for social change. Applications are available at the E4A Office, Radcliffe Gym, Mon.–Fri., 11 a.m.–3 p.m. Call 495-8604 or 491-0765 for more information.

The Center for Lifelong Learning is offering three all-day seminars on Sat., Dec. 8: *Condominium Management: The Unit Owner's Association*, for present and prospective owners, 9:30 a.m.–4:30 p.m., $50 plus $5 registration fee; *Marketing Strategies for Small Businesses*, analysis of marketplace, product, and pricing policies, distribution channels, 9:30 a.m.–5:30 p.m., $55 plus $5 registration; and *Approaches to Life Management: Gaining Control of Your Life*, analysis of self-management programs to help identify and design strategies for health and appearance, personal relations, and career development, 9:30 a.m.–5:30 p.m., $55 plus $5 registration. For more information, contact the Center, Lehman Hall B-3, Cambridge, 02138; 495-4973.

The Harvard Community Alcoholics Anonymous group meets every Tuesday from 4:30 to 6:30 p.m. at Phillips Brooks House. Those interested are invited to drop by for coffee and conversation. For information, call Phil at 495-5526 weekdays.

Fairs and Sales

The Harvard Ski Team continues a sale "The Great Crimson Ski Steal," Sat., Nov. 30 and Fri., Dec. 1, in the Briggs Cage, opposite the Stadium. Seven thousand pieces will be offered: skis, boots, poles, bindings, skiwear, both downhill and cross country, at bargain discount prices. Hours are 2 to 10 p.m. Fri.; 10 a.m. to 5 p.m. Sat. Briggs Cage is on the corner of Soldiers Field Road and Boylston St.; free parking. All proceeds to the Ski Team.

Faculty Club

Dinner Specials—6 to 8 p.m.
Mon., Dec. 3—Sauteed Tenderloin of Beef Stroganoff
Tues., Dec. 4—Baked Boneless Half Chicken Hunter's Style
Wed., Dec. 5—Roast Rack of Lamb, Mint Sauce
Thurs., Dec. 6—English Beef and Kidney Pie
Fri., Dec. 7—Broiled Brochette of Scallops, Bacon and Pineapple, on Bed of Rice

Coming Events

"When the Shah Falls: Regime Change and U.S. Policy."† (Center for International Affairs) Mon., Dec. 10—Seminar on North–South Relations with Associate Professor Michael Nacht (Public Policy). Room 2, Coolidge Hall, 1737 Cambridge St., 2 p.m.

"THE SOURCE: The Information Utility."† (Program on Information Policy Research) Mon., Dec. 10—Seminar with William F. von Meister, Chairman, Telecomputing Corporation of America: Room 241, Aiken Computation Lab., 4 p.m.

"On the Historiography of Literature and Science: Reflections on Recent Models for the History of Science and Their Relevance for the Study of Literature."† (Dept. of Comparative Literature) Mon., Dec. 10—Conference with John Neubauer, Visiting Professor of German, and Professor of German, University of Pittsburgh. Ticknor Library, Boylston, 5 p.m.

"Teaching the Graduate Seminar."* (Harvard–Danforth Center for Teaching and Learning) Mon., Dec. 10—Professional Training Series panel discussion with Warner Berthoff, English and American Literature; Roger Brown, Psychology and Social Relations; Richard Caves, Economics; and Theda Skocpol, Sociology. Moderator: Dean K. Whitla. Lecture Hall A, Science Center, 4:30 p.m.

"Leaf Adaptations to Environment."† (Dept. of Biology) Tues., Dec. 11—Special Natural History Seminar with David Parkhurst, Dept. of Public and Environmental Affairs, Indiana State University. Main Lecture Room, Biological Labs., 12 noon. Bring your own lunch.

Poetry Reading‡ (Committee on Latin American and Iberian Studies) Tues., Dec. 11—By Homero Aridjis, Mexican poet and Guggenheim Fellow. In Spanish. Room 104, Harvard Hall, 12 noon

"Transnationalizing African Political Problems: The Case of the Sahel."† (Bunting Institute, Radcliffe) Wed., Dec. 12—Colloquium with Assistant Professor Pearl Robinson (Political Science), Tufts University. First floor, Agassiz House, Radcliffe Yard, 4 p.m.

The First Three Years."† (United Ministries—First Parish in Cambridge–Lowell Institute–MIT Chaplains) Wed., Dec. 12—Cambridge Forum series "Problems and Prospects." With Burton White, Director, Center for Parent Education. 3 Church St., 8 p.m.

"Ashbery's Subject Matter."† (Lamont Library) Wed., Dec. 12—Lecture by Helen Vendler. Poetry Room, Lamont, 8 p.m. Refreshments

"Why Classify?"† (Dept. of Biology) Thurs. Dec. 13—Natural History Seminar with David Hull, University of Wisconsin. Main Lecture Room, Biological Labs., 12 noon. Bring your own lunch.

"The Organization of Ukrainian Nationalists and the International Situation in the 1930s."† (Ukrainian Research Institute) Thurs., Dec. 13—Seminar on Galicia Between the Two World Wars with Mykola Leded, PROLOG Associate. In Ukrainian. Seminar Room, 1583 Mass. Ave., 2 p.m.

"Historical Consciousness in 17th–Century Ukraine."† (Ukrainian Research Institute) Thurs., Dec. 13—Seminar on Ukrainian Studies with Assistant Professor Frank E. Sysyn (History). Seminar Room, 1583 Mass. Ave., 4 p.m.

"Antibodies: Split Genes and Jumping Genes."† (Dept. of Biochemistry and Molecular Biology) Thurs., Dec. 13—Lecture by Professor Leroy E. Hood, Division of Biology, California Institute of Technology. Main Lecture Hall, Biological Labs., 5 p.m. Tea, Room 154, 4:30 p.m.

"Writing an Archaeological Report: Reflections of an Editor."† (Semitic Museum) Thurs., Dec. 13—Cambridge Archaeological Seminar with Professor James R. Wiseman, Dept. of Classical Studies, Boston University. Semitic Museum, 6 Divinity Ave., 5:15 p.m.

Author's Query

Professor **Elisha B. Chrakian**, 129 Robbins Road, Watertown, Mass. 02172, is seeking letters, articles in nonscholarly publications, and other relevant material from colleagues and friends of the late Professor **Robert Pierpont Blake.** Mr. Chrakian intends to write a tribute to Blake and his pioneering work at Harvard in Armenian and Georgian studies. His tribute will include also the contributions of **Archibald Cary Coolidge** and **Kirsopp Lake.**

EXEMPT POSITIONS
MEDICAL AREA

Research Associate. Req. 30718. Medical School. Works on phosphate- and carbohydrate-modified proteins of vesicular stomatitis virus. Determines their ability to control nucleic acid synthesis. Coordinates the efforts of undergraduate and graduate students and a technician. Minimum requirements: Ph.D. with 3-4 years' postdoctoral experience; general knowledge of animal virology and experience in protein and nucleic acid biochemistry. (11/30/79)

Sr. Research Assistant I or Research Assistant II. Req. 30707. School of Public Health. Involves research on bacterial mutagenesis. Coordinates and carries out research. Depending on background and experience, may participate in research design and in drafting sections of papers on research results. Minimum requirements: BS or MS in biology, bacteriology or related field; minimum of 2 years' research laboratory experience; familiarity with techniques used in bacterial genetics preferred; experience with bacteriological techniques necessary. (11/30/79)

Personnel Officer. Req. 29983. Under the direction of the Associate Dean for Administration, is responsible for personnel management within the School of Public Health. Acts as liaison with the University Personnel Offices administering personnel policies and procedures for non-teaching staff. Advises and assists staff members with personnel matters. Helps departmental administrators and faculty members to define, describe and evaluate personnel needs. Assists in recruitment and orientation of new staff. Implements a procedure for periodic performance reviews. Works with the University Personnel Offices to establish appropriate salary rates and review requests for salary adjustments. Helps staff to define and realize their career development needs. Conducts exit interviews. Represents the School on personnel-related committees. Minimum requirements: either 3-5 years' professional experience in personnel administration or 3-5 years' administrative experience within the University; good communications skills, both verbal and written; some exposure to interviewing and/or employee relations counseling preferable. (11/16/79)

Applications Programmer. Req. 29975. School of Public Health. Position is in small programming group assisting faculty and students engaged in medical statistical analysis. Individual will work with researchers to outline approaches, encode, test, and debug and run programs. Minimum requirements: Bachelor's degree; minimum 2 years' programming experience; familiarity with statistical packages (SPSS, SAS, or DATATEXT) and higher level languages (FORTRAN or PL-1), preferably in a research context. (11/9/79)

Administrative Director. Req. 29973. School of Public Health. Acts as administrator for educational degree programs at masters and doctoral levels in health policy and management, and units conducting organized research in health field. Reports directly to and participates with an Executive Committee composed of senior faculty members representing different programs in the Department. Will work directly with Department Head when one is appointed. Supervises all administrative aspects of department. Responsibilities include administrative coordinational research and teaching activities, case development and student affairs; facilitating of administrative relationships of Department with School of Public Health and with other departments and schools of the University. Participates in decision-making committees of Department. Supervises Department Administrative Assistant and Financial Assistant. Oversees government grants and contracts with various funding agencies. Minimum requirements: Advanced degree, preferably in health administration field and experience in academic administration and/or equivalent training with a variety of professional people and government agencies; good communications skills and knowledge of University procedures and regulations preferred. (11/9/79)

Research Associate. Req. 29965. School of Public Health. Involves statistical analyses of longitudinal data on growth and development, requiring extensive computer programming skills. Consults with and gives statistical advice to other members of the research team. Writes reports of analyses and assists in the authorship of papers. Responsible for all aspects of longitudinal data file management. Minimum requirements: Doctoral degree in biostatistics or applied statistics; experience with longitudinal data analysis and the use of higher level programming languages, statistical packages and mathematical subroutines; demonstrated research and writing ability. (11/9/79)

Research Assistant II. Req. 29958. Medical School. Involves studies on the interaction of viruses with lymphocytes. Duties include work with herpes viruses and animal experiments. Supervises 3 people. Will have input into the development, design and control of research. Note: position is located in Southboro, 23 miles west of Boston; there is no public transportation. Minimum requirements: BS plus 3-4 years' experience in cell culture methods, propagation and titration of animal viruses, fluorescent antibody and virus neutralization tests. (11/2/79)

Applications Programmer. Req. 29955. School of Public Health. Works with interdisciplinary team on large study on health effects of air pollution. Under direction of research staff, performs statistical analysis on large data sets using standard analytical packages such as SAS and also writes specialized programs in PL1 or other higher level languages. Writes programs and documents procedures for regular data processing. Trains users and assists in identifying problems. Will initially work in PDP11/70 with UNIX operating system, and ITEL with (IBM) VS1 operating system computers. Responsible for complete documentation of all programs and analyses. Minimum requirements: Bachelor's degree and substantial training and/or experience in programming; course work and experience in statistics very desirable; applicant should be familiar with SAS, and/or other statistical program packages, and should be an experienced programmer in FORTRAN or PL/1; should be familiar with IBM, JCL, and Utilities. The position will offer the opportunity to develop additional analysis and programming skills. Applicant should be prepared to describe and document previous experience. (11/2/79)

Harvard is education and research, and people working to support these activities. To help insure the effectiveness and diversity of people, Harvard is committed to taking active and positive steps to recruit, employ and promote qualified minorities, women, disabled veterans, veterans of the Vietnam era and handicapped persons.

This list represents all professional, administrative and supervisory positions, as well as support staff positions, salary grade 6 and above, that are posted at the time the Harvard Opportunities goes to press (Monday at 5:00 p.m.).

When applying for a position, please refer to the job title and requisition number, noted at the beginning of each listing. The date in parentheses after each job indicates the date of initial publication in Harvard Opportunities.

We encourage you to visit our Personnel Offices. The Medical Area Office services the Medical School, Dental School and School of Public Health and is located at 164 Longwood Avenue, Boston, MA 02115. Resumes are accepted for all positions in the professional, administrative, research, and technical areas. For secretarial and clerical positions, interviews are held Monday through Friday, 9 a.m. to 4:30 p.m. For more information, please call 732-1520.

The Cambridge Personnel Office is in Holyoke Center, 1350 Massachusetts Avenue, Cambridge MA 02138. Interviews are conducted Monday through Friday, 8:45 a.m. through 3:30 p.m. For additional information, call 495-2771 after 3:30 p.m.

In addition to the above sources, a selection of supporting staff positions (salary grades 1-5) can be heard by calling Dial-A-Job at 495-4981.

CAMBRIDGE

Sr. Engineer. Req. 32393. Harvard College Observatory. A Systems Engineer is required to participate in a program to design, build and operate an ultraviolet spectrometer which will be used to measure the solar spectral irradiance from the bay of the Space Shuttle. Will work with the principal scientists and the program manager. Will be responsible for translating scientific objectives into technical direction of a prominent aerospace contractor. Minimum requirements: BS or MS in engineering or equivalent; 5-10 years' experience; significant experience with optical instruments for use in space or in a closely related field and recent broad technical responsibility for optical, electronic and mechanical engineering; person with interest in both technical monitoring and hands-on design preferred. (11/30/79)

Project Associate, International Economics. Req. 32392. Institute of International Development. Position located in Abidjan, Ivory Coast, Africa. Acts as resident advisor to the African Development Bank. Maintains a review of the major developments in the economics of aid-giving countries. Studies and reports on the transfer of resources from developed or which co-ordinates to Africa. Analyzes the aid policies of these countries and their effects on the economic policies of African countries. Position requires a minimum commitment of 2 years. Minimum requirements: Ph.D. in economics with considerable experience in overseas work; substantial publications record; competence in French language skills. (11/30/79)

Cataloger, Widener Library. Req. 32391. Duties include original cataloging of monographs and supervision and/or revision of cataloging-support activities, such as copy cataloging and computer-based cataloging. Minimum requirements: MLS or equivalent; fluent German and/or French and one other Western European language; sound knowledge of Anglo-American Cataloging Rules and familiarity with Library of Congress standards and practices; previous experience in a large research library and familiarity with OCLC helpful. (11/30/79)

Managing Editor, Harvard Newsletter on Computer Graphics. Req. 32390. Graduate School of Design. Responsible for all phases of publication. Gathers detailed information on advances in the Computer Graphics field through research, interviewing, etc. Writes, edits, and proofreads all copy for publication. Works with printers. Prepares a Directory of Manufacturers for this field. Increases the subscription base of the Newsletter. Minimum requirements: Bachelor's degree; advanced degree preferred; 3-5 years' experience in computer industry, at least 5 years' editorial experience with 1-2 years' experience in marketing and management. (11/30/79)

Public Information Coordinator. Req. 32357. Kennedy School of Government. Responsible for the development and operation of a comprehensive information system. Reports to the Associate Dean, Executive Officer. Researches, writes, edits and selects the distribution of news releases to local and national news media. Coordinates information for and responds to press inquiries. Assists with the development and promotion of special projects and conferences. Coordinates all news media activities for the School. Assists the Director of Publications by taking responsibility for editorial and production phases of the monthly newsletter, the annual catalogue and the bi-annual alumni bulletin. Reports on all School events. Obtains permissions and conducts research on special projects. Minimum requirements: BA, preferably in English or journalism; 2-3 years' journalism experience; familiarity with print media; knowledge of production, lay-out, graphic design, and photography. (11/23/79)

Sr. Mechanical Engineer. Req. 32355. Reports to the Manager of Utilities. Responsible for overall planning, conceptual design and design development, and construction of all components for two institutional-type steam distribution systems (300,000 lbs./hr. and 90,000 lbs./hr.). Responsible for budget estimating, setting design perimeters and criteria for building mechanical systems, value engineering, selection of consulting firms, design review, shop drawing review and approval, bid evaluation, mechanical subcontractor approval and mechanical field inspection. Works closely with energy conservation program, including design and utilization of necessary records and physical plant data. Analyzes fluctuations in energy budget, monitors service rate-setting, and forecasts future system requirements. Minimum requirements: BS/ME degree; at least 10 years' professional experience; Massachusetts Professional Engineer Registration required. (11/23/79)

General Ledger Comptroller. Req. 32353. Treasurer's Office. Controls and supervises all functions of the General Ledger computer system. Maintains accounting control for the general endowment portfolio. Supervises a staff of 7-8 people and assists management with the general maintenance and operation of the Treasurer's Office. Minimum requirements: CPA; 4-5 years' experience in securities and investments; ADP experience or knowledge of computer technology necessary; demonstrated supervisory experience. (11/23/79)

Director of Admissions. Req. 32350. Reports to Associate Dean for Administration, Graduate School of Arts and Sciences. Supervises Admissions and Communications Offices personnel. Proposes, interprets, and implements admissions policy. Plans and budgets for offices' activities and programs. Oversees personnel involved in processing applications, record keeping, on-line computer-assisted report preparation, distribution of information and materials to departmental offices, liaison with these offices, and preparation of application materials. Participates in Affirmative Action and acts as liaison with various governmental and foundation officials. Minimum requirements: BA degree; minimum of 3 years' college or university academic or administrative experience; admissions experience and broad familiarity with graduate education in arts and sciences preferred. (11/23/79)

Project Associate, Organization and Information. Req. 32341. Institute of International Development. Position in Nairobi, Kenya, working on the decentralization of the planning process in the Ministry of Economic Planning. Assists District Development Officers in improving district plan implementation capacities by devising better information systems. Defines needs of a decentralized planning process. Assists with development of participatory planning structures. Examines information and organizational requirements for effective district planning. Position will last through December, 1980, with possibility of extension. Minimum requirements: advanced degree in one of the following areas: business, public administration, management, regional planning, or government; strong background in management and administration, including budgetary and financial systems; field experience with program implementation in developing countries, with emphasis on organization and information systems; system design and implementation experience helpful. (11/23/79)

Administrative Assistant and Executive Secretary. Req. 32340. Kennedy School of Government. Coordinates all administrative matters for the Office of the Dean. Supervises work of research assistant, executive secretary, and secretary. Coordinates the implementation of various projects. Schedules and manages meetings and conferences. Acts as liaison between the Dean and faculty, staff and students. Issues and interprets operating policies and implements decisions on behalf of the Dean. Supervises the day-to-day operation of the office and secretarial functions. Takes dictation and types confidential material as the need arises. Minimum requirements: College degree preferred; 3-5 years' related administrative experience, preferably within a university setting; shorthand or speedwriting skills and 75-80 wpm typing; good organizational skills and ability to direct and supervise others. (11/23/79)

Planning Officer II or III. Req. 32321. Position as staff member of the Long Range Planning and Research Division of the Planning Office. Involves management of major external projects and community and government related issues. Prepares schematic designs for long-range planning policies. Minimum requirements: graduate degree in urban planning or equivalent; experience in economic and public policy analysis; 3 years related experience preferred; good oral and written communications skills. (11/16/79)

Crew Supervisor. Req. 32320. Supervises a complete shift of workers within a specifically assigned area. May assign and inspect work performed by employees. Maintains records of work schedules, key listings, vacation, attendance, sick pay, inventories, etc. Evaluates, disciplines, and counsels employees. Conducts training programs and implements standards. Inspects buildings. Maintains up-to-date knowledge of building use regulations and relevant city ordinances. Minimum requirements: high school graduate; 2-3 years' custodial supervisory experience. (11/16/79)

Manager of Accounting and Data Processing. Req. 32318. Harvard Real Estate. Reports to the Treasurer. Responsible for accounting implementation and control as well as the initial installation and ongoing operations of a stand-alone mini-computer management information system. Management information system will include financial, rental and property management modules. Not on Harvard payroll. Minimum requirements: BS in business administration or accounting required; MBA or CPA helpful; 3-5 years' accounting, data processing and supervisory experience; knowledge of real estate accounting and computer programming preferred. (11/16/79)

Editor, Harvard Business Review. Req. 32317. Position calls for creative identification of potential subjects and authors in business management field, and imaginative solicitation of articles in areas where there are important new methods and concepts to translate into terms for senior executives. Edits and evaluates manuscripts. Minimum requirements: Master's or doctoral degree in business administration, economics, finance or related field; demonstrated editorial ability with emphasis on skills in such areas as management accounting, managerial economics, control or quantitative analysis; must have an understanding of the contributions of quantitative business research to the practical needs of general managers. (11/16/79)

University Photographer. Req. 32297. Photographs members of the faculty, professional and administrative staff, and university events for both publication and the historical record. Assists Director of Information and Managing Editor of the Gazette in selection, cropping, and editorial use of photographs. Manages a photographic laboratory and supervises schedule of lab technician. Acts as liaison for visiting photojournalists on assignment at Harvard. Responsible for the fast and accurate processing of film and prints to meet strict publication deadlines. Minimum requirements: experience in news and public relations photography with cameras 35mm to 4x5; ability to manage a photographic laboratory and process film and prints, black-and-white and color; college education and knowledge of the Harvard community helpful. (11/9/79)

Associate Director, Executive Management Program for State and Local Governments. Req. 32290. Responsible for all phases of the Executive Management Program for State and Local Government at the Kennedy School of Government. Develops and executes a marketing plan for recruitment of participants. Develops curriculum and curricular materials. Supervises a research and case writing effort, securing foundation and government support for Program activities. Plans and implements activities necessary for the operation of a three week, residential program for senior government officials. Minimum requirements: graduate degree in public policy, public administration, or related field preferred; familiarity with state and local government, with professional experience in one or more governmental units; experience in interactive case-based instruction or executive education; experience with curriculum and curricular materials development; direction of a research effort desirable. (11/9/79)

Health Systems Analyst. Req. 32285. University Health Services. Under the direction of the Associate Director for Administration and Finance, performs programs and financial audits of medical and administrative departments. Plans and operates a data-based management information system. Analyzes and monitors various cost exercises to determine the adequacy of pricing policies relating to insurance and fee-for-service, special projects such as multi-level care, inventory control, and capital budgeting procedures. Coordinates with the Financial Officer on financial and budgetary control aspects of the Health Services, which includes the regulation of overhead rates with Medicare, depreciation schedules, accrual accounting, and reserve accounts monitoring. Minimum requirements: CPA or bachelor's degree in accounting; 3-5 years' experience in medical delivery systems required; ability to work independently. (11/9/79)

SPECIAL LISTING

Associate Curator for the Pre-Columbian Collection. Dumbarton Oaks, Washington, D.C. Three year position involving immediate responsibility, under the direction of senior consultant, for Pre-Columbian studies at the Dumbarton Oaks Research Library and Collection of Harvard University. Duties will include care and display of the collection and development of library and programs associated with the collection. Organizes scholarly activities, such as conferences, collection study, library study, and field study. Supervises the Pre-Columbian Fellowship Program and publication program. Occasional teaching and lecturing to be arranged. The subject matter concentration for the position is the art and archaeology of the high cultures of Mesoamerica

Harvard Responds To City Fears on Hazardous Waste

The Cambridge City Council at a hearing on November 19 asked the city solicitor to draft an ordinance ensuring the safe storage and transport of radioactive wastes used in medical and scientific research at universities and hospitals in Cambridge.

Health and safety officers from Harvard and MIT answered questions at the hearing about the use, storage, and transport of low-level radioactive wastes at their universities.

"Harvard's program for handling these materials has always exceeded regulatory guidelines and standards," said Dr. **Warren Wacker**, Director of the University Health Services. "As a result, we anticipate no difficulty in meeting both the letter and spirit of the proposed ordinance."

Dr. Wacker told the city councilors that the level of radiation from these radioactive wastes was very low and was comparable to the level of radiation from materials found in nature. He explained that "such risks as can be associated with these wastes must be attributed to their flammability rather than their low-energy radiation."

The hearing was prompted by councilors' concerns about the impact on Cambridge of the closing October 4 of a burial site for low-level liquid wastes in Hanford, Washington. Both Harvard and MIT had been shipping their low-level wastes to the Hanford site, which is one of only three disposal sites for such wastes in the country.

At the Council meeting, **Walter Milne**, Special Assistant to the President of MIT, informed the council that Washington Governor **Dixie Lee Ray** had decided that week to reopen the Hanford site. During the six weeks Hanford was closed, noted Dr. Wacker, Harvard's on-site storage had almost reached its safe maximum capacity when the University reached agreement with a new contractor licensed to receive and store the wastes—Todd Shipyards in Galveston, Texas.

"There was never a time when we exceeded our storage capacity," said Dr. Wacker. "If no alternate site had become available, we would have curtailed our research, including our medical research. We would not have allowed the wastes to pile up in Cambridge.

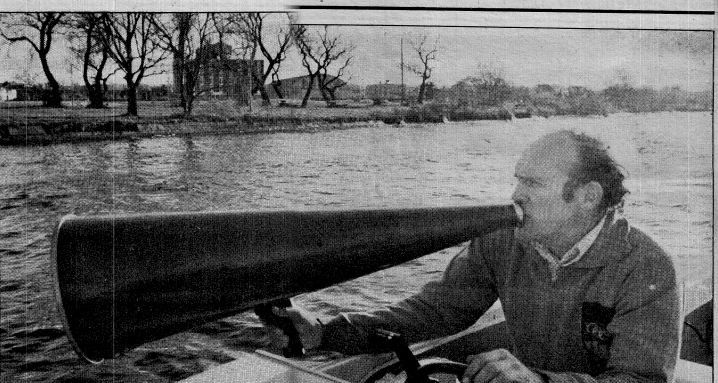
"Ninety percent of the volume of Harvard's waste materials contain the radioisotopes carbon 14 and tritium. These radioisotopes are used as extraordinarily sensitive probes to trace biological and chemical activity through a process called liquid scintillation counting. An important diagnostic and research tool, scintillation counting is used in research and treatment of cancer, heart disease, and certain viral diseases as well as for the development of vaccines. The procedure is also used to test for hepatitis-infected blood in Red Cross and hospital blood banks," Dr. Wacker noted.

The rest of the radioactive materials used at Harvard contain substances like radioactive iodine and potassium which have short half-lives. Most of these materials are contained in water-based solution and decay in a matter of weeks or months to levels comparable to that of normal background radiation.

"We are talking here about ultra-low levels of radioactivity, levels quite comparable to those that occur naturally," said Dr. Wacker in response to a question from the Council. "We are *not* talking about the concentrated wastes of a nuclear power plant or nuclear weapons."

Mr. Milne noted that the temporary closing of the Washington disposal site has raised the issue of planning for the long-

(Continued on page 12)



Crew Coach Harry Parker, in his element here on the Charles, will coach U.S. Olympic scullers next spring for the Moscow games in June. For the veteran coach, it's all a matter of doing "what seems natural." This will, after all, be his third Olympic team. (Photo: Michael Nagy)

Harry Parker:

'An Innovator; a Legend' to Students, He Will Head 1980 Olympic Team

Harvard Varsity Crew coach **Harry Parker** hasn't lost a race to Yale in 16 years. Crimson crews sport a 68-6 record under his 20-year reign. He is described by colleagues and students as "an innovator" and "a legend." To hear Parker tell it, though, you'd think all that was little more than an honest day's work for an honest day's pay.

"I just do what seems natural," says Parker, evoking **John Wayne**'s famous disclaimer, "I don't act, I re-act." Last week's announcement that Parker will go to Moscow to coach in his third Olympic crew is perhaps a tribute to that humility, for a man who makes coaching (and winning) look easy is a logical choice for the ultimate coaching test.

To the unassuming Parker, 44, coaching at the 1980 Olympics is simply another chance to enjoy his favorite pastime—competition. "It's definitely the ultimate test. For me, competing for the U.S. against the world's best crews is as much incentive as you could ever have."

Most people who know Parker will be surprised to hear that he is aware of incentive at all, as his instinctively competitive nature is a large part of the Parker legend. **Greg Stone** '75, a sculler on the 1975 Crimson National Championship crew and now a student at the Law School, recalls a typical Parkeresque vignette. "Harry was in this 60 km. cross-country ski race in Vermont last year. It was extremely cold that day, and judges stationed along the course were checking the racers for frostbite as they came by. Several racers had already been pulled out of the race, but Harry just pulled his hat down over his face to hide his frostbitten ears and completed the course. He didn't win but he did pretty well."

Driven though he is, Parker doesn't impose his personal motivations on his athletes. "He doesn't overcoach," says **Greg Stone**, "and he never takes credit away from his oarsmen in victory or defeat. That helps the athletes develop their own sense of purpose." Penn or Yale may have bigger crew programs, but for quality of training and performance Harvard crews are unsurpassed.

"What makes Harry great is his ability to pick out little things in technique that we're doing wrong," says Stone. "But he doesn't overwork his crews. We train racing on a daily basis, which is an unusual coaching technique, and Harry competes with us every day. It's a source of pride to crew under Harry Parker. He's what makes Harvard crew better than any other school."

While some coaches work to ensure their moment in the spotlight, Parker's law is that success comes because of the crew themselves, and it is they who should accept the spoils. "The most important ingredient to winning is what I've been fortunate to have during my years at Harvard—capable, highly motivated students," he says.

Parker's own education came in the excellent Penn crew program. After graduating in 1957, Parker joined the staff at Harvard, with time out to row a single scull in the 1960 Rome Olympics. He is credited with introducing foreign advancements in rowing equipment to U.S. competition—Swiss boats, British oars, German rigging and training techniques. He introduced a weight training and physical endurance program that has since been imitated at most colleges where rowing matters. Although America hasn't been among the top rowing nations for some time, a Parker-coached eight-man crew won a silver medal at Munich in 1972, a moment Parker rates as one of his career highlights. Other achievements that Parker takes special pride in include his first win over Yale in the series inaugural back in 1963 ("a very satisfying win") and the Harvard victory in the 1968 Olympic trials by one foot over Penn. "Really, I've enjoyed it all," he says. "Every year has one highlight or another."

Olympic hopefuls will arrive in Cambridge next May, where Parker will select and train the eight-man crew that will head for Moscow in mid-June. How are U.S. chances against powerful crews from East Germany, West Germany, and New Zealand? "It's possible," says Parker, "but it will require some exceptional performances from every athlete." With that in mind, it seems as if the U.S. Olympic Committee has chosen the right man for the job.

Students Bring Active Intelligence to Case Material Danforth Panelists Find

Some of the best work in psychology has started with a practice case which struck a chord with the researcher and led to the generalization of other cases, Senior Lecturer **George Goethals**, (Psychology) said at the third Danforth Lecture Monday.

Addressing the topic "Using Case Materials" with panelists Associate Professor Peter Lange (Government) and Stephen Williams, Peabody Professor of American Archaeology and Ethnology, Mr. Goethals related an example from his own practice. In 1962, he said, he had treated a deeply depressed student suffering from "the familiar boy-meets-girl, boy-loves-girl, boy-loses-girl—the first wound."

Mr. Goethals couldn't forget the case and asked himself, "What had I done that made him feel better?" The consideration that Dr. Goethals gave this question over a 10-year period led to the publication in 1972 of his book *Symbiosis and the Life Cycle.*

Mr. Goethals said that casework is integral to what he called "the imprecise art of being a good clinician." He added that a course in psychology should include lectures, case materials, and seminar sections, each of which strengthens the whole. He recommended using case materials to stimulate "active rather than passive intelligence. The student *has* to participate."

Peter Lange noted that "students have difficulty in dealing with the abstractions of statistical data. The case makes the data concrete.

"In political science, the chain of causality is multidimensional," he continued. The case shows not just the formal relationship, but the complexities as well, and can therefore give the student a sensitivity to process, Mr. Lange

(Continued on page 12)

City of Cambridge

In the Year One Thousand, Nine Hundred Seventy Nine

AN ORDINANCE

Relative to the Storage and Transport of Radioactive Wastes in The City of Cambridge

Be it ordained by the City Council of the City of Cambridge as follows:

The use of radioactive material is well-established in industrial, research, and hospital procedures as a useful and essential technique in the City of Cambridge as well as elsewhere; and

The number of disposal sites for radioactive wastes in the United States has recently been decreased in number to the extent that such disposal is now recognized as a national, regional, and community problem, the solution to which appears to be regional responsibility; and

Federal regulations include strict measures for the procurement and usage of radioactive materials through licensing, inspection, citation and similar procedures and also for the transportation of these materials, as do further regulations imposed by the Commonwealth of Massachusetts; and

The City Council, in order to ensure that the citizens of Cambridge may have confidence that no unsafe or hazardous procedures will be permitted in the handling of radioactive wastes in the City of Cambridge, has initiated a study on this issue; and be it further

ORDERED:

That Chapter Eleven entitled: "Health and Housing" of "The Code of the City of Cambridge" is hereby amended by adding at the end thereof a new Article III entitled: ORDINANCE FOR THE STORAGE AND FOR THE TRANSPORT OF RADIOACTIVE MATERIAL IN THE CITY OF CAMBRDIGE" which reads as follows:-

ARTICLE III

ORDINANCE FOR THE STORAGE AND FOR THE TRANSPORT OF RADIOACTIVE MATERIAL IN THE CITY OF CAMBRIDGE.

1. Institutions making use of radioactive materials shall comply fully with all relevant regulations established by the Federal Government and the Commonwealth of Massachusetts for the storage, handling, and

transport of these materials; and comply in addition with such other health regulations as the Commissioner of Health and Hospitals of the City of Cambridge may promulgate from time to time; and

2. The Health Policy Board, which has been instituted by order of the City Council and which is composed of a representative group of Cambridge citizens, shall include the health aspects of radioactivity within its study of public health and environment issues in Cambridge and make recommendations regarding them to the Commissioner of Health and Hospitals in Cambridge; and
3. The Commissioner shall enforce compliance with all relevant regulations as now exist or as may be adopted in the future and shall act to close any such operations that he deems hazardous to the public health; and
4. In regard to the storage of radioactive material and, in particular, of radioactive waste, the following regulations shall apply:
   a) Each storage location shall be under the control of a designated qualified person.
   b) Radioactive waste materials shall be packaged and stored only under the supervision of authorized persons and records of the type and amount of waste shipped from Cambridge shall be maintained.
   c) Qualified radiation safety technicians shall inspect storage locations regularly and check for possible contamination.
   d) All relevant records and reports shall be available to the Commissioner of Health for his inspection as he may require.
5. In supplement to the preceding rules in paragraph (4) above, the following regulations shall apply to the storage locations for radioactive waste:
   a) Radioactive waste must be stored only in restricted locations while waiting disposal.
   b) Storage locations must be secure and protected against tampering or unauthorized removal of material.
   c) Storage locations must have adequate safeguards against fire or flooding.
   d) Storage locations must have adequate ventilation to protect workers and prevent accumulation of explosive vapors.

6. In addition to the oversight and enforcement authority of the Commissioner of Health, the Head of the Cambridge Fire Department shall exercise his full authority in regard to hazards other than radioactivity, including but not limited to any potential risk of fire related to the solvents containing some radioactive wastes.

   a) If the waste fluid is flammable as defined in Chapter 148 of the General Laws of Massachusetts, it shall be stored in accordance with the requirements of Sections 10A and 13 of Chapter 148 and all rules promulgated therefrom. For quantities not exceeding the amounts stated in Rule 3 of Section 10A a PERMIT shall be obtained from the head of the fire department. For quantities exceeding those stated in Rule 3, Section 10A, Chapter 148, application shall be made annually to the Cambridge License Commission for a Certificate of Registration, which is the license to store flammable fluids.

   The storage of all flammable fluids shall be as directed by the head of the fire department who shall cause storage locations to be inspected at the time of original application, at the time of annual renewal of the PERMIT or LICENSE, and at such other times as he may deem necessary.

7. The transport of radioactive material shall comply with all relevant Federal and State requirements including those of the users of radioactive material who transport radioactive material outside the confines of the place of use or who deliver any radioactive material to a carrier for transport shall comply with the applicable requirements of the regulations appropriate to the mode of Department of Transportation in 49 CFR Parts 170-189 and of the Nuclear Regulatory Commission in 10 CFR 71 insofar as such regulations relate to the packaging, marking and labeling of packages, loading and storage of packages, placarding of the transportation vehicle, monitoring requirements and accident reporting. Further, trucks transporting radioactive material should be placarded with signs reading RADIOACTIVE as specified in Department of Transportation Regulations 172.556. The carrier of radioactive material is responsble for determining that the transport vehicle has the appropriate placards.

8. If any section, sub-section, sentence, clause, phrase or portion of this ordinance is for any reason held invalid or unconstitutional by any Court of competent jurisdiction such portion shall be deemed a separate distinct and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

9. For the purposes of this ordinance radioactive material is defined as material having a significant excess of radioactive atoms over the natural abundance. Specifically, in this ordinance the terms "radioactive material" or "radioactive waste" are defined as quantities in excess of those categorized as exempt concentrations in Federal Regulations 10 CFR 30.70.

City of Cambridge

In the Year One Thousand, Nine Hundred Seventy-nine

AN ORDINANCE

In amendment to an ordinance formerly entitled "The General Ordinances of the City of Cambridge" as revised in 1972 and now designated as "The Code of the City of Cambridge".

Be it ordained by the City Council of the City of Cambridge as follows:

Health Hospital & Housing.

That Chapter Eleven entitled "~~Health and Housing~~" is hereby amended by adding at the end thereof a new Article IV entitled "ORDINANCE FOR THE STORAGE AND FOR THE TRANSPORT OF RADIOACTIVE MATERIAL IN THE CITY OF CAMBRIDGE" which reads as follows:

ARTICLE IV. ~~-~~ or maybe ~~Article V~~

ORDINANCE FOR THE STORAGE AND FOR THE TRANSPORT OF RADIOACTIVE MATERIAL IN THE CITY OF CAMBRIDGE.

1. Institutions making use of radioactive materials shall comply fully with all relevant regulations established by the Federal Government and the Commonwealth of Massachusetts for the storage, handling, and

City of Cambridge

In the Year One Thousand, Nine Hundred Seventy Nine

AN ORDINANCE

Relative to the Storage and Transport of Radioactive Wastes in The City of Cambridge

Be it ordained by the City Council of the City of Cambridge as follows:

The use of radioactive material is well-established in industrial, research, and hospital procedures as a useful and essential technique in the City of Cambridge as well as elsewhere; and

The number of disposal sites for radioactive wastes in the United States has recently been decreased in number to the extent that such disposal is now recognized as a national, regional, and community problem, the solution to which appears to be regional responsibility; and

Federal regulations include strict measures for the procurement and usage of radioactive materials through licensing, inspection, citation and similar procedures and also for the transportation of these materials, as do further regulations imposed by the Commonwealth of Massachusetts; and

The City Council, in order to ensure that the citizens of Cambridge may have confidence that no unsafe or hazardous procedures will be permitted in the handling of radioactive wastes in the City of Cambridge, has initiated a study on this issue; and be it further

ORDERED:

That Chapter Eleven entitled: "Health and Housing" of "The Code of the City of Cambridge" is hereby amended by adding at the end thereof a new Article III entitled: ORDINANCE FOR THE STORAGE AND FOR THE TRANSPORT OF RADIOACTIVE MATERIAL IN THE CITY OF CAMBRDIGE" which reads as follows:-

ARTICLE III

ORDINANCE FOR THE STORAGE AND FOR THE TRANSPORT
OF RADIOACTIVE MATERIAL IN THE CITY OF CAMBRIDGE.

1. Institutions making use of radioactive materials shall comply fully with all relevant regulations established by the Federal Government and the Commonwealth of Massachusetts for the storage, handling, and

transport of these materials; and comply in addition with such other health regulations as the Commissioner of Health and Hospitals of the City of Cambridge may promulgate from time to time; and

2. The Health Policy Board, which has been instituted by order of the City Council and which is composed of a representative group of Cambridge citizens, shall include the health aspects of radioactivity within its study of public health and environment issues in Cambridge and make recommendations regarding them to the Commissioner of Health and Hospitals in Cambridge; and

3. The Commissioner shall enforce compliance with all relevant regulations as now exist or as may be adopted in the future and shall act to close any such operations that he deems hazardous to the public health; and

4. In regard to the storage of radioactive material and, in particular, of radioactive waste, the following regulations shall apply:

   a) Each storage location shall be under the control of a designated qualified person.

   b) Radioactive waste materials shall be packaged and stored only under the supervision of authorized persons and records of the type and amount of waste shipped from Cambridge shall be maintained.

   c) Qualified radiation safety technicians shall inspect storage locations regularly and check for possible contamination.

   d) All relevant records and reports shall be available to the Commissioner of Health for his inspection as he may require.

5. In supplement to the preceding rules in paragraph (4) above, the following regulations shall apply to the storage locations for radioactive waste:

   a) Radioactive waste must be stored only in restricted locations while waiting disposal.

   b) Storage locations must be secure and protected against tampering or unauthorized removal of material.

   c) Storage locations must have adequate safeguards against fire or flooding.

   d) Storage locations must have adequate ventilation to protect workers and prevent accumulation of explosive vapors.

6. In addition to the oversight and enforcement authority of the Commissioner of Health, the Head of the Cambridge Fire Department shall exercise his full authority in regard to hazards other than radioactivity, including but not limited to any potential risk of fire related to the solvents containing some radioactive wastes.

   a) If the waste fluid is flammable as defined in Chapter 148 of the General Laws of Massachusetts, it shall be stored in accordance with the requirements of Sections 10A and 13 of Chapter 148 and all rules promulgated therefrom. For quantities not exceeding the amounts stated in Rule 3 of Section 10A a PERMIT shall be obtained from the head of the fire department. For quantities exceeding those stated in Rule 3, Section 10A, Chapter 148, application shall be made annually to the Cambridge License Commission for a Certificate of Registration, which is the license to store flammable fluids.

   The storage of all flammable fluids shall be as directed by the head of the fire department who shall cause storage locations to be inspected at the time of original application, at the time of annual renewal of the PERMIT or LICENSE, and at such other times as he may deem necessary.

7. The transport of radioactive material shall comply with all relevant Federal and State requirements including those of the users of radioactive material who transport radioactive material outside the confines of the place of use or who deliver any radioactive material to a carrier for transport shall comply with the applicable requirements of the regulations appropriate to the mode of Department of Transportation in 49 CFR Parts 170-189 and of the Nuclear Regulatory Commission in 10 CFR 71 insofar as such regulations relate to the packaging, marking and labeling of packages, loading and storage of packages, placarding of the transportation vehicle, monitoring requirements and accident reporting. Further, trucks transporting radioactive material should be placarded with signs reading RADIOACTIVE as specified in Department of Transportation Regulations 172.556. The carrier of radioactive material is responsble for determining that the transport vehicle has the appropriate placards.

8. If any section, sub-section, sentence, clause, phrase or portion of this ordinance is for any reason held invalid or unconstitutional by any Court of competent jurisdiction such portion shall be deemed a separate distinct and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

9. For the purposes of this ordinance radioactive material is defined as material having a significant excess of radioactive atoms over the natural abundance. Specifically, in this ordinance the terms "radioactive material" or "radioactive waste" are defined as quantities in excess of those categorized as exempt concentrations in Federal Regulations 10 CFR 30.70.

City of Cambridge

In the Year One Thousand, Nine Hundred Eighty-one

AN ORDINANCE

Relative to the Storage and Transport of Radioactive Materials in the City of Cambridge

Be it ordained by the City Council of the City of Cambridge as follows:

The use of radioactive material is well-established in industrial, research, and hospital procedures as a useful and essential technique in the City of Cambridge as well as elsewhere; and

The number of disposal sites for radioactive wastes in the United States has recently been decreased in number to the extent that such disposal is now recognized as a national, regional, and community problem, the solution to which appears to be regional responsibility; and

Federal regulations include strict measures for the procurement and usage of radioactive materials through licensing, inspection, citation and similar procedures and also for the transportation of these materials, as do further regulations imposed by the Commonwealth of Massachusetts; and

The City Council, in order to ensure that the citizens of Cambridge may have confidence that no unsafe or hazardous procedures will be permitted in the handling of radioactive wastes in the City of Cambridge, has initiated a study on this issue; and be it further

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ARTICLE III

ORDINANCE FOR THE STORAGE AND FOR THE TRANSPORT
OF RADIOACTIVE MATERIAL IN THE CITY OF CAMBRIDGE.

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all relevant regulations estabished by the Federal Government and the Commonwealth of Massachusetts for the storage, handling, and transport of these materials, and comply in addition with such other health regulations as the Commissioner of Health and Hospitals of the City of Cambridge may promulgate from time to time; and

2. The Health Policy Board, which has been instituted by order of the City Council and which is composed of a representative group of Cambridge citizens, shall include the health aspects of radioactivity within its study of public health and environment issues in Cambridge and make recommendations regarding them to the Commissioner of Health and Hospitals in Cambridge; and
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   d) Storage locations must have adequate ventilation to protect workers and prevent accumulation of explosive vapors.
6. In addition to the oversight and enforcement authority of the

Commissioner of Health, the Head of the Cambridge Fire Department shall exercise his full authority in regard to hazards other than radioactivity, including but not limited to any potential risk of fire related to the solvents containing some radioactive wastes.

a) If the waste fluid is flammable as defined in Chapter 148 of the General Laws of Massachusetts, it shall be stored in accordance with the requirements of Sections 10A and 13 of Chapter 148 and all rules promulgated therefrom. For quantities not exceeding the amounts stated in Rule 3 of Section 10A a PERMIT shall be obtained from the head of the fire department. For quantities exceeding those stated in Rule 3, Section 10A, Chapter 148, application shall be made annually to the Cambridge License Commission for a Certificate of Registration, which is the license to store flammable fluids. The storage of all flammable fluids shall be as directed by the head of the fire department who shall cause storage locations to be inspected at the time of original application, at the time of annual renewal of the PERMIT or LICENSE, and at such other times as he may deem necessary.

7. The transport of radioactive material shall comply with all relevant Federal and State requirements including those of the users of radioactive material who transport radioactive material outside the confines of the place of use or who deliver any radioactive material to a carrier for transport shall comply with the applicable requirements of the regulations appropriate to the mode of Department of Transportation in 49 CFR Parts 170-189 and of the Nuclear Regulatory Commission in 10 CFR 71 insofar as such regulations relate to the packaging, marking and labeling of packages, loading and storage of packages, placarding of the transportation vehicle, monitoring requirements and accident reporting. Further, trucks transporting radioactive material should be placarded with signs reading RADIOACTIVE as specified in Department of Transportation Regulations 172.504 and 172.556. The carrier of radioactive material is responsible for determining that the transport vehicle has the appropriate placards.

8. If any section, sub-section, sentence, clause, phrase or portion of this ordinance is for any reason held invalid or unconstitutional by any Court of competent jurisdiction such portion shall be deemed a separate

distinct and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

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CITY OF CAMBRIDGE
DEPARTMENT OF HEALTH, HOSPITAL AND WELFARE
1493 CAMBRIDGE STREET CAMBRIDGE, MASSACHUSETTS 02139
Telephone 354-2020

January 16, 1981

Mr. James L. Sullivan
City Manager
City Hall
795 Massachusetts Avenue
Cambridge, Ma. 02139

Dear Mr. Sullivan,

At the combined Health Policy Board Public Health Subcommittee held on January 15, 1981, the Ordinance that was reviewed by the Board a year ago was again examined.

The Public Health Subcommittee and the Board felt that this Ordinance was not only sufficient but also desirable to deal with the regulation of transportation of radioactive material through Cambridge. We are happy to submit a copy of this Ordinance to you for review and submission to the City Councillors.

Yours sincerely,

VS

Robert Neer

Robert Neer, MD, Chairman
Subcommittee on Public Health
Cambridge Health Policy Board

MC:vs
cc: Dr. Chalfen
Public Health Committee
members

RECEIVED
JAN 26 11 06 AM '81
OFFICE OF THE
CITY MANAGER

CITY OF CAMBRIDGE

CAMBRIDGE, MASSACHUSETTS 02139
Tel. 498-9011

EXECUTIVE DEPARTMENT
JAMES L. SULLIVAN
City Manager

February 2, 1981

To the Honorable, the City Council:

Enclosed is a copy of a communication from the Cambridge Health Policy Board and a proposed Ordinance relative to the storage and transport of radioactive materials in the City of Cambridge.

Very truly yours,

Robert W. Healy
Acting City Manager

RWH/mbf
Encs. 2

Agenda # 7 O-6A

Proposed ordinance relative to the storage and transportation of radioactive materials in the City of Cambridge.

In City Council,

February 2, 1981

2/2/1981
Referred to the
Committee on Health
and Hospitals
Copy sent to Comm. on Health
+ Hospital 2/3/81 (DL)