April 9, 1986 Volume 30, Number 27

## No Tech Talk

Because of the Patriots' Day holiday observance Monday, April 21, Tech Talk will not be published April 23. The Institute Calendar next week will cover the period from April 16 through May 4. The deadline for listings in next week's paper is noon Friday, April 11.

## Sounds of the heart

What is the sound of a saxophone and a throbbing heart? Find out next Tuesday at 12:30pm in Lobby 7 when saxophone player Stan Strickland will be fea-tured in "Heartbeat." This performance work by artist Chris Janney, fellow at the Center for Advanced Visual Studies, is designed as a duet between a saxophonist and the amplified sound of the electrical impulses of his heartbeat. It will be a teaser for two major works by Janney scheduled at MIT next week.

## Jet history

Donald S. Lopez, deputy director of the National Air and Space Museum (NASM), Smithsonian Institution, will address "The Jet Age: A Brief History" Monday, April 14, at 7pm in Rm 10-250. The lecture, part of the Illustrated Lectures from NASM program, is sponsored by the MIT Museum, Department of Aeronautics and Astronautics Ward Fund and the New England Section of the American Institute for Aeronautics and Astronautics.

Explored will be the development of the jet engine from a machine that transformed fuel into heat and noise to the mainstay of military and commercial aviation that is known today. The lecture is free and is open to the public.

## **Experts Wanted**

A nonprofit group that acts as a link between journalists and experts in technical fields is seeking MIT people who may want to participate in the program.

The New York-based Media Resource Service-operated by the Scientists' Institute for Public Information-was established in 1980 to facilitate and improve communication between scientists and journalists. Today it has a data base of more than 20,000 participants cross-referenced according to their expertise and location.

Reporters who call the service are referred to scientists, engineers, physicians and policymakers who have agreed to provide responsible information to the media. When the issue in question is controversial, journalists are referred to experts representing differing views.

The service is free and available to all

For additional information, or to obtain questionnaires from the Media Resource ervice, contact Charles Ball in the News Office at x3-1683.

## WMBR at 25

A special program, "A Silver Anniversary Retrospective: 25 Years of FM Radio at MIT," will air Thursday, April 10, 8-11:30pm on WMBR, 88.1FM. A committee is being formed to plan special events for the station's 25th year. Those interested in participating should call Todd Glickman '77 at WMBR x3-4000, Rm 50-030.

## Faculty call

The housemasters and students of Burton-Conner House will host a facultystudent party in the Burton Dining Hall from 5-7pm Friday, April 11. Andrew Bein, Burton House social chairman, issued an open invitation to faculty to attend.



# Legendary Daedalus to fly again

By CHARLES H. BALL Staff Writer

A press conference was scheduled in Washington, D.C., today (April 9) to announce that proposed human-powered aircraft flight from Crete to Greece—dubbed Project Daedalus and sponsored jointly by MIT and the Smithsonian National Air and Space Museum -has been found to be "technically and physiologically feasible."

Dr. Jack L. Kerrebrock, associate dean of the School of Engineering and Richard Cockburn Maclaurin Professor of Aeronautics and Astronautics, was to participate in the news conference with John S. Langford, an MIT graduate who is serving as project manager, and Walter J. Boyne, director of the National Air and Space Museum.

Professor Kerrebrock said before leaving for Washington that the project is now ready

to move into the phase involving construction of a prototype aircraft over the summer at MIT and test flights at Hanscom Field in Bedford by fall. If all goes well, and adequate funding is obtained, he said, the actual flight could be attempted as early as a year from

"We have a design and we're ready to go ahead with construction of the prototype," he said. The work will be done, as it was with previous human-powered aircraft built at MIT, in the Department of Aeronautics' Experimental Projects Laboratory and at Lincoln Laboratory's Hanscom Field Flight Facility. The Daedalus technical team includes undergraduate and graduate students, faculty and alumni.

The team will build on the base of experience provided by the department's five earlier human-powered aircraft, which include the 1979 Chrysalis and the 1984 Monarch B

The Monarch B was awarded first prize in the Royal Aeronautical Society's Kremer World Speed Competition for a record-setting speed flight on May 11, 1984, of 1,500 meters in three

Financial support for prototype construction and flight testing-Phase II of the project-is being sought from corporate sponsors. The cost is estimated at \$195,000.

Phase III will cover construction of the actual Daedalus aircraft and flight operations from Crete to the mainland of Greece-a distance of 69 miles. The "weather window" for the flight is March, April or September,

A study prepared by the Daedalus team, to be released in Washington today, states that the aircraft's aerodynamic characteristics will be tailored to minimize sensitivity to winds and turbulence.

It noted that the distance for the proposed flight is more than triple that of the world distance record—22 miles across the English Channel by the Gossamer Albatross in 1979and that no human-powered aircraft that currently exists is capable of making the journey.

In finding, however, that the project is feasible, the technical team said it relied not only on theoretical calculations but also on an experimental research program conducted during the past year. It said research was conducted in the following areas:

-Aerodynamics. An airfoil with 30 per cent less drag than those used on previous humanpowered aircraft was developed.

-Structures and materials. An advanced all-composite wing structure was designed and built.

-Human endurance. With the cooperation of the Yale University School of Medicine, a

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# Brain and Cognitive Sciences Department to be established

By ROBERT C. Di IORIO

Staff Writer
Effective July 1, MIT will establish a new academic department to carry foward its ongoing interdisciplinary efforts to understand the most complex, sophisticated and powerful information processing device known—the human brain.

The new Department of Brain and Cognitive Sciences will be formed by merging the Department of Psychology and the neuroscience program of the Whitaker College of Health Sciences, Technology and Manage-

The head of the new department will be Emilio Bizzi, MD, Eugene McDermott Professor in the Brain Sciences and Human Behavior, and director of Whitaker College. Dr. Bizzi, a member of the faculty since 1969, will continue to direct Whitaker College. Professor Kenneth A. Smith, associate provost and vice president for research, will continue to be responsible for the overall guidance of the

Professor Richard Held, head of the De-

partment of Psychology since 1977, will continue his teaching and research as a faculty member in the new department.

Professor John M. Deutch, MIT provost, announced the establishment of the new academic department. The study of the complexities of the brain requires "an interdisciplinary approach which combines the experimental technologies of neurobiology and psychology with the theoretical power coming from the fields of artificial intelligence and linguistics," Professor Deutch said.
"The new department will be focused around

two themes: computation and neurobiology. Focusing our ongoing interdisciplinary efforts in these areas in a new department will create a unique scientific environment for the training of an exciting new generation of scientists," Professor Deutch continued. "Within a single academic structure we will train young researchers who will be competent in neurobiology, systems neuroscience, computation, or cognitive science, and literate in the other relevant domains as well. Such a broadly (continued on page 8)

# Campus Preview scheduled for admitted women

By JOANNE MILLER Staff Writer

When the freshman class assembles at MIT next August, it will be different from all its predecessors-it will be 35 per cent or more

That's a breakthrough MIT women students and admissions officials have been hoping to achieve for the past several years. This year more young women than ever applied for admission to MIT and more were admitted. If they enroll in the same proportion as part classes, they will be some 350 strong in the 975-member Class of 1990.

To give them an advance look at what attending MIT is like, all 639 of the admitted women have been invited to the campus this week for Campus Preview. More than a third of them are expected to attend with some coming from as far away as Hawaii and the Marshall Islands.

This is the third year admitted women have been invited to the campus. They pay their own transportation costs but while at MIT are guests of the Institute. This year's program,

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# MIT to entertain at Museum

When Boston's Museum of Fine Arts throws its yearly party for 15 colleges and universities, where does it go to get a polyphony of pianists to play in relays for two and a half hours?

The answer is MIT. The time is tonight (Wednesday, April 9) when students and all other members of the MIT community are invited to The Event, 7-9:30pm.

Last year our pianists were the big hit of the evening," said Alison Shafer of the Council for the Arts. "They were called back again and again for encores.'

MIT pianists this year will include Una Hwang '88, organizer and leader of the piano team, Larry Brott '87, Bertha Chang '88, graduate student Monty McGovern and John Raush '87. A violist, Wilson Hsieh '87 also will perform this year.

Two more MIT attractions will be a performance by the singing Logarhythms and installation of the Musical Sidewalk developed by the MIT chapter of Tau Beta

Pi, the national engineering honor society. The Event is planned to introduce students to the Museum and also to remind them that they have unlimited free admission to the Museum by simply presenting their IDs. At MIT this membership program is provided by the Council for the Arts, which also serves as liaison for other events and benefits, such as the MFA passes available for MIT faculty and staff.

The Museum's outstanding collections of Impressionist, European and American paintings will be open, along with the Classical, Egyptian and Asian art wings. Among the special exhibitions are: Manet to Matisse and Augustus Saint-Gaudens.

Student coordinator of The Event for MIT is Carolyn Beer '86, assisted by Stephanie Levin '87.

Refreshments and live entertainment will be provided throughout the evening. Admission is by valid current ID. Information: x3-4003 or 267-9300, x446.

# Junior finds creativity a part of life at MIT

(An exhibition of work by Jennifer Lin '87 will be a special part of Campus Preview, an event for women admitted to the Class of 1990 that will take place Thursday-Saturday. "Profile: A Detour through MIT" opens with a reception tonight (Wednesday, April 9) at 7pm in the Wiesner Student Art Gallery located on the second floor of the Student Center.

When Ms. Lin visited the News Office to talk about her exhibit, we asked her to develop some of her ideas in writing. In the following she introduces her exhibit, supported in part by the Council for the Arts, and explains how she came to create it.)

When I tell people that I am an architecture major at MIT, some typical reactions are:

"I didn't know they had an architecture department. 'Can you fix my computer?'

"Do you have time for a social life?"

"How many all-nighters have you pulled?" I explain to them that not only do I have a challenging academic life, but I also have time to develop my extracurricular activities, such as sculpture, photography and sketching.

To give women students an idea of what they can accomplish at MIT, I decided to ask for an exhibition of my art work in connection with Campus Preview.

I will be exhibiting ceramic pieces done at the Student Art Association, along with drawings, sketches and photography done in

and outside my major. There will also be pieces highlighting Women's Studies and the Experimental Studies Group. I've also planned an informal panel of students on Friday, April 11, to discuss and answer questions about how incoming freshwomen will fit in at MIT. Members of the panel will be from a variety of backgrounds, such as electrical engineering, political science, humanities and mathematics

My hope is that my exhibition and the discussion may help MIT to attract more women students and also to prove that the stereotypic ideas about the MIT student are far from true. Often, of course, there is a grain of truth to

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#### Announcements

June Degree Candidates With Student Loans Administered by MIT – Will receive notices to schedule an Exit Interview with the Bursar's Office Student Loan Dept, Rm E19-225, x3-3341. These interviews are mandated by the US Office of Education and are required by the Institute to maintain good standing on the degree list. The notice also serves to activate the repayment status and terms of the loans.

Examination Schedules - All students should obtain examination schedule at Information Ctr, Rm 7-121. Exams n listed, or a conflict in exams (two in the same period) must be reported to the Schedules Office, Rm E19-338, Fri, April 18,

Medical School Applicants 87 - Meeting on the Application Process, Thurs, April 10, 10am, Rm 4-370. Details will be discussed about services and procedures of the Preprofe Advising Office. Info: Ann, x3-4737 or come by Rm 12-170.

1986 Summer Session Registration Material – Available Fri, April 18, at the Registrar's Office, Rm E19-335. Registration forms must be filled in and returned to the Registrar's Office by Fri, May 2.

John Asinari Award for Undergraduate Research in the Life Sciences – For undergraduates in Course VII, VII-A and VII-B. Deadline: April 25. For details see Tom Lynch, x3-4711, Page 5654 Rm 56-524

Information Services Computing Courses and Seminars\*\* – FEE TRAINING COURSES: Introduction to Lotus 1-2-3, April 22-23, 9-5pm, American Institute of Banking, Charles River Plaza, Boston — Register by 12noon, April 14; Advanced Lotus 1-2-3, May 8-9, 9-5pm, American Institute of Banking. Charles River Plaza, Boston - Register by 12noon, April 28; Introduction to Symphony, \$DAS01May 1-2, 9-5pm, American Institute of Banking, Charles River Plaza, Boston -Register by 12noon, April 23; Introduction to Word Processing on DECmate II, May 6, 8, 13, 15, 9-12noon, Rm II-401 — Register by 12noon, April 21; Introduction to Multiplan, April 22 and 29, 1-4pm, Rm II-401 — Register by 12noon, April 14. Payment required at time of registration, Rm II-315; MIT ID required to avoid paying maximum fee. Some uisites; questions about registration, call Joan Bubluski, x3-1744.

MITOC White Water Canoeing Class\*\* - April 12-13, Wellesley/Cohasset; April 20, Saco; May 3-4, Farmington (limit 6); June 14, Maine. You must know how to swim. Approx cost, \$35 (includes transportation). Contact Bruce McKenzie, 396-2733.

Serials in the MIT Libraries, 27th Ed - Microfiche listing published three times a year, of approximately 22,000 titles, includes information on holdings, dates, call numbers, and title cludes information on noisings, dates, call numbers, and the changes. The 27th edition contains over 100 new titles and is published in two sections: 1) alphabetical list (8 fiche); 2) keyword index (8 fiche). Prepayment required. Price: \$20; \$5/MIT staff & students. Send check payable to MIT to Office of the Director, Rm 14S-216.

Free Museum of Science Admission for MIT Students — With MIT student ID, provided by MIT chapter of Tau Beta Pi, the Engineering National Honor Fraternity. Also, reduced ad-mission to special exhibits.

MIT Hunger Drive Food Drive – We need non-perishable, unopened foods for Boston's less fortunate. Ongoing collection all day and night at drop-off boxes in Lobby 7, Walker, McGregor

Arts Hotline - Recorded information on all arts events at MIT may be obtained by dialing x3-ARTS. Material is updated every Monday morning.

Nightline\*\* – a student-run hotline open every evening of the term, 7pm.7am. If you need information about anything or you just want to chat, give us a call. We're here to listen. x3-7840.

Faculty Members — Technology Review would like to hear about books being published by MIT faculty members. Please notify us, as far in advance as possible, of your upcoming book. Technology Review, Rm 10-140, x3-8250.

#### Club Notes

WMBR\*\* - is looking for students interested in radio and chnical work. Contact Eli Polonsky, x3-4000. Leave name and phone number.

MIT Student Cable Programming Group\*\* - Looking for students interested in programming the MIT Cable Television channels. Contact Randy Winchester, x3-7431.

- MIT's humor magazine\*\* - meets every Weds, 7pm, Rm 50-309 (Walker). Everyone welcome

Student Center Committee (SCC)\*\* - Has fun every Sunday, 7pm, Student Ctr Center Lounge. Do you? Call x3-3916 anytime

Animal Rights Forum\*\* - Meets 2nd & 4th Weds each month, 5pm, Rm 8-105.

MIT Student Duplicate Bridge Club\* - Bridge games every Sat, 7pm; every Thur, Sun & Mon, 6:30pm, \$.75 entry fee, Rm 407, Student Center. Lessons free w/entry at 6:15pm from Bridge Senior Masters. No partners necessary, all welcome.

MIT/DL Bridge Club\* - Duplicate bridge, Tues, 6:30pm, Stu dent Center Rm 349. ACBL masterpoints awarded; come with or without partner, newcomers always welcome. Special touronthly. Handicap game, 3rd Tues every month. Info call Gary Schwartz, x8-2459 Draper, or Mark Dulcey, 272-8428. n: \$1/students, \$2/non-students.

MIT Outing Club\* — Camping, cycling, climbing, canoeing, cabins: meets M/Th, 5-6pm, Student Center Rm 461. Also, see our bulletin board in "Infinite Corridor" next to Athena.

Club Lounge. Info: Hoang Do, x3.2843. Suguru Araki Open – (4th Annual MIT Open) Competition for all skill levels, May 24.25, 10am-6pm, DuPont Gymnasium. Info: David MArcus, 492-4317. MIT Table Tennis Club\*\* - Meets Fri, 8-10pm; Sat, 6pm, T-

MTT Go Club\*\* - Meets M/Th, 5-7pm, NE43 3rd fir Playroom. Play the ancient oriental game of skill. Knock to get in if the door is locked.

MIT Hobby Shop\*\* – Complete supervised facilities for woodworking and metalworking, Rm W31-031, M-F, 10am-6pm; Wed, 10am-9pm. Fees: \$15/term students; \$25/term community. Info, x3-4343.

MIT Yoga Club\* - Rejuvenate your mind and body with Kundalini Yoga, the science of awareness, M-TW, 5:15pm, Burton Dining Hall. Beginners welcome. Th Seminar Class with Dr. Gurucharan Singh Khalsa, 5pm, Rm 24-624. Info: Fred Martin or Jeff Tollaksen, 247-0506 or x3-3157.

MIT Aikido Club\*\* - meets Mon-Fri, 5:30pm, DuPont exercise room. Aikido is a non-competitive Japanese martial discipline.

MIT Wu Tang Club\* - teaches northern Chinese kung fu, Tues & Thurs, 8pm, Burton Dining Hall; Sat, 10am, Athletic Center. Beginners welcome. For info call Meilin Wong, x5-8713

MIT Tae Kwon Do Club\*\* - Tae Kwon Do is a Korean martial art. Meets Sun, 4pm, T-Club Lounge; M/W, 6pm, Burton Dining Hall; Fri, 6pm, T-Club Lounge. For info call In Ho Kim,

MIT Wonhwa-do Club\* — A synthesis of karate-do-type and judo-type martial arts. Meets MWF, 7-8:30pm, DuFont Exercise Rm. Beginners welcome. Info: Victor Lin, x5-8264 dorm or Karl Gemperli, 536-1300.

Scuba Club\*\* – The club sponsors dives throughout the term. Call scuba locker (x3-1551) for info and equipment rentals. For more info contact Dave Summa, x3-6464 or Mike Fox 492-4407.

MIT Guild of Bell Ringers\* - meets Mondays, 6:30-9pm, 2nd floor Lobby 7, for change ringing on handbells. We also ring the tower bells at Old North Church. Beginners are welcome. Contact Steve Costenoble, x3-3664 for more information.

#### Religious Activities

The Chapel is open for private meditation 7am-11pm daily.

Christian Science Organization at MIT\* - Weekly estimony Meeting, Thurs, 5:45pm, Rm 4-145.

Tech Catholic Community\* - Roman Catholic Masses: Sun, Pentential Service: Tues, April 29, 7pm. All services in MIT Chapel. Morning Prayer: M.F. 8:15am, Chapel Basement. Bible Study: Sun, 10:35am, Ashdown Hulsizer Rm & Tues, 8pm, Chaplaincy Library. Chaplaincy Office: x3-2981.

MIT Hillel\* - Passover Seder Reservations due by April 11. Sign up and pay at Hillel or at the Passover Booth in Lobby 10, April 9.

Lutheran Ministry and Episcopal Ministry\*\* – Weekly service of Holy Communion: Wed, 5:10pm, MIT Chapel. Supper vice of Holy Communion: Wed, 5:10pm, MIT Chapel. Supper following at 312 Memorial Drive. For further info, call x3-2325/2983.

Baptist Chapel\* – Baptist Student Fellowship Services, Suns, 7pm, MIT Chapel.

MIT Islamic Society\* - Daily prayers, Ashdown House (basement), 5 times a day. Call x5-9749 dorm, for schedule. Friday prayer, Ashdown House 12:30-1pm, Khutba starts at 12:30pm, congregation at 12:55pm.

Meditation and Discourse on the Bhagavad Gita\* – Swami Sarvagatananda, MIT Vedanta Society/Ramakrishna Vedanta Society of Boston, meets Fridays through May 23, 5:15pm, MIT Chapel

United Christian Fellowship\*\* - MIT Chapter of Inter-Varsity Christian Fellowship, weekly meetings: large group for worship and sharing from God's word, Fri, 7pm, Student Ctr Mezzanine or Ctr Lounge; small group meetings for Bible Study eekly at different times. For more info, call Chiu-Oan,

MIT Graduate Christian Fellowship\* - Come meet other MIT Graduate Christian Fellowship — Come meet christian faculty, staff and grad students: weekly lunch gatherings, Weds, 11:55-12:55, Student Ctr Twenty Chimneys; info: John Ivan, x3-3880. A fellowship group also meets for a time of prayer and sharing for faculty, staff and graduate students in Sloan School, Thurs, 12noon, Rm E51-024. Contact Andy Hamlin, 926-8472.

MIT Seekers Christian Fellowship\* — Park Street Church Seekers Teaching and Worship Time, Sundays, 9:15am, enjoy our biblical teaching, worship and sharing at Park Street Church, right in front of the Park Street T stop, MIT Seekers leave from McCormick at 8:30am. Come join us

Campus Crusade for Christ\*\* - Family time, 7:15pm, Fri, eves, Rm 37-252. Fellowship, scripture teaching, prayer, singing, refreshments & fun. Tues, prayer time, 7:30-9am, W20-441, Student Center. Call x5-9153 dorm.

Lincoln Laboratory Noon Bible Studies\* - Tues & Thurs, Kiln Brook III, Rm 239. Annie Lescard, x2899 Linc.

Morning Bible Studies - Fri, 7:30-8:30am, L-217. Ed Bayliss,

Noon Bible Study\* - Every Wed, Rm E18-465, bring lunch. Ralph Burgess, x3-2422. (Since 1965).

Edgar Cayce Study Group\* - Tuesdays, 6:30-9pm, Edgar Cayce's Search for God material will be used as the basis for group discussion & meditation. For info: Douglas McCarroll, 497-0819 12-9pm or Scott Greenwald, x3-7423.

## **Graduate Studies**

t Dean Jeann the Graduate School Office, Rm 3-136, x3-4869 for further

Foreign Languages and Literatures Section of the Humanities Dept Student Exchange Program with the Ecole Normale Superieure in Paris, France, 1986-87. MIT student selected will be provided, free of charge, with a private room and breakfast in the school and will have free access to the Ecole's libraries, classes, and seminars. As a student at the Ecole, he/she is entitled to register at any of the institutes of higher learning affiliated with the Ecole, to work under the supervision of some of Paris' most distinguished professors. Graduate students and graduating seniors in the areas of sociology, ar modern history, economics, urban geography, chaeology, literary and cultural studies, philosophy, and linguistics are invited to apply. The candidate must be competent in the French language. Application deadline: April 11. Application forms available in the Foreign Languages and Literatures Office, Rm 14N-207. Information: x3-4771.

1987-88 Fulbright and Other Grants for Graduate Study Abroad. Opening for competition for grants for graduate study or research aborad in academic fields and for professional training in the creative and performing arts is May 1, 1986. Approximately 700 awards to over 70 countries will be available. Approximately 700 awards to over 70 countries will be available. plicants must be US citizens at the time of application, who will hold a bachelor's degree or its equivalent before the beginning date of the grant and, in most cases, be proficient in the language of the host country. Except for certain specific awards, es may not hold a PhD at the time of application. Candidates for 1987-88 are ineligible for a grant to a country if the hav been doing graduate work or conducting research in that country for six months or more during the academic year 1986-87. Creative and performing artists are not required to we a bachelor's degree, but they must have four years of professional study or equivalent experience. Candidates must have an MD or equivalent degree (e.g. DDS, OD) at the time of application. Applications available from Dean Eugene R. Chamberlain, Rm 5-106. Deadline: September 26, 1986.

Fulbright Collaborative Research Grants, 1987-88. Designed for teams of 2-3 graduate students or recent postdoctoral researchers to perform joint research in most countries in the world (except most East European countries, the USSR, and In-dochina). There are no restrictions on fields of study. Applicants should check with IIE (Institute of International Education) regarding country availability, prior to applying. Applicants must be US citizens at the time of application, have received the majority of their high school and undergraduate education at majority of their righ scnool and undergraduate education at US educational institutions and must hold a BA degree or equivalent before the beginning date of the grant. Applicants with a PhD at the time of application may have obtained the degree no earlier than June, 1984. Applicants in medicine must have an MD degree or equivalent (e.g. OD, DDS) at time of application. Applicants are expected to have written and spoken proficiency in the language of the host country. The statement of proposed research submitted by team members may be idenor proposed research submined by can inclined any can detect it.

ical, complementary to, or present a different dimension of the team's research. Also, evidence of affiliation abroad with a host country institution on on-going project that will oversee the research must be presented with the application. Grants are normally for 6-10 months and will provide fixed sum awards to each member of the team, in addition to basic health and accident insurance conserved that accept member of the dent insurance coverage. It is expected that each member of the team will carry out research in one country abroad for a minimum of six months during the same academic year, although all members of the team do not necessarily have to be in the host country concurrently. Applications available from Dean Eugene R. Chamberlain, Rm 5-106. Deadline: December 1, 1986.

#### International Opportunities

The following is a list of opportunities available to foreign nationals or students desiring work abroad. For more information on these, please see the International Jobs notebook in the Office of Career Services, Rm 12-170.

Exxon Corp has been advised that a number of their foreign affiliates are interested in recruiting engineering or comp foreign nationals for work in these countries: Belgium, Den-mark, England, Finland, France, Germany, Holland, Italy, Nor-way, Argentina, Colombia, Brazil, Thailand, and Malaysia.

Raychem International Corp is interested in hearing from na-tionals of Brazil, Canada, China, Kuwait, Malaysia, Mexico, Saudi Arabia and Taiwan; candidates should have scientific, technical and engineering backgrounds and experience plus an MBA. They also seek Master's degree candidates in the scientific, technical and engineering fields for positions available in

Siemens in Tokyo seeks Japanese nationals in mechanical, electrical, and electronics engineering fields.

The Organization for Economic Co-Operation and Development in Paris has a job opening of an entry level APL programmer. They seek someone who is highly qualified. Relocation expenses

#### Internships

The following is the list of internships received this week. For ore information please see the Internship Information note

more information please see the Internsity Information notecook in the Office of Career Services, Rm 12-170.

NOTE: The Office of Career Services has added a new directory to their Career Library: Getting Work Experience, the College Students' Directory of Summer Internship Programs that Lead to Careers. It can be found in the Reference section of the Career Services Office.

Internships Offering a Stipend:

The Boston Hearld is accepting applications for their Minority Summer Internship Program. This is a paid three month oppor-tunity to develop reporting, writing and editing skills.

Home Box Office, Inc, is offering a paid, 12 week summer a paid, 12 ship program for a graduate student (first year MBA) or undergraduate (junior year). The intern will provide support for users of computer systems throughout HBO's many programming departments.

#### Student Jobs

There are more job listings available at the Student Employment Office,  $Rm\ 5$ -119.

Student or organization to promote and distribute the New York Times on campus. Automobile not necessary. Great opportunity for a student group to provide continuity in a job. Approximately 8 hrs/wk, with potential for \$200+/wk. contact G. Michael Ploude, PO Box 190, Londonderry, NH 03053,

Student needed to work at the MIT Nuclear Reactor Lab in Radiochemistry and neutron activation analysis of various samples and chemical compounds. Must have good background in analytical chemistry and a strong interest in learning trace element analysis employing neutron activation techniques. Must be at least 18 years old. Will be required to work with and handle radioactive materials and must adhere to safety procedures established by the Radiation Protection Office. Temporary position through July 1, 1986, with probability of full time sum-mer employment through August. Contact: Henry Bondar,

Office assistant needed for computerized literature search service to provide assistance to staff. Fee based service providing n-line search capabilities to students, faculty and staff, as well as clients outside the Institute. Phones, greet clients, and interpret service, schedule appointments are some duties. Also, typing, filing, and copying. 6-9 hrs/wk, 3 hour daily afternoons, only. \$5.60/hr. Contact: Joan Whittaker or Mary Pensyl, x3-7746, Rm

Someone needed to assist in delivering and assembling furniture. No car or license necessary. Hours are part-time, on-call. Pay is \$6/hr. Contact: John, John Maher Trucking, 84 Gardner

#### UROP

MIT and Wellesley undergraduates are invited to join with faculty members in pursuit of research projects of mutual fascina-tion. Undergraduates are also urged to check the Undergraduate Research Opportunities Program's bulletin boards located in the main corridor of the Institute and in the UROP Office. Faculty supervisors wishing to have projects listed should send project descriptions to the UROP Office. Questions? Contact us, x3-5049, Rm 20R-141 Nuclear Engineering UROP Awards. Several awards are

given to encourage research with faculty in the Nuclear Engineer-ing Dept. Freshmen are encouraged to apply. Contact: Prof Ronald Ballinger, x3-5110, Rm 24-215 for more details.

Phase Measurement in Structural Vibration. Various theories exist for predicting the phase delay betw and a vibration pick-up attached to a structure. The purpose of this project is to carry out a sequence of experiments to deter-mine which (if any) of these theories is best able to predict the observations. A plate will be used as the structure and damping applied to it. The damping will be measured using decay rate applied to it. Ine damping will be measured using decay race techniques. This project may be extended through the summer of 1986 and is available for PAY or credit. Contact: Richard Lyon, Dept of Mechanical Engineering, x3-2214.

Chemical and Biotechnology Risk Assessment. The Magnitude of Likely Variability in Human Susceptibility in Toxic Substances. For this project the student would assist us in retrieving papers, abstracting/analysing data, and helping us build up a computerized data base of information on human variability that can later assist in quantitative risk ass Faculty supervisor: Nick Ashford, Rm E40-239. Contact: Dale Hattis, x3-6468.

Development of Methodology for Occupational Health Risk Assessment. In this effort, sponsored by the National In-stitute for Occupational Safety and Health, we will be undertaking a number of case studies of the health risks of specific chemical agents — including ethylene dichloride, perchloroethylene, other two-carbon alkylating agents, and aromatic

amines. The student will help assemble relevant scientific literature, develop appropriate pharmacokinetic models, and explore the risk implications of alternative models. Faculty supervisor: Nick Ashford, Rm E40-239. Contact Dale Hattis, x3-6468.

UROP in History. UROPer interested in 19th century history, especially European (English) and South African. Contact: R. Rotberg, x3-3641, Rm 14N-321.

Metal Matrix Composites Processing. UROPer needed to help make metal matrix composites. Will work with machine that casts liquid aluminum into fiber at high pressure. Work will entail running the present machine and helping to improvits performance, including some computer control and data as quisition. No prior experience except good mechanical abilities are needed. Be willing to get hands dirty and work around molten metal. Faculty supervisor: Dr. James Cornie. Contact: Larry Masur, x3-3276/5410.

Athena Language Learning Project. Experienced LISP programmer, preferably with 6.170 to work on AI system for teaching foreign languages. Knowledge of Spanish, French, Japanese, Russian, French are advantages. Thesis topics possible PAY or credit. Summer into fall. Contact faculty supervisor: Janet Murray, x3-2094 or e-mail jhmurray%athena or Sue Felshin, x3-5043, sylph%02.

Athena Writing Project. Experienced C-programmer preferably with 6.170, to work on a complex Compositional System for writers and writing instruction. PAY or credit. Summer into fall. Contact: Janet Murray, x3-2094 or e-mail jhmurray%athena or Bill Cattey, x3-0140 or wac%athena.

#### Cable Television Schedule

MIT Cable Television serves the MIT campus. For connection and programming information, call x3-7431.

Wednesday, April 9

Channel 8: 3:30-6pm - Live coverage of Prof Franco Modigliani's Killian

Channel 9: 9-10:30am — High Frequency Seismology. 2-3:30pm — 13.862 Ocean and Seabed Acoustics II. The Japanese Paintings. 2-3:30pm - 13.862 Ocean and Seabed Acous 8-9pm - Nihonga, The Japanese Paintings.

10:30am-12noon - Live coverage of the MIT Optics and Quan-

tum Electronics Seminar. Thursday, April 10

6pm - 8.02 Help Session #9. Program will repeat until 4pm, 4/15.

Channel 9: 9-10:30am - High Frequency Seismology.

Channel 11: 10:30am-12noon

- 12.762 Experimental Physical Oceanography Live from WHOI.

Friday, April 11 8.02 Help Session #9. Program will repeat until 4pm, 4/15.

Channel 9: 10:30am-12noon - 12.806 Instability and Turbulence in

Geophysical Systems

Saturday, April 12

Channel 8: 8.02 Help Session #9. Program will repeat until 4pm, 4/15.

Sunday, April 13 Channel 8: 8.02 Help Session #9. Program will repeat until 4pm, 4/15.

Monday, April 14 Channel 8: 8.02 Help Session #9. Program will repeat until 4pm, 4/15.

2-3:30pm - 13.862 Ocean and Seabed Acoustics II. Live from WHOL

Tuesday, April 15 Channel 8: 8.02 Help Session #9. Program will repeat until 4pm. 4:30-6pm — Live coverage of the MIT Biology Colloquium.

3-5:30pm - Live coverage of the MIT VLSI Seminar.

10:30am-12noon - 12.806 Instability and Turbulence in Geophysical Systems. Live from WHOI.

Wednesday, April 16 Channel 9: 9-10:30am — High Frequency Seismology. 2-3:30pm — 13.862 Ocean and Seabed Acoustics II.

Channel 10: 10:30am-12noon — Live coverage of the MIT Optics and Quantum Electronics Seminar.

Thursday, April 17

6pm - 8.02 Help Session #10. Program will repeat until 9am, 4/25.

Channel 9: 9-10:30am — High Frequency Seismology. 8-9pm — Nihonga, The Japanese Paintings.

Live from WHOI.

Friday, April 18 Channel 8:

10:30am-12noon - 12.762 Experimental Physical Oceanography.

8.02 Help Session #10. Program will repeat until 9am, 4/25.

10:30am-12noon - 12.806 Instability and Turbulence in Geophysical Systems.

Saturday, April 19

Sunday, April 20

8.02 Help Session #10. Program will repeat until 9am, 4/25.

8.02 Help Session #10. Program will repeat until 9am, 4/25.

TECH TALK



April 9, 1986 Volume 30 Number 27

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# Sussman appointed CTS director

Professor Joseph M. Sussman, recognized internationally as an expert in transporta-



tion, particularly with regard to rail system operations, has been named director of the Center for Transportation Studies

The appointment was announced by Dr. Gerald L. Wilson, Dean of the School of Engineering. 'I am particularly happy that Professor Sussman has agreed to direct the Center's activities at this point in history. The transportation en-

vironment is a dynamic one, with critical changes in regulatory climate, technology and international issues impacting the field dramatically. The Center has an opportunity to make a significant contribution in this important field and Professor Sussman brings to the task broad educational and administrative experience and a distinguished background in transportation research," Dean Wilson said.

Professor Sussman succeeds Professor Daniel Roos who in May 1985 became the first director of MIT's new Center for Technology, Policy and Industrial Development. Professor Roos was director of the Center for Transportation Studies for seven years. "During his term as director," Dean Wilson said, "the Center experienced substantial growth in its intellectual breadth, in its research programs and in its interactions with the private transportation sector. Also, the interdisciplinary Master's Program in transportation was initiated. We owe our gratitude to Dan for his strong leadership as director of the Center.

Gerard McCullough, deputy director of the Center, served as acting director during the transition period. Dean Wilson said he was 'pleased to report" that Mr. McCullough will continue as deputy director.

The Center was established in 1973 to promote interdepartmental cooperation in innovative research and is a focal point for MIT educational programs in transportation. The Center's research involves all modes of transportation-passenger and freight-in both the public and private sectors. Reseach ranges from broad conceptual planning to specific equipment design and operations analysis. The Center addresses major issues of policy, technology, the environment, planning and management. Organized within the School of Engineering, the Center has close ties with academic departments in all five of MIT's schools. Fifty faculty members are involved in its programs.

Professor Sussman, a faculty member in the MIT Department of Civil Engineering since 1967 and in CTS since its inception in 1973, has done pioneering work in engineering applications of computers and transportation systems analysis with particular emphasis on rail freight systems. His work is widely used in the US rail industry. A study he directed for the Federal Railroad Administration of the reliability of railroad freight operations was praised by W. Graham Claytor Jr., then head of Southern Railway, one of the nation's largest railroads, and later Secretary of the Navy, as "one of the most productive partnerships I have known among the government, the academic community and the railroad industry."

Professor Sussman served as head of his department's Transportation Systems Division from 1974-77. He was associate dean for educational programs in the School of Engineering from 1977-79. From 1980 to 1985 he was head of the Department of Civil Engineering. While head of the department, he continued his transportation activities, helping to develop a large research program with Spain's national railroad, known as RENFE, and wrote and lectured extensively on new directions for civil engineering education and

Professor Sussman received his bachelor of civil engineering degree from City College of New York in 1961, the master of science degree in civil engineering from the University of New Hampshire in 1963 and the PhD in civil engineering from MIT in 1967.

He has been a consultant to a number of public agencies and private organizations and is a member of Chi Epsilon, Sigma Xi, the Transportation Research Forum, the American Society of Civil Engineers and the Transportation Research Board.

Professor and Mrs. Sussman, the former Henri-Ann Simon of Marblehead, have three children, Kerri-Jae, Andrew and Craig. They live in Lincoln.

## Sea Grant awards

MIT Sea Grant has made its undergraduate awards for the spring term for research carried out under the auspices of the Undergraduate Research Opportunities Program (UROP). The six student Sea Grant undergraduate researchers will receive stipends of \$750 each for work relating to the study and management of the ocean and ocean resources.

Recipients include four students working with Professor Thomas Sheridan of the Department of Mechanical Engineering on unmanned underwater vehicle development: Derek Aqui and Ann Ferriter, members of the Class of '87, and Susan Ostrowski and Christopher Saito, members of the Class of '88; Michele Kimpel, a member of the Class of '87 who will work with Professor Philip Gschwend of the Department of Civil Engineering on "The Role of Bacteria in the Breakdown of Organic Contaminants," and Michael Jones, Class of '86, who will work with Professor Uno Ingard of the Department of Physics on "Analysis of Circular Bores."



Institute Professor Herman Feshbach received the National Medal of Science from President Ronald Reagan at a White House ceremony March 12.

# Dyson to give Feshbach Lectures

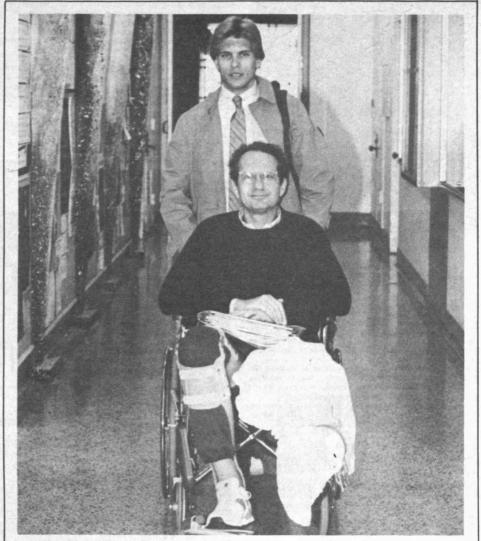
Professor Freeman J. Dyson of Princeton's Institute for Advanced Study will deliver the 1985-86 Herman Feshbach Lectures in Physics during the week of April 14. Professor Dyson is renowned for his many contributions in physics, including his crucial role in the development of quantum electrodynamics, and in issues of science and society.

Three lectures—all at 4pm—will be given: "Arms Control and Defense," Monday, April 14, Rm 54-100; "To Uranus, Next Time," Wednesday, April 16, Rm 54-100; and "Neutrino Detection," Thursday, April 17, Rm

The Herman Feshbach Lectures in Physics are sponsored annually by the Department of Physics to honor Dr. Feshbach, an Institute Professor, for his distinguished career and for his many years as the head of this department. Last month Dr. Feshbach received the National Medal of Science from President Reagan at the White House.

Professor Dyson, in his books, Disturbing the Universe (Harper & Row, 1979) and Weapons and Hope (Harper & Row, 1984), offers the perspectives of a scientist in society, the exploration and settlement of space, and the issues of disarmament.

He has been at the Institute for Advanced Study since 1953. Born in England, he came to Cornell University in 1947 and settled permanently in the US in 1951. He has been a consultant to NASA, the Defense Department, and the Arms Control Disarmament Agency. Professor Dyson is the recipient of many prizes and honors, including the Heineman Prize of the American Institute of Physics, the Lorentz Medal of the Royal Netherlands Academy, the Hughes Medal of the Royal Society, the Max Planck Medal of the German Physical Society, and the Wolf Prize.



BACK ON THE JOB-Professor John M. Deutch, MIT Provost, has returned to his office following two-and-a-half weeks at Massachusetts General Hospital and doesn't mind at all being pushed around by students, as Michael A. Petro, a freshman from Hammond, Ind., is doing here. Professor Deutch, hit by a car March 9, has moved to the MIT Infirmary. Three other students, Thomas C. Pitten and Arthur B. Gregory of MIT and Thomas Doucette, a Northeastern University work-study student in sports medicine who is assigned to the MIT Athletics Department, are also helping the Provost make his daily commute from Building E25 to his office, Rm -Photo by Herb Smith

# Harbison work to be premiered

By CHINA ALTMAN Staff Writer

The 1986 Abramowitz Memorial Concert at MIT will feature the premiere of composer John Harbison's "Music For Eighteen Winds," to be performed by the MIT Chamber Players, on Friday, April 18, at 8pm in Kresge Aud-

Professor Harbison will be guest conductor for the concert. Admission is free and, for the first time in the 26-year history of the Abramowitz series, those planning to attend are not requested to arrange for tickets in advance. Admission will be on a first-come, first-served

The concert has been designed in the style of "composer's choice," according to Professor Harbison, allowing him to frame his new composition with pieces that reflect his

Included in this "landscape of favorite landmarks and colors" will be: Octet by Stravinsky, Wind Serenade in E-flat by Mozart, and Overture to the Barber of Seville by Rossini. The program will conclude with Harbison's piece, commissioned by the Council for the Arts at MIT.

Nationally acclaimed as a composer, Professor Harbison is the first permanent holder of the Class of 1949 Professorship at MIT and is co-artistic director of Boston's new music ensemble, Collage.

"Most precious about the circumstances of this commission," Professor Harbison said, "has been the opportunity to frame the work's premiere, to work with MIT students, colleagues and friends from the Boston freelance community in its presentation, and to play it for an audience in my own community.

For the Harbison premiere, players from the MIT community will be: Stephen D. Umans 70, clarinet, principal research engineer in the Department of Electrical Engineering and Computer Science; MIT Affiliated artist Jean Rife, horn; Thomas Stephenson '70, bassoon; Kevin J. Owyang '88, trombone; Andrew Tangborn, clarinet, graduate student, and Cynthia Woolley, flute, support staff, Architecture Department.

Guest players from the highly regarded community of freelance musicians in Greater Boston will be: Michelle Sahm, flute; Margaret Pearson, oboe; Philip Long, bassoon; Ken Radnofsky, alto saxophone; Diane Friend, horn; Jane Sebring, horn; Bruce Hall, trumpet; Dennis Alves, trumpet; Donald Sanders, trombone; Morris Anderson, tuba; Barbara Knapp, oboe, and Martha McQuaid, horn.

The other three works on the program call for various combinations of the musicians above with the following: graduate student Robert J. Hall, clarinet; Carlene Ruesenberg, bassoon, senior secretary in the Planning Office; and Boston freelance musician Isabel Plaster, contrabassoon.

Professor Harbison has been appointed composer-in-residence with the Los Angeles Philharmonic for 1986-87 when he will be on leave from both MIT and Collage.

The Abramowitz Lecture Series was established at MIT by William L. Abramowitz '35 as a memorial to his father. Sustained since his death through the interest of his wife and children, it is administered by the Council for the Arts. For more information: x3-4003.

# Shimizu research program begins

Shimizu Construction Co., Ltd., of Tokyo, Japan, has made a grant of \$100,000 a year over five years to establish the Shimizu Research Program at MIT.

The Institute-wide program, to be managed by the Laboratory of Architecture and Planning in consultation with an advisory committee, will focus on worldwide development trends that have implications for facilities development; on engineering, architectural and planning practice; and on construction management and technology.

The program's specific areas of interest

include communications and regional development; impact on construction industries of new materials or biotechnology; macroengineering; and major demographic and eco-

## Cardinal to visit

Cardinal Bernard Law, archbishop of Boston, will visit the Tech Catholic Community Sunday, April 13.

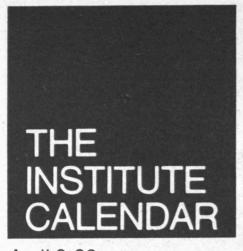
Cardinal Law will celebrate the 9am Mass, preach, and attend the usual Sunday morning social hour in Ashdown, said the Rev. Robert O'Donnell, MIT religious counselor and director of the Paulist Chaplaincy which serves the Tech Catholic Community.

nomic trends that influence facilities construction.

In addition to research that will be seeded by program funding, Shimizu may provide funds for a number of individual research projects.

The advisory committee for the program includes Michael L. Joroff, director of the Laboratory of Architecture and Planning, who will act as program director; Professor David H. Marks, head of the Department of Civil Engineering; and Toshihiko Ohta, director of Shimizu's Technology Research Laboratory, and Noriaki Fujimori, general manager for the company's Corporate Planning Division.

Shimizu, founded in 1804, is Japan's major construction company. As a provider of services in architecture, engineering, general contracting and facilities management, it undertakes projects throughout the world that include regional development, environmental preservation, building construction and largescale engineering. Among its overseas subsidiaries is the Shimizu American Corporation of New York City and Los Angeles.



## April 9-20

Freshmen are encouraged to attend departmental lectures and seminars. Even when these are highly technical they provide students one means to learn more about professional work in a department and field.

MISS THE TECH TALK DEADLINE?

Put your announcement on the MIT Cable System. "Today at the Institute" runs 24 hours a day and can be viewed in Lobby 7, Lobby 10 and anywhere the cable is connected.

Simply submit announcement in writing to Rm 9-030. We prefer a day's warning, but faster action may be possible. Useful also for correcting errors, notifying about cancellations, and dealing with emergencies.

cancellations, and dealing with emergencies.

Note: If you have met the Tech Talk deadline, your announcement is automatically put on cable (except for exhibits and some multimeetings programs).

## **Events of Special Interest**

Civil Engineering Open House\* - Wed, April 9, 2-4:30pm, Rm 10-105. Refreshments served; come and talk with faculty and students about programs in civil engineering.

Applied Biological Sciences Open House\*\* – Thurs, April 10, 24:30pm, Rm 10-105. Pizza and beverages provided; talk to faculty about undergraduate program, UROP, and opportunities for graduate training.

A Silver Anniversary Retrospective: 25 Years of FM Radio at MIT — WMBR's 25th Anniversary program, Thurs, April 10, 8-11:30pm, WMBR 88.1FM. Also a 25th anniversary committee is being formed to plan special events for the year. Interested persons should contact Todd Glickman '77, WMBR, Rm 50-030, x3-4000.

Bake Sale\*\* - Tech Community Women Sale, April 14, all day, Lobby 10.

Chemical Engineering Open House for Freshman – Tues, April 15, 4-5:30pm, Rm 66-110. Discuss research areas, subject requirements, job prospects; lab tour. Refreshments.

#### Seminars and Lectures

#### Wednesday, April 9

Model Ionic Thermoplastic Elastomers Based on Polyisobutylene\* – Garth L. Wilkes, Polymer and Interfaces Laboratory and Dept of Chemical Engineering, Virginia Polytechnic Institute and State University, Program in Polymer Science and Technology Polymer Seminar, 11am-12noon, Rm 66-360. Refreshments served, 10:30am.

Optical Properties of Multiple Quantum Well Waveguides\*\* - Y.J. Chen, GTE Laboratories, EECS/RLE Seminar on Optics and Quantum Electronics, 11am-12noon, Rm 96,498

MacWrite and Microsoft Word\*\* - Sherry Howlett, Apple Computer, Inc, Information Systems Seminar, 12-1pm, Rm 13-1143.

Evaluating Lighting System Performance\*\* - Harvey Bryan, assistant professor of building technology, MIT Dept of Architecture, MIT Joint Program for Energy Efficient Buildings & Systems/Laboratory of Architecture & Planning Seminar on Building Performance, 12-1pm, Rm 1-134. Bag

Bartropic Semi-Diurnal Tides off the Coast of Northern California\* - Leslie Rosenfeld, WHOI/MIT, Oceanography Sack Lunch Seminar, 12:10pm, Rm 54-411.

An Introduction to Nodal Expansion Methods\*\* - Peter Laughton, Dept of Nuclear Engineering Seminar, 3-4pm, Rm 24-213.

Macrocyclic Polymers: Synthesis and Solution Properties\*
- Prof Paul Rempp, CNRS, Strasbourg, France, Program in Polymer Science and Technology Polymer Seminar, 4-5:30pm, Rm E25-117. Refreshments served, 3:30pm.

Effect of Structure and Composition on Grain Boundary Diffusion: A Computer Simulation Study\*\* – Cynthia Nitta, PhD candidate, Dept of Nuclear Engineering RST Seminar, 4pm, Rm 24-121. Refreshments served, 3:45pm.

A Model for Tectonic Segregation and Implications for "Pressure Solution" in Rocks\*\* – Prof Pierre-Yves Robin, Erindale College, University of Toronto, Dept of Earth, Atmospheric, and Planetary Sciences Colloquium, 4-5pm, Rm 54-918.

Life at Low pH in a Bog\*\* - Tom Army, MIT, Ralph M. Parsons Laboratory Aquatic Sciences Seminar, 4pm, Rm 48-316.

Financing of Ports and Shipping\* – John P. Clark, vice president, relationship banker, Citibank, MIT International Shipping Club Seminar, 4:15pm, Rm E51-328. Refreshments served.

Application of the Life Cycle Hypothesis to Policy Issues\*
– Prof Franco Modigliani, winner, 1985 Nobel prize in economics; MIT Institute Professor, Killian Award Lecture, 4:30pm, Rm 10-250. Closed-circuit television Rms 4-231, 4-270 and Rm 34-101.

Observations on the Fifth Generation Project\*\* – David Gollard, associate professor, mechanical engineering, MIT Japan Science and Technology Forum talk, 5:30pm, Student Ctr Mezzanine Lounge.

On His Work\*\* – Giancarlo De Carlo, director, International Laboratory for Architecture and Planning, Milan, Dept of Architecture Arthur H. Schein Memorial Lecture, 6:30pm, Wiesner Bldg Bartos Theatre.

#### Thursday, April 10

DEC User Group Resources\*\* - Information Systems Seminar with Boston Computer Society, the DEC Users Society (DSUS) and a new group for VAX system managers at MIT, 12-1pm, Rm 13-1143. Running Effective Meetings: Agenda Preparation; Parliamentary Procedure; Group Discussion Techniques\*\*
– Barbara Chuck, staff associate, Campus Activities Office, MIT Leadership Education and Development (LEAD) Program exploring the skills needed by effective leaders, 3pm, Student Ctr Center Lounge, or 6:30pm, Rm 10-280.

How to Improve Precision While Reducing Costa\*\* - Prof Don Clausing, Bernard Gordon Adjunct Prof of Engineering Innovation and Practice, Laboratory for Manufacturing and Productivity Seminar, 3-4pm, Rm 35-520. Refreshments follow.

The Crystal Ball Looks at the Upsilon\*\* - Dr. Susan Cooper, SLAC, Physics Colloquium, 4pm, Rm 10-250. Refreshments served, 3:30pm, Rm 10-250 Lobby.

Three Types of Public Memory\* - Prof Mary Douglas, visiting professor, Princeton University, Sloan School Kenneth J. Germeshausen '31 Distinguished Lecture, 4pm, Rm E51-329, Reception follows.

Integrated Machines\* - Prof Jeffreh H. Lang, MIT, Electrical Engineering and Computer Science Colloquium, 4pm, Rm 34-101. Refreshments served, 3:30pm.

Arms Control and Defense\* – Prof Freeman J. Dyson, Institute for Advanced Study, Princeton University, Herman Feshbach Lecture in Physics, 4pm, Rm 54-100.

Modeling Ecological Complexity: Some Social and Historical Perspectives\*\* – Dr. Peter Taylor, Mellon Fellow, STS, MIT, Dept of Civil Engineering Division of Water Resources and Environmental Engineering Seminar, 4pm, Rm 48-316.

The Jet Age: A Brief History\* - Donald S. Lopez, deputy director, National Air and Space Museum, Washington, DC, MIT Museum/Ward Fund of the Aeronautics and Astronautics Dept/New England chapter, Institute for Aeronautics and Astronautics Slide Lecture, 7pm, Rm 10-250.

A hologram among trees to illustrate a special 11-day installation of holograms by Dieter Jung now at the Center for Advanced Visual Studies. A grouping of these works has been described as a "forest of holograms." The exhibition closes April 11.

Types of Knowledge as a Basis for Medical Decision Making Programs\* — Peter Szolovits, PhD, associate prof of computer science, Harvard-MIT Division of Health Sciences and Technology Seminar, 4pm, Rm E25-117.

Computer Aided Engineering: Historical Perspectives, Present Status and Future Directions of Research With Examples Taken From Electromechanical and Electromagnetic Devices\*\* - Prof Ernest M. Freeman, Imperial College, London, England, Laboratory for Electromagnetic and Electronic Systems Seminar, 4pm, Rm 34-401A.

The Effects of Migration Patterns on the Occupational Mobility of Women in the Philippines\* – Jennifer Lauby, Harvard University, MIT/Harvard Research Seminar on Migration and Development, 4-6pm, Harvard Ctr for Population Studies. 9 Bow St.

Electronic Publishing\* – David Gifford, MIT; Walter Bender, MIT; Allen N. Grossman, Dow Jones & Company, Inc, MIT Communications Forum Seminar, 4-6pm, Wiesner Bldg Bartos Theatre.

Choosing the Right Preposition\*\* - Writing and Communication Center ESL Writing American English Workshop, 4:15pm, Rm 14N-317.

#### Friday, April 11

Japanese Language Word Processing Using a Conventional Macintosh and Printer\*\* - Information Systems Seminar, 12-1pm, Rm 13-1143.

Discommensurations in Rare Earth Magnets\*\* - Dr. Jakob Boyr, Brookhaven National Laboratory, Ctr for Materials Science and Engineering Colloquium, 12:15pm, Rm 9-150. Lunch provided, 12noon.

Enhanced Oxygen Transfer Using Oil-in-Water Emulsions\*\* - James D. McMillan, Chemical Engineering Seminar, 2pm, Rm 66-110.

Biotechnology\*\* - Steven F. Karel, Stanford University, Chemical Engineering Seminar, 3pm, Rm 66-110.

Reflections on Nuclear Power in America and Overseas\*
- Prof Richard K. Lester, MIT Dept of Nuclear Engineering, Ctr for Technology, Policy and Industrial Development/Whitaker College of Health Sciences Program in Health Policy Seminar on Environmental Health and Industrial Development: Current Research and Educational Perspectives, 4-5pm, Rm E25-401. Refreshments served, 3:30pm.

Modons and Atmospheric Blocking\*\* - Dr. John Marshall, Imperial College, London, England, Ctr for Meteorology and Physical Oceanography Seminar, 4pm, Rm 54-915.

Current Research in the Los Alamos Spheromak Program\* - Dr. Cris W. Barnes, Los Alamos National Laboratory, CTR Division, Plasma Fusion Center Seminar, 4pm, Rm NW17-218.

## Monday, April 14

Introduction to DISSPLA\*\* – Information Systems Seminar on Mainframe Package for Programmers who want sophisticated graphics, 12-1pm, Rm 1-390.

The Realities of High Tech in Manufacturing\* – James Harbour, Harbour and Associates, Ctr for Technology, Policy and Industrial Development/Laboratory for Manufacturing and Productivity Joint Seminar, 3pm, Rm 37-252.

Correspondence Betwen Quantum Gauge Theories Without Ghost Fields and their Covariantly Quantized Theories with Ghost Fields\*\* - Dr. Er Cheng Tsai, MIT, Applied Mathematics Colloquium, 4pm, Rm 2-338. Refreshments served, 3:30pm, Rm 2-349.

## Tuesday, April 15

Ultrafast Time-Resolved Spectroscopy of Vibrating Crystals and Molecules\*\* – Keith A. Nelson, MIT, Laser Research Ctr/George R. Harrison Spectroscopy Laboratory/ Research Laboratory of Electronics/School of Engineering Seminar on Modern Optics and Spectroscopy, 11-12noon, Rm 37-252. Refreshments served following seminar.

Project Athena\*\* - Information Systems Seminar, 12-1pm, Student Ctr West Lounge.

Instruction Sets and Beyond: Computers, Complexity, and Controversy\*\* - E. Douglas Jensen, Carnegie-Mellon University, Pittsburgh, VLSI Seminar, 4pm, Rm 34-101. Refreshments served, 3:30pm.

Numerical Solution of Stiff Two-Point Boundary Value Problems\*\* – Prof Uri Ascher, Dept of Computer Science, University of British Columbia, Vancouver, Applied Mathematics Special Colloquium, 4pm, Rm 2-338. Refreshments served 3:30pm, Rm 2-349.

Modern Problems in Turbocharger Fluid Mechanics\*\* – Dr. H.G. Weber, Cummins Engine Co, Dept of Aeronautics and Astronautics Gas Turbine Laboratory Seminar, 4:15pm, Rm 35-520. Refreshments served, 4pm.

Genes Controlling Meiosis in Yeast\*\* - Shelly Easton Esposito, Dept of Molecular Biology, University of Chicago, Biology Colloquium, 4:30pm, Rm 10-250. Coffee served, 4pm, Bldg 56 5th floor vestibule.

Development of Natural Kind Concepts\*\* - Frank Keil, Dept of Psychology, Cornell University, Cognitive Science Seminar, 7:30-9:30pm, Rm 34-401. Commentary: Prof Susan Carey & TBA. Copies of paper available upon request from Karen Persinger, x3-7538, Rm 20B-225.

#### Wednesday, April 16

Coherent Beam Addition and Modular Laserss\*\* – J.R. Leger, MIT Lincoln Laboratories, EECS/RLE Seminar on Optics and Quantum Electronics, 11am-12noon, Rm 36-428.

MacDraw and MacDraft\*\* - Sherry Howlett, Apple Computer, Inc, Information Systems Seminar, 12-1pm, Rm 13-1143.

Laboratory Observation of Isolated Waves and Eddies\* – John Whitehead, WHOI, Oceanography Sack Lunch Seminar, 12:10pm, Rm 54-915.

Behavior of Interstitials in Crystal\*\* - Horngming Hsieh, PhD Candidate, Dept of Nuclear Engineering RST Seminar, 4pm, Rm 24-121. Refreshments served, 3:45pm.

To Uranus, Next Time\* - Prof Freeman J. Dyson, Institute for Advanced Study, Princeton University, Herman Feshbach Lecture in Physics, 4pm, Rm 54-100.

Reading in a Foreign Language\* - Prof Elizabeth Buchter-Bernhardt, Foreign Languages and Literatures Seminar, 4pm, Rm 4-249.

Conditions in the Mt St. Helen's Magma Chamber from Experimental Petrology\*\* – Prof Malcolm Rutherford, Dept of Geological Sciences, Brown University, Dept of Earth, Atmospheric, and Planetary Sciences Colloquium, 4-5pm, Rm 54-918.

Geochemistry of Volatile Organic Compounds in Coastal Seawater\*\* – Stuart Wakeham, WHOI, Chemistry, Ralph M. Parsons Laboratory Aquatic Sciences Seminar, 4pm, Rm 48-316.

Lecture/Recital on the Chinese Lute\*\* - James Watt, Metropolitan Museum of Art, Music Lecture, 4:30pm, Rm 2-190.

## Thursday, April 17

The Boston Computer Society\*\* - Jonathan Rotenberg, founder and president, BCS, Information Systems Seminar, 12-1pm, Student Ctr West Lounge.

Cultural Destruction from the Destrtoyer's Point of View: A Central American Example\* - Prof James Howe, MIT Anthro/Archaeology Program, Anthropology/Archaeology Program Work-in-Progress Seminar, 12noon, Rm 20B-136.

Trends in Microcomputer Software\*\* – William H. Gates, chairman of the board, Microsoft Corporation, Laboratory for Computer Science Distinguished Lecturer Seminar, 3:30pm, Rm 34:101. Refreshments served, 3:15pm.

Environmental Health: International Dimensions\* – Prof Eugene B. Skolnikoff, director, Ctr for International Studies, MIT Dept of Political Science, Ctr for Technology, Policy and Industrial Development/Whitaker College of Health Sciences Program in Health Policy Seminar on Environmental Health and Industrial Development: Current Research and Educational Perspectives, 4-5pm, Rm E25-401. Refreshments served, 3:30pm.

Lattices, Trellises, and Bandwidth Efficient Modulation\* – David Forney, vice-president and director, Technology and Planning Motorola Information Systems Group, Laboratory for Information and Decision Systems Colloquium, 4pm, Rm 9-150. Reception, 3:30pm, Lobby Rm 9-150.

Neutrino Detection\* - Prof Freeman J. Dyson, Institute for Advanced Study, Princeton University, Herman Feshbach Lecture in Physics, 4pm, Rm 10-250.

Angiogenesis Inhibitor (Collagenase Inhibitor) Purified from Bovine Scapular Cartilage\* – J. Sudhalter and J. Behm, Dept of Applied Biological Sciences Seminar, 4pm, Rm E25-202.

Angiogenesis Inhibitor (Collagenase Inhibitor) Purified from Bovine Scapular Cartilage\*\* – J. Sudhalter and J. Behm, Applied Biological Sciences Seminar, 4pm, Rm E25-202.

Remittances: A Differential Game Theoretic Approach\* – Shah Ashiquzzaman, Harvard University, MIT/Harvard Research Seminar on Migration and Development, 4-6pm, Harvard Ctr for Population Studies, 9 Bow St.

Seismic Verification of Nuclear Test Ban Treaties\*\* - Prof Thomas H. Jordan, MIT Dept of Earth, Atmospheric and Planetary Sciences, Ctr for International Studies, Defense and Arms Control Studies Program Seminar, 4-6pm, Rm E38-615.

Articles, Nouns, and Quantifiers\*\* - Writing and Communication Center ESL Writing American English Workshop, 4:15pm, Rm 14N-317.

#### Friday, April 18

Introduction to Scientific Word Processors\*\* - Information Systems Seminar, 12-1pm, Rm 13-1143.

Development and Procurement of Advanced Control Systems for Freight Railroading\* – Peter Detmold, special consultant, CP Rail, Center For Transportation Studies/Transportation Research Forum of Boston Seminar, 12:45-2pm, Student Ctr Rm 407. Optional luncheon, 12-12:45pm; luncheon fee – \$2/students; \$6/non-students.

The Effect of Hydrogen Sulfide Upon a Ni-Mo Hydrotreating Catalyst\*\* - Vito LaVopa, Chemical Engineering Seminar, 2pm, Rm 66-110.

Synthesis of Evaporation Systems Using Minimum Utility Insights\*\* - Prof Arthur W. Westerberg, Dept of Chemical Engineering, Carnegie-Mellon University, Chemical Engineering Seminar, 3pm, Rm 66-110.

Objective Evaluation of the Mechanical Properties of Fabrics and Its Role in Anticipating Manufacturing Problems and Product Satisfaction\*\* – Prof Sueo Kawabata, Dept of Polymer Chemistry, Kyoto University, Japan, Laboratory for Manufacturing and Productivity Seminar, 3-5pm, Rm 35-520. Refreshments served.

Microwave and Millimeter Wave Radiation from Rotating Electron Beam\* - Prof William W. Destler, University of Maryland, MTT Plasma Fusion Seminar, 4pm, Rm NW17-218.

## Readings

you would like to attend.

Poetry Reading\* - Robert Creeley, author of Hello, Later and Mirrors, MIT Writing Program reading, Thurs, April 10, 8-10pm, Student Ctr Mezzanine Lounge. Creeley will read from his new poetry collection, Memory Gardens Free.

#### Community Meetings

Alcoholics Anonymous (AA)\*\* - Meetings every Tues, 12-1pm, Rm E23-364. For info call Ann, x3-4911.

Al-Anon\*\* – Meetings every Fri, noon-1pm, Health Education Conference Rm E23-297. The only requirement for membership is that there be a problem of alcoholism in a relative or friend. Call Ann, x3-4911.

Alcohol Support Group\*\* - Meetings every Wednesday, 7:30-9am, sponsored by MIT Social Work Service. For info call Ann, x3-4911.

Narcotics Anonymous\* – Meetings at MIT, every Mon, 1-2pm, Rm E23-364 (MIT Medical Dept). Call 569-0021.

Overeaters Anonymous\* – Meetings every Mon, 12-1pm, Rm E23-297. This is not a lunch time meeting, so please do not bring any food. For info call Judy, x3-2481.

Medical Consumers' Advisory Council Meeting\*\* - Open meeting, Mon, April 14, 12noon, Rm E23-501. Call x3-1316 if

MIT Faculty Club\*\* - The Club is open Mon-Fri. Luncheon hours: noon-2pm; dinner hours: 5:30-8pm. For dinner and private party reservations, call x3-4896 9am-5pm daily. April 11: Raw Bar; April 15: Steak Night, Main DR, \$9.45+ tax. April 16: Quiche Night, 5-7pm, Lounge. April 17: New England Clambake, Main DR. April 18: Fri Lunch Buffet, 11:45-2pm;

Commodore Users Group\*\* - meets monthly at noon time. For more info, call Gil, x8-3186 Draper.

Who is in Charge: You or Your Child? Setting Limits\*\* – Dr. Margaret Ross, MIT Medical Dept, Child Care Office Seminar, 12-1pm, Rm 4-144.

Women and Reproductive Technologies. - Conference, Women's Studies Program/Office of the Dean, School of Humanities and Social Sciences conference, April 13-14. Call x3-8844 for more information.

Technology Moving to Cambridge\*\* – Helen Samuels and Kathy Marquis, Institute archivists, Women's Forum Luncheon Slide Show, April 16, 12-2pm. Cost: \$3.50. Call Anna Verhulst, x3-3656 for reservations by April 11.

Wives' Group\*\* - Morning Group: April 9, MIT Museum, Current exhib.: A Photographic Perspective of MIT, Calvin Campbell; Watercolors of Europe & the Near East 1971-92, by Arthur Roach; sculpture by Beverly Berlon Seamons; info - Chieri Kotake, 643-8497 or Lynda Merican, 577-9519. April 16, No trip planned. Meet at 9:15am, Eastgate. Children welcome. Afternoon Group: April 9, Being Pregnant: How to Prepare for Having a Baby - Dr. Annie Liau, obstetrician-gynecologist, MIT. All meetings 3-5pm, Student Ctr Rm 491. April 16, Leading American Schools More Effectively: The Role of the Principal - Jeff Nelson, elem school prinicipal; visiting practioner, Harvard Grad School of Education. Babysitting provided in Student Ctr Rm 407.

Craft Group\*\* - sponsored by Wives' Group, meets every Thurs, 2-4pm, Student Ctr Center Lounge or Student Ctr Rm 407. Please call x3-1614 to check on location of meetings.

The Language Conversation Exchange\*\* – sponsored by the Wives' Group, seeks persons interested in practicing languages with a partner. Many international students and spouses wish to practice English with a native speaker. If you are willing to help an international visitor practice English andor interested in practicing or learning a foreign language with a native speaker, call the secretary to the Wives' Group, x3-1614.

Feminist Reading Group\*\* - Meets every Wed, 12-1pm, Rm

MIT Women's League Informal Needlework Group\*\* – Wednesday lunchtime gatherings, 9:30am-1:30pm, Rm 10-340. Bring sack lunch, projects, swap ideas. Coffee & tea served. Meeting dates: April 9, 23, May 14, 28. For more info, call Lillian Alberty (491-3689), Nancy Whitman (x3-6040) or Beth Harling (749-4055).

#### Alumni Activities

Learning to Live in Space\*\* - Prof Laurence Young, MIT Man-Vehicle Lab, MIT Club of Boston Dinner and lecture, April 11, 7pm, Hillcrest Restaurant, Waltham. Cocktails, 6:30pm. Cost: \$16/Club members & guests; \$14/those under 18; \$18/non-members. For reservations, send check made out to the MIT Club of Boston to: Mark Radtke, Venture Economics, PO Box 348, Wellesley Hills, MA 02181. Info: 431-8100.

## MIT Activities Committee

MITAC, the MIT Activities Committee offers discount movie tickets for General Cinema, Showcase and Sack (USA Cinemas) Theaters (\$3 ea). Tickets are good 7 days a week, any

performance.

Tickets may be purchased at MITAC Office, Rm 20A-023 (x3-7990), 10am-3pm. Mon through Fri and Lobbies 10 and E18 on Fri, 12-1pm. Lincoln Lab employees may purchase tickets in Rm A-270 from 1-2pm, Tuesday through Friday only. Check out our table of discounts for camping, dining, musical and cultural events available to you through MITAC and MARES (Mass Augus of Recreation and Employee Services). Assoc of Recreation and Employee Services)

Juilliard String Quartet. Fri, April 25, 8pm, Jordan Hall. The "first family of chamber music" perform their fifth concert devoted to the quartets of Beethoven: D Major, Op. 18, No. 3; F Minor, Op. 95, Serioso; and B Flat Major, Op. 130. Tickets: \$15 (reg \$16.50) available in Rm 20A-023.

Deerfield Day Trip. Sat, May 3. Take a step back in time and explore the colonial heritage of historic Deerfield. Day includes visits to 3 sites: 1) Fabric Hall — a tour of the Textile Collection (needlework, textiles from Europe and Colonial America); 2) the Allen House; and 3) the Wright House. Brown bag a lunch on your own — we'll provide the desserts and beverages. Bus leaves West Garage at 8am sharp; returs approx 5:30pm. Cost: \$20/pp. Make reservations in Rm 204-023 Deerfield Day Trip. Sat, May 3. Take a step back in time and Make reservations in Rm 20A-023.

Shriners Circus. Sun, May 11, 1:30pm, Shriners Auditorium, Wilmington, Mass. Don't miss an afternoon under the Big Top with lions, tigers, bears and more. Tickets: \$3 (reg \$6), available in Rm 20A-023.

A Day at Mystic Seaport. Sat, May 17. Spend a day exploring this waterfront maritime village in Mystic, Conn. Step on board the decks of the wooden whaleship Charles W. Morgan, the square-rigged ship, Joseph Conrad, and the fishing schooner L.A. Dunton and rediscover the nautical craftsmanship of the 19th century. Bus leaves West Garage, 8am, Sat, May 17; returns approx 7pm. Tickets: \$17/adult; \$13/child (inc admission to Mystic Museum) available in Rm 20A-023.

Council for the Arts Museum Passes. On campus, there are 10 passes employees may borrow for free admission to the Museum of Fine Arts. To check on availability, call x3-5651. At ses are available in the Lincoln Lab Library,

Museum of Science Tickets. Available for only \$1. Pay another \$1 at the door, for a total savings of \$3/pp/adult; \$1/pp/child (reg \$5/pp/adult; \$3/pp/child).

New! The Greater Boston '86 Books are here! 2-volume, 820-page discount coupon book offer discounts on fine and casual dining, theatre, comedy shows, opera, ballet, museums, hotels, car washes, cleaners, and more...for the greater Boston area and beyond (inc areas in the Metro West, South Shore, North Shore & north of Boston). A limited supply now available for only \$20 cs. (per \$30 cs.) only \$20 ea (reg \$30 ea).

Important! To avoid disappointment, purchase tickets and make reservations early as we are limited by ticket availability and transportation. All MITAC events and ticket purchases are non-refundable due to the non-profit nature of our organization.

## Social Activities

Japanese Table\*\* - MIT-Japan Science and Technology Program/Wellesley-MIT Exchange Program lunch table, every Tues, 1-2pm, Student Ctr Center Lounge. Bring bag lunch; all levels

Hebrew Table\*\* - MIT Hillel Hebrew Table to practice your Hebrew, every Tuesday at 5:30pm in the Kosher Kitchen (Walker Rm 50-007). Dinner available for \$5.75.

GAMIT Sunday Discussion Meeting\* – Gays at MIT, Suna, 5pm, GAMIT Lounge, Walker Memorial Rm 50-306. Dinner served at 6:30pm.

GAMIT Study Break\* - Gays at MIT, Thurs, 9pm, GAMIT Walker Memorial Rm 50-306.

Lesbian Lunch Group\* – LAMIT, (part of GAMIT) meets first and third Thursday of each month, 1pm, Student Ctr Center Lounge. Spring meetings: April 17, May 1 & 15. Staff, faculty & students welcome. Info: contact Lesbian Lunch Group, c/o Rm 50-306 or call x3-5440.

## Movies

The Grapes of Wrath\*\* - LSC Classic Movie, April 11, 7:30pm, Rm 10-250. \$1/MITWellesley ID.

Chariots of Fire\*\* - LSC Movie, April 11, 7&10pm, Rm

The Black Cauldron - LSC Movie, April 12, 3,7 & 9:30pm, Rm 26-100. \$1/MIT-Wellesley ID.

Something Wicked This Way Comes\*\* - LSC Movie, April 13, 6:30&9pm, Rm 26-100. \$1/MITWellesley ID.

The Hidden Fortress\*\* - LSC Classic Movie, April 18, 7pm, Rm 10-250. \$1/MITWellesley ID.

Excalibur\*\* - LSC Movie, April 18, 6:30&10pm, Rm 26-100. \$1/MITWellesley ID.

Real Genius\*\* - LSC Movie, April 19, 7&9:30pm, Rm 26-100. \$1/MIT-Wellesley ID.

The Bridge Over the River Kwai\*\* - LSC Movie, April 20, 6:30&10pm, Rm 26-100. \$1/MIT-Wellesley ID.

## Music

Noon Hour Chapel Series\* - Carrie Kourkoumelis, harp, Thurs, April 10, 12:05pm, MIT Chapel. Free.

Tyrone R. Williams, MIT Graduate Student, in Concert: An Evening of Gospel Music\* – Black Graduate Student Association concert featuring the Voices of Faith and The New Temple Singers from St. Paul AME Church and friends from the MIT Gospel Choir, April 12, 8pm, Kresge Little Theatre.

Festival Judeo Espanol\* - Hillel concert featuring Voice of the Turtle and Flory Jagoda & Family performing Sephardic music, Sun, April 13, 2pm, Kresge Auditorium. Tickets available at Hillel (W2a): \$6, \$8, \$10 (students receive a \$2 discount w/stu-

MIT Affiliated Artist Series\* – Marek Zebrowski, piano, performs Haydn, Prokofieff and Schumann, Sun, April 13, 8pm, Kresge Auditorium. Free.

on Hour Chapel Series\* - Concertino Boston, Thurs, April 17, 12:05pm, MIT Chapel. Free.

Abramowitz Memorial Concert\* - MIT Chamber Players, Marcus Thompson, music director, present the premiere of Marcus Thompson, music director, present the premiere of "Music for Eighteen Winds," by John Harbison, Fri, April 18, 8pm, Kresge Auditorium. Free

MIT Faculty Series\* - An evening of Schubert Opera with chestra and chorus including *Die Zwillingsbruder*, Sat, April 19, 8pm, Kresge Auditorium. Free.

MIT Gospel Choir\*\* - Meets every Sat, 11am. Welcomes new mm toospet Choir - neets every Sat, Itali. Wetchies new members, visitors - if you feel shy about singing, we need help with lighting, audio, design & arrangements for the spring con-cert scheduled April 26. Rehearsals: April 12 & 19 - Student Ctr Center Lounge; April 26 - Student Ctr Rm 491; May 3 -Student Ctr Rm 491. Info: x5-8645 dorm, x5-7531 dorm, or

Chinese Intercollegiate Choral Society\* - Meets Suns, 3-5pm, Rm W20-491. Currently rehearing Chinese folk songs. oice lessons and music theory class, 1pm.

#### Theater

Tech Show '86: Diamonds in the Rough\* - MIT Musical Theatre Guild original musical comedy, written and directed by students, April 11-12, 8pm, Student Ctr Sala de Puerto Rico. Ad mission: \$3/MIT students: \$4/students & seniors: \$5/MIT staff:

End Games Auditions\*\* - MIT Community Players auditions, April 9, Rm 24-407. Performances May 15-17, Spm, Kresge Little Theatre. Information: Elliott Bradshaw, 489-4179.

#### Dance

MIT Ballroom Dance Club Workshops\* - April 13; Begin ning Cha Cha, 12:30-1pm; Intermediate Tango, 1:30-2:30pm; Ad vanced Foxtrot, 4-5pm. April 20: Beginning Samba, 12:30-1pm; Intermediate Cha Cha, 1:30-2:30pm; Advanced Tango, 4-5pm. All classes at Student Ctr Sala de Puerto Rico unless otherwise indicated. Admission: Beginning — \$.25/members, \$.50/non-members; Intermediate — \$.50/members, \$1/non-members; Advanced — \$2/members, \$3/non-members. Info: x5-9171 dorm.

Western Square Dancing\* - Tech Squares Club Level dancing and rounds, Tues, 8-11pm, Student Ctr 2nd Floor. Dennis Marsh, club caller & instructor; Veronica McClure, club cuer.

MIT Dance Workshop Classes\*\* – Beginning Modern Dance Technique, M/W, 3-5pm, DuPont TClub Lounge; In-termediate Modern Dance, T/Th, 5:30-7pm, Walker 201; Improvisation, Th. 1-3pm, Walker 201.

MIT Contemporary Dance Club\* - Cynthia Mallick, instructor, Aerobix, M/W, 6:30-7:30pm; Jazz I/II, M, 7:30-8:30pm; Stretch, W, 7:30-8:30pm; Rep, M/W, 9-10pm. Classes at: M, 6:30-8:30pm, McCormick Gym; W, 6:30-8:30pm, W31; M/W, 9-10, TClub Lounge. Fee: \$3/single class, \$4/non-MIT. Info: call

Children's Dance Classes\*\* - Pamela Day, instructor, Creative Movement/Modern Dance classes for children ages 3-8, Fri: Ages 3-4, 2:30-3:15pm; Ages 5-8, 3:30-4:30pm, West Campus location. Great for boys & girls; excellent opportunity for non-English speaking children. For info & registration, call Pamela, x3-5791, T/Th mornings or 648-4834 eves/wkends.

MIT Folk Dance Club\* - weekly dancing-Sundays, Interna tional Dancing, 7:30pm, Student Center Sala de Puerto Rico; Tuesdays, Balkan and Western European Dancing, 7:30pm, Rm 407 Student Center; Wednesday, Israeli Dancing, 7:30pm Sala

Rhythmic Gymnastics Classes for Women\*\* – MIT Women's League classes, Fri, 12-1pm, Rm 10-340. Info: Helena, 596-2396.

Yoga\* – ongoing classes in traditional Hatha and Iyengar style. Beginners: Mon, 7:20pm; Intermediates: Mon, 5:45pm. For information call Ei Turchinetz, 862-2613.

#### Exhibits

COMMITTEE ON THE VISUAL ARTS Albert and Vera List Visual Arts Center Jerome & Laya Wiesner Building

Hayden Gallery - Alvar Aalto: Furniture and Glass. The 40 pieces of furniture, 25 glass objects and 35 drawings on view demonstrate Aalto's sensitivity to individual materials, respect for regional traditions and simple timeless forms in an integra-tion of architecture and design. Through April 13.

David and Sandra Bakalar Sculpture Gallery - Alexander Calder: Artist and Engineer, through April 13.

The Reference Gallery - Mabou Mines Artist in Residence, April 14 through May 3.

#### THE MIT MUSEUM

MIT Museum Bldg - Calvin Campbell: A Photographic Perspective of MIT, Retrospective show commemorating the retirement of MIT's News Office photographer for the past 12 years, through July 31. Sculpture by Beverly Benson Seamans, through July 26. Ansel Adams: Photographs Approximately 60 prints from the collection of Ron Kurtz, MIT Council for the Arts, show Adams' control of technique and techology to support a wholly personal and internal vision, April 9 through July 31. Of Aerostatic Machines: Early Ballooning in France and Britain, Prints from MIT's Vail Collection illustrate the development of ballooning as a science and sport fanciful inventions for steering ba views of Paris and other cities, through April 12. Three Photographers, photos by Linda Cuccurullo and Gordon Thomas (MIT Libraries staff), and Carolina Salguero (formerly of MIT Dept of Architecture), through April 19. Minor White: Photographs, 102 prints dating from the 1930s to 1968, through March. Ongoing exhibits: Gjon Mili 27: A Tribute, through March. Ongoing exhibits: 0.00 min 27.4 Tribute.
Born in Rumania, world famous photographer Gon Mili studied
electrical engineering at MIT and pioneered in the use of electronic flash and multiple exposure photographs. In 1938 he
egan doing stories for Life magazine. Light Sculptures by Bill
Parker 74, A synthesis of scientific knowledge and artistic composition gives expression to these changeable, touchable plasma sculptures. Hours: Weekdays 9am-5pm, Saturdays 10am-4pm.

Compton Gallery - Nihonga: Contemporary Japanese Paintings in the Traditional Style, Representative works by 48 contemporary Japanese artists, through June 14. Hours: Weekdays 9am-5pm, Saturdays 10am-4pm.

#### Hart Nautical Gallery

Ongoing exhibits: Currier & Ives Prints From the Hart Nautical Collections - Colored lithographs of sailboats, steam-boats, clipper ships and whalers. George Owen '94: Yacht Designer - Line drawings and half-models designed by one of the early professors of naval architecture at MIT. MIT Seagrant A review of MIT ocean research; Collection of Ship Models
 Half-models and drawings. Historical view of the design and

construction of ships.

Edgerton's Strobe Alley - Exhibits of high speed photography. Main corridor, 4th floor

#### **Corridor Exhibits**

Corridor Exhibits: Building 1 & 5, 2nd floor: John Ripley Freeman Lobby, Building 4: Norbert Wiener, Karl Taylor Compton. Community Service Fund, Ellen Swallow Richards. Women at MIT. An overview of the admission of

women at MIT. Five photographic panels with text documenting the circumstances that increased the number of women in the classroom since Ellen Swallow Richards. Building 6: Laboratory for Physical Chemistry. Building 8:

Institute Archives and Special Collections – Planning the New Technology. Part Two: Constant Desire Despradelle. Part two of a three-part series about the relocation of MIT from Copley Square to Cambridge portrays the impressive design of architect and teacher Despradelle. Though he died before the project began, several of his ideas were incorporated into the or, William Welles Bosworth. Hall exhibit case across from 14N-118.

Monhegal Still Lifes - through May. Architecture & Planning Computer Resource Laboratory sequential exhibit of photographs by S. Leland Smith, teacher of filmmaking and photographic darkroom skills at the MTT Student Art Ass tion. Hours: M-F, 9am-5pm, Rm 9-514.

Profile: A Detour Through MIT - Selected artworks by Jennifer J. Lin in honor of Women's Week, Wiesner Student Art Gallery, Student Ctr 2nd Floor, through April 20. Funded in part by the Council for the Arts at MIT.

Jerome B. Wiesner Student Art Gallery - for 1986 scheduling, any MIT student or student group interested in showing or performing art in the Gallery, call Andy Eisenmann, x3-7019 in

## Sports

HOME EVENTS: April 9: W's Softball vs Framingham State, 3:30pm. April 10: Ws Softball vs Suffolk, 3:30pm, Ms Tennis vs Mt Holyoke, 3pm; Track vs Springfield, 4pm. April 12: Baseball vs Coast Guard (2 games), 1pm; M's Lwt Crew vs Dartmouth, Harvard (Biglin Cup); Golf vs Colby, Tufts, 1:15pm; Lacrosse vs Trinity, 2pm; Sailing, Geiger Trophy, 12:30pm. April 13: M's Hwt Crew vs Coast Guard; Ws Crew vs Columbia, Rutgers; Sailing, Greater Boston Championships (Oberg Trophy), 10:30am. April 14: Baseball vs UMass-Boston, 3pm. April 15: Ws Tennis vs Brandeis, 3:30pm. April 16: Baseball vs Suffolk, 3pm; Lacrosse vs Curry, 3pm; W's Softball vs WPI, 4pm; M's Tennis vs Clark, 3pm. April 17: M's Tennis vs Boston College. April 18: vs clark, 3pm. April 17: at a tennis vs Doscon Conige. April 10: Baseball vs Boston University, 3pm. April 19: M's Ltwpft Crew vs Columbia, Cornell Geiger Cup); Golf vs Bates, 1:15pm; Lacrosse vs Springfield, 2pm; M's Tennis vs Brandeis, 3pm. April 19:20: W's Sailing, Emily Wick Trophy, 12noon. April 20: M's Volleyball NECVL Championships, 8am-10pm.

## Wellesley Events

Jewett Arts Center\* - Recent Acquisitions and Alumnae Gifts, through June 8. Major Drawings From an Alumna Collection, recent acquisitions from the collection of Dorothy

Braude Edinburg 42, through June 8.
Francesca Woodman: Photographic Work, through June 8.
Contemporary Prints from the Permanent Collection,

Biography of Frida Kahlo\* - Martha Zamora, Mexican art historian and artist, Latin America Today: A Wellesley College Symposium Slide Lecture, April 9, 4:15pm, Library Lecture Rm

Careers Program: Dual Career Couples\* - Alumnae & husbands, Wellesley College ACCESS Event, April 9, 7pm, Tower Court Great Hall.

Harriet Beecher Stowe\* - Prof Mary Kelley, Dartmouth College, Lecture, April 9, 7:30pm, Library Lecture Rm.

Perspectives on Separation and Agoraphobia\* – Mary Lou Randour, post-doctoral fellow, Ctr for Research on Women Luncheon Seminar, April 10, 12:30-1:30pm, Cheever House. Bring a bag lunch; coffee provided.

The Role of Gender in Contemporary Social Thought\* – Prof Suzanne Keller, Princeton, Wellesley/Brandeis Sociology Depts Seminar, April 10, 6:30pm, Library Lecture Rm.

cess: Different Definitions\* - Alumnae Careers Panel, Ctr for Women's Careers Program, April 10, 7pm, Davis Lounge. Jazz Concert\* - Solo jazz piano improvisations by Paul Barr-

inger, April 10, 8pm, Jewett Auditorium The Refutation of Indeterminacy\* - Jerrold Katz, Distinguished Professor of Philosophy and Linguistics, CUNY, Lecture, April 11, 4:15pm, Pendleton Rm 105.

Concert\* - Prism Jazz, Parent's Weekend concert, April 11, 8pm, Houghton Memorial Chapel.

Concert\* – The Wellesley Blue Notes, Close harmony a cappella singing group perform with the Bowdoin Mediebempsters,

April 11, 8:30pm, Tower Court Great Hall. Concert\* - The Wellesley Tupelos and Widows, Sophomore Parents Weekend concert, April 12, 3:30pm, Amphitheatre.

Chamber Music Concert\* - April 13, 2pm, Pendleton Rm

The Design of Wellesley College\* - Helen L. Horowitz, Scripps College, Architecture Lecture, April 14, 8pm, Jewett.

The US and Chile: Lessons for Central America\* - Peter Winn, Barnette Miller Visiting Professor of International Relations, Wellesley, Latin America Today: A Wellesley College Symposium Barnette Miller Lecture, April 14, 7:30pm, Pendleton Rm 105.

Francesca Woodman: Photographic Work\* -Gabhart, director, Wellesley College Museum, Artbreak, April 15, 12:30 & 4:15pm, Jewett Main Gallery.

Encolpius in the Underworld: Petronius and Vergis\* – Prof John Bodel, Harvard University, Greek/Latin Dept Lecture, April 15, 4:15pm, Library Lecture Rm.

The Color Purple Colloquium\* – Bill Cain, director, American Studies Program; Jackie Jones, associate prof of history; Mae Henderson, assistant prof of Black Studies, American Studies Program Colloquium, April 15, 4:15pm, Pendleton Rm 105.

Career Program: What's Your Major? Does it Really Matter?\* - College ACCESS Program Discussion, April 15, 8:30am, Freeman LR.

Cognitive Science and the Computer Metaphor\* - John Searle, University of California-Berkeley, Henry R. Luce Lec-ture, April 16, 7:30pm, Science Ctr Rm 377.

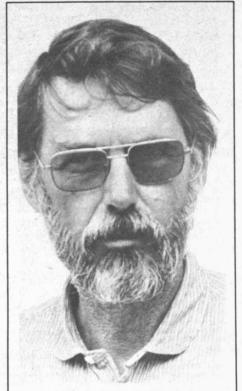
Early Education Goes to School: Public School Involvement in Programs for Young Children\* - Fern Marx, project research director, Ctr for Research on Women Luncheon Seminar, April 17, 12:30-1:30pm, Cheever House. Bring a bag

Juggling it All\* - Amy Domini, author, Workshop, April 17, 7:30pm, Davis Lounge

Le Cheval de Troie de la Description\* - Claude Simon, author, winner 1985 Nobel Prize for Literature, Lecture in French, April 17, 8pm, Pendleton East Rm 112. Followed by reception and exhibit of M. Simon's manuscripts, photos & collages, Maison Francaise, 33 Dover Rd, Wellesley

April 17-19, Th, 3-5pm; F, 8:30am-5pm; Sat, 9am-4pm, Alumnae Hall.

\*\*Open to the MIT community only \*\*\*Open to members only Send notices for Wednesday, April 16 through Sunday, May 4, to Calendar Editor Rm 5-111, before noon, Friday, April 11.



Poet Robert Creeley, whose published works date from 1945 to his forthcoming collection, Memory Gardens, will read from his work and discuss poetry as an art form Thursday, April 10, at 8pm in the Student Center Mezzanine Lounge. Mr. Creeley's appearance is sponsored by the MIT Writing Program and is open to the public free of charge.

## Arco gift to benefit ${\sf REMERGENCE}$ Lab

The Atlantic Richfield Foundation of Los Angeles, Calif., has awarded the REMER-GENCE Laboratory \$200,000 for the purchase of equipment.

The gift was announced by Dr. Herbert H. Einstein, professor of civil engineering. He said the grant was an important contribution to a planned \$2.8 million modernization and expansion of the laboratory.

The laboratory, established in 1983, brings together students and faculty from throughout the Institute working in the areas of materials and structures. The laboratory's name is an acronym drawn from the major areas of research and teaching that take place there: Resource Extraction, Materials and Energy, Reservoir, Geotechnical, ENvironmental and Construction Engineering.

Faculty members from five departmentsmechanical engineering, civil engineering, ocean engineering, materials science and engineering, and earth, atmospheric and planetary sciences-have combined efforts and resources to conduct pioneering research in materials and structures.

## Seminar series opens

A weekly seminar series, sponsored by the Center for Technology, Policy and Industrial Development and the Laboratory for Manufacturing and Productivity, will begin Monday, April 14, with a talk about the realities of high tech in manufacturing by James Har-bour of Harbour and Associates. The seminar will be held at 3pm in the Marlar Lounge, Rm 37-252

The speaker at the second seminar, April 22, will be Dr. James P. Womack, research director of the International Motor Vehicle Program at MIT. He will speak on structural trends in the motor industry. Other seminar speakers will be Daniel Jones of the Science Policy Research Unit of the University of Sussex, U.K.; Dr. Kurt Hoffman, University of Sussex; Professor Harry Katz, Cornell University labor relations expert; Professor Joel Clark, director of the Materials Systems Laboratory at MIT, and Dr. Michae mano, research fellow at the Harvard Business School and author of a recent book on the Japanese motor industry. Seminar times, places and dates will be announced later.

## Sephardic concert set

Voice of the Turtle and Flory Jagoda & Family will present a concert of Sephardic folk music on April 13, at 2pm in Kresge Auditorium. Sponsored by MIT Hillel, the concert will feature folk traditions of the Balkans and North Africa, and holiday music for Purim and Passover.

Voice of the Turtle, a Boston based instrumental and vocal ensemble, is dedicated to the preservation and performance of songs of the Sephardim, the Jews of Spain and Portugal. Flora Jagoda, born in Yugoslavia and taught by her grandmother in the oral tradition, is a source of authentic Ladino folk music from the Balkans and Mediterranean

Tickets for the concert are \$10, \$8 and \$6 available at MIT Hillel, x3-2982.

# **CLASSIFIED**

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INSTRUCTIONS: Ads are limited to one (of approximately 30 words) per per-son per issue and may not be repeated in successive issues. All must be accompanied by full name and extension. Persons who have no extensions or who wish to list only their home telephones, must come in person to Rm 5-111 to present Institute identification. Ads using extensions may be sent via Institute mail. Ads are not accepted over the telephone.

Deadline is noon Friday before

#### For Sale

Royal prtbl elec typwrtr, exc cond, \$60 or bst. George, 492-4660.

IBM PC Jr, colr mntr, intrnl modm, dsk dry & cartrdg, sftwr, \$800. Jill, 789-4434.

Mtchng sofa & chr, \$70; 14 c.f. fridge/frzr, \$75; 2 twn beds, mttrss, bx sprs & frms, \$75 & \$50; wden dsk & chr, \$75; misc lmps & tbls. Wayne, x3-0030 or 923-9170 aftr 6pm

Mving sale: bike & lck, \$90; couch, \$60; DR tbl, \$35; chrs, \$10; armchr, \$70; piano bnch, \$10; vac clnr, \$15; dbl pltfrm bed, \$100; dbl mttrss, \$60; dsk, \$60; chst of drwrs, \$20; stereo rcvr & spkr, \$25; elec htr, \$10; humdfr, \$10; 14" fan, \$10; 13" b&w tv, \$50; shlvs, lmps, ktchn ware & appliancs, nego. Bernard, x3-1911 or

Alloy grindr Demco E45 w/auto spindle, 1/3 HP, \$350 or bst; Yates elec solderng mach, \$200 or bst. Michael x3-6733.

Btfl playpen, usd 2 mo, nw \$80, askg \$50 Paolo, x8-5226 Whitehead or 266-1716

Apple Imagewriter prntr, \$250. Shirley, x3-4090 or 237-9059 eves.

6 yr crib w/bumpr pad, exc cond, \$75; foldup strollr, almst fiw, \$20. Annie, x3-6694. strollr, almst nw, \$15; child's car seat,

Fridge, 14 c.f, gd wrkng ordr, \$75. Michele, x3-5993 or 696-1716.

Fuji Opus III triathalon bike, '83, 12-spd, 61cm, exc cond, \$475 or bst. Bob, x3-2596

or 770-1015 aftr 7:30pm. HP41CV plus extnded functn module, exc cond, \$175 or bst; Raleigh pro bike, 52cm Carlton Raleigh frm, full Campi Nouva Recrd; 2 xtra whls, exc cond, \$650 or bst;

Zenith 13" colr tv, v gd cond, \$125 or bst Call x3-3094 or 494-1117 eves. Vac for 2 certificates, ovr 100 resrts to choose frm, US & abroad, \$100; Persn hndmd oriental rnnr, 16'2"x 3'8", \$350; 2 12" silvr cndlstcks, \$75; Regina elec broom \$18; Singer sewng mach w/btfl tbl, \$150; suitcases, \$5-25; misc cheap furn, 10 oak bookshlvs w/brckts, \$100; rllr skts, sz 7-9, \$5; Evan Picone wool suit, sz 12, \$50; Pendleton wool skirts, sz 12, \$15. Call x3-3175 or 332-8251.

Trees, Colorado blue spruce, \$15 any sz. Call 957-0219.

Dorm-sz fridge, approx 19x19x19" ice cube compremnt, \$75. Lillian, x3-4861 or 648-6197.

23' Seaway boat, 1983, Cuddy cabin, full hse, 42 gas fuel, 115hp, Evin O/B, 160 hrs, VHF dpth soundr, \$16,500. Barbara King, x3-2531 9am-1pm.

Perego twin-carriage, exc cond, \$120 or bst. Call x3-6212 or 965-8566.

1 AR 90 spkr, 3½' tall, flr stndng, \$250 or bst. Marc. x3-5843.

Rabbit diesl rad, nw, \$75; 19" b&w tv, nds wrk, \$7; mapl syrup, pt, qt, or 1/2 gal. Call x3-7235.

Smith Corona electric typwrtr, 5 yrs old, exc cond, \$95. Call 497-1479 aftr 5pm.

Lrg DR set w/1 leaf & 6 chrs, \$150; campr cap to fit 6x5' pickup trck, bst offr. Luis, x3-0815 or 254-5068.

free to anyone who'll come take it away. Ken, 497-3061. Full-sz fridge/frzr, gd wrkng ordr, avlbl

M's 10-spd Raleigh Grand Prix bike, v gd cond, 23" silvr & bl frm, inc toe clips, wtr bottl & grab-ons, \$100. Peter, x3-8070.

Waring ice cream mkr, \$10. Call x3-1996.

Paine L's writing dsk, antq green w/mtchng chr, \$85; Cogswell arm chr, v fine, \$55. Anne, x3-7494 (can be seen on

Rohn 25G tower top sectn w/hvy duty thrust brng, br nw, \$50. Hank, x3983

SCM elec typwrtr, \$65, gd cond. Joan,

## Vehicles

'69 Ford Mustang, red w/blck top, 70K, 250 auto, exc in & out, Alpine alrm & stereo, \$3,500. Bob, 625-6897. '69 T-Bird, a/c, all pwr, nwly paintd, exc

cond. \$4,000; '82 Honda 550 silvr wing, mny xtras, \$1,600. Call 324-1711.

'71 BMW R75/5 mtrcycl, \$1,000. Sam, x3-6064 or 868-5346 eves before 9pm.

'72 Camaro 350, 3-spd, 90K, v gast, exc mech cond, rst arnd edgds, nw batt, strtr, htr cove, \$850. Rob, x8-4629 Draper or 491-6507 eves

'72 Mercedes 250, reblt bdy in '82, a/c, gd d, no rst, \$4,900. Darryl, x7505 Linc or 692-6650 (Westford).

'74 Mercedes Benz, 450SE sdn, \$8,000. Tom, x4212 Linc or 245-9187 eves/

'76 Ford Pinto wgn htchbck, V6 eng rns well, bdy rstprfd in TX, nw rad, trs, batt, exh, carb, has AM/FM, a/c, ps, pb, askg \$600 or bst. Ray, 247-2959.

78 Olds Delta 88, 4-dr sdn, ps, pb, AM/FM stereo, 1 ownr, gd cond, rns well, \$2,300 or bst. Annmarie, x7430 Linc or 272-1057

'78 Toyota Corona, 2-dr, 74K, exc mech cond, nw muff, \$2,200 or bst. Call 734-1175.

'78 Datsun B210, 4-spd, 52K, a/c, Zbart AM/FM, v dpndbl, \$1,995 or bst. Call 629-2169 aftrnoons/eves.

'78 Suzuki GS 550 mtrcycl, 16.6K, dk brwn, sissy bar, grged yr-rnd, v gd cond, askg \$800. Arthur, x3-2720 or 272-2220.

'79 Ford Pinto, 54K, some bdy rst, std, nds wrk, \$600 or bst. Denise, x3-6286.

'79 Caprice Classic, a/c, pb, ps, auto, pwr lcks & wndws, cruise cntrl, AM/FM, plush int, \$2,700 or bst. Call 232-8523.

'80 Toyota Tercel SR5, 2-dr htchbck, 5-spd std, AM/FM, rad trs, fabric uphlstry, rear wndshld wipr, rstprfd, top gloss, exc cond, no rst, no dnts, 46K, \$3,300 or bst. Call

'80 Chevy Citation, 6 cyl, 4-dr, 4-spd htchbck, ps, pb, a/c, exc cond, nw cltch, etc, 72K, \$2,150 or bst. Harvey, x4267 Linc.

'81 Ford Escort, AM/FM/cass, 4-spd, rear wndw defog, frnt whl drv, lt bl, \$1,600 or bst. Chris, x3-5435 or 322-5207.

'82 Dodge Aries, 4-dr, auto, pb, ps, AM/FM, 50K, \$2,750. Bill, x8-3460 Draper or 843-9234.

'82 Subaru 4x4 wgn, v gd cond, int like nw, 4-spd, AM/FM/cass stereo, sunrf, gd mpg, nds no wrk, bst offr. Susan, x3-4266.

'82 Plymouth Horizon, 29K, 4-dr htchbck, mnl, rear wndw wipr & defog, cloth int, no radio, \$3,500. Call 666-3862, lv mssg

'82 Chevy G-10 cargo van, 55K, exc cond. Call x3-5619 or 776-0463 aftr 6pm.

'82 Mazda RX7 GSL, all opts, excpt lthr int & a/c, 50K, gd cond, \$7,300 or bst. John, x3-3596.

'82 Ford EXP, 65K, bl, 2-dr, auto, pb, ps, AM/FM, lrg cargo space, hi mpg, Michelin rads, a/c nds wrk. Stuart, x3-5043 or 787-9161 eves.

'82 Rabbit GL, wh, radio, 24K, 4-spd, 4-dr, \$3,400 or bst. Call x5-8734 dorm eves.

'84 Subaru GL 4WD 4-dr sdn, 9.8K, 3½ yr warr, loaded, mnt cond, \$8,000 or bst. Alan, x3-6800.

'84 Mustang GT, a/c, pwr wndws & lcks, cruise cntrl, moonrf, 25K, askg \$9,000 or bst. Helene, x3-2422 or 396-9399 aftr

'85 Jeep Cherokee, 2-dr, auto, ps, pb, AM/FM stereo, cust whls, rfrcks, 11K, \$10,800 or bst. Call x3-5048 or 666-4983.

## Housing

Btfl 1BR apt in priv hm on Brattle St, 10 min wlk to Hrvd Sq, sep entrnc, wshr/dryr, avlbl 6/1-8/31, \$400/mo. Jeff, x3-0916 or 497-7303

Lux Cape Cod condo & resort facilts for rnt, wk of 4/26-5/3, Mashpee, sleeps 2, 2BR, LR, DR, ktchn, 2b, frplc, patio, bckyrd, 2 tvs, stereo, dshwsh, wshr/dryr, indr/outdr tennis courts & pools, \$400+ \$100 retrnbl sec dep. John, x3541 Linc or 862-4809 eves/wkends.

Concord, 3 yr old cstm contemp solar dck Concord, 3 yr old estin contemp solar ack hse, fully furn, 3BR, 2b, lrg ktchn, frplc LR & sun/DR, 2 car grg, nr ctr & train to Red Line, avlbl 6/1, 1 yr lease, \$1,400/mo+ utils. Call x3-7121.

Lexington, mod 3BR on 3/4 acre, w/larg screend prch, easy commute to Linc/MIT, avlbl mid-summr, \$1,200/mo, 2 yrs lease.

Call x4810 Linc or 862-5017. N Camb/Arlington line, 6 rm sgl, nw fur-

nace, insulatd, circuit breakrs, c.t. bath, fencd yrd, nw wndws, nr T, \$147,000. Call vner, 661-1004 aftr 6pm

Avlbl 5/1/86, sunny contemp twnhse, 2/3BR, 1½b, D/D & wshr/dryr hookup, sm priv fencd yrd, Indscapd w/patio dck, off-st orkg, conv to MIT, Tech Sq & Kendall Sta T stop, \$1,200/mo. D. Whiddon, x3-4339 or 868-5132 aftr 6pm.

Concord, 4BR, 2b, CA rnch, 2 car grg, for 1, 2 or 3 yr, \$1,400/mo or less for lng trm lease. Call x3358 Linc or 369-1529.

Mashpee-Falmouth line, summr rntl July/Aug, 3BR, 2b Cape, dck w/wtr view, mooring avlbl w/hse, shrt drv to South Cape Beach, all amenities in well-furn hse, \$55/wk. Nick, x3-1654.

San Francisco sublt, avlbl 5/23-8/15, lrger furn BR in 3BR flat w/grg, nr public trnsit & prk, \$303/mo+ about \$20/mo phone & utils. David, 926-4697.

Arlington, 4 rm apt in duplex, nr Spy Pond, hdwd fir, prches, grdn space, prkg for 1 car, no pets, sublet 6/1-8/31 w/opt to renew, \$485/mo+ utils. Helen, x3-3707 or

Singing canaries, \$40; Zebra finches, \$10/pr. Leonard or Diana, 321-3981.

#### Wanted

BR in apt in greatr Boston area, nonsmoking apt-mates, ided by end of July beginning Aug. Elaine, x3-2139 or

Keybrdist & bassist for rock band, we're still learning but v enthusiastic Sam, x5-7494 dorm; Niki, x5-7488 dorm; Bridget, x5-7498; or Mike, x5-7492.

Licensd drvr to take car frm MIT to N Alabama or S Tenn May or early June Call 237-0486.

Intrstd but inept F music lovr sks patient persn to give priv recordr lssns. Louise, x3-6261 or 391-8045 eves.

Nice 2BR apt frm May-Sept onward, pref Camb & above grnd flr. Send cmptr mail to MMC%bunny or call Michele, x3-8922.

Piano playr, starving stdnt pref, to provide bckgrnd music at eve recptn/dinnr, Sun, 4/27, paymnt can include gourmet dinnr. Kathrin, x3-7744 for details.

#### Roommates

Neat non-smkng grad stdnt/staff membra wntd for 1BR apt on Comm Ave west of BU, shard by 2 people, each has own rm, nr lndry, groceries, & T, \$207.50/mo inc ht, h.w. & gas stv, elec about \$20/mo/prsn. Call x3-3733 or 738-0268.

Christn sgl F sks same to shr spacious 2BR Belmont apt, nr T, off-st prkg, \$250+ utils, no pets, no stdnts, avlbl 5/1. Barbara, x3-6788.

Nonsmkng quiet F, 25 yrs+, sks same in Arlington, shr 2BR apt, 1st fir of 2 fmly, \$330+ utils, off-st prkg, 10 min wlk to T, avlbl 6/1, no pets. Holly, x3-5852 or 646-4072.

#### Miscellaneous

Exprt typng on wrd pressr, all knds, fast, efficnt, gd rates. Karla, x3-2203.

Summr babysttr/mthrs avlbl 6/23-8/15, 2 delightful Fr girls, exp au pairs, will live w/Camb fmly & sk full/p-time wrk in/nr Camb. Eve Sullivan, x3-7182, lv mssg.

## Surplus Property

The Property Office has the following excess MIT equipment for transfer within MIT. Unless noted, items are at the Equip-ment Exchange, 224 Albany St, open Tues & Thurs, 11am-3pm. After 30 days, items are sold to individuals. Where noted, bids and offers go to Tom Donnelly, Property Disposal Officer, E19-429, x3-2779, with envelope so marked. Always reference case number on envelope. MIT reserves the right to reject any and all bids.

Case 1627 - For sale by sealed bid. Bids to be received by 4pm EST, 4/18/86. To inspect call Dan Shevitz or Miriam Rosenblum, x3-2982: '71 Ford Maverick, ps, mech fair.

Case 1716 — To inspect call Bob Kane, x3-2238: National Rubber Machine Co rubber extruder; Alsteele plastics chopper; Reed thread roller; United Shoe Machinery extruder.

Case 1680: Visual Tech terminal.

Case 1649: Honeywell recorder.

Case 1717: Digital monitor.

Case 1618: IBM 1972 standard typewriters.

Case 1716: Datel terminal; Tektronix oscilloscope; Sanborn amplifier; Rockwell sander; Rockwell band saw; Oscilloscope cart; Tektronix plug-in, mdl Q; Sanborn recorder; flr lmp.

## professionalism in manner and appear ance, reliability, and capability of assum ing responsibility are essential. Personal recommendations are important. C86-177 Assistant/Associate Director, Career

ity to relate well to patients and staff,

Assistant/Associate Director, Career Services and Preprofessional Advising, to develop a practical experience program giving students the opportunity to gain work experience and to earn income to help cover their MIT expenses; this program's initial thrust will be to develop summer jobs for underrepresented minor-ities and will later be expanded to serve all students and may include longer periods of work. Will identify companies and government agencies interested in this approach to promoting minority em-ployment; seek employers across the full spectrum of students' interests and in the major metropolitan areas from which the students come, as well as around Boston; and travel to meet employers and become familiar with their businesses and the kinds of work they can offer. Duties will also involve learning about specific career fields and characteristic work oppor-tunities in order to assist in the career counseling of students and alumni looking to their long-term future. A broad educational background (not necessarily a master's degree), positive, enquiring interest in the working world; and relevant work experience are required. Energy and initiative, administrative skills, and a friendly, understanding manner impor-tant. Interest in technology preferred.

Assistant Managing Editor, Sloan Management Review, Sloan School of Management, to edit articles and forums for the professional journal of the Sloan School. Will proofread all production School. Will proofread all production stages of journal (galleys, page proofs, blues); handle correspondence with author after manuscript has been accepted by publication and oversee author changes on galleys; and coordinate book reviews and forums for each issue. Duties also in clude coordinating advertising campaigns and handling advertising for each issue and assuming responsibility for permis sion agreements. A college degree, prefer ably a B.A. in English or Journalism, and two years of editorial/writing experience are required. Knowledge of production and experience in dealing with printers essential. Excellent communication, organizational, and interpersonal skills neces sary. Advertising experience desirable. Initiative and ability to work independently and assume a great deal of responsibility important. NON-SMOKING OFFICE. A86-702

Applications Programmer, Electrical Engineering and Computer Science, academic staff position for development of relational database applications in headquarters offices of the Department. Initial emphasis on redesigning existing ad-ministrative database applications to run in a modern, distributed, workstation environment. A later objective will be the creation of new and more flexible software tools. The system is expected to in-tegrate database applications, word pro-cessing, and related management tools on a local network of Micro-VAX-II workstations with graphics consoles and laser printers. Three to five years programming background expected. Experience with relational database systems important. Experience with UNIX 4.2 desirable. chelor's degree preferred. C86-176

Programmer/Systems Coordinator, Personnel - Faculty and Staff Informa tion Services, to provide primary pro-gramming support for the information consumers of the Personnel and Employee Records System (PERS). Will develop, document and maintain programs and related information for data retrieval, report generation, and other consumer needs, using Natural and Easytrieve develop training materials and instruct novice users in the access to and opera-tion of the PERS database and its component subsystems; and assist in providing support for microcomputer applications in Personnel running on IBM PC-XT's under PC-DOS and DECmate II's under CP/M. Bachelor's degree or equivalent combina-tion of relevant experience and education and at least one year of experience with an IBM-based operating system, prefera-bly VM/CMS and with a microcomputer such as the IBM PC are required. Programming experience with a high-level programming language such as Natural, PL/1, Easytrieve, or FOCUS necessary.
Ability to communicate effectively with a wide variety of information consumers throughout MIT as well as with informa tion systems professionals and absolute discretion in handling confidential personnel information essential. A86-701

Journals Editorial and Production Manager, MIT Press, Journals, to be

responsible for editorial coordination and Will type theses, manuscrpts, proposls, resumes, tech paprs on IBM Sel III, rsnbl rates. Sylvia, x3-3765. production for fifteen journals in a grow-ing program. Editorial duties will include scheduling; trafficking manuscripts, galleys, pages, blues, etc. between sup-pliers and editorial offices; supervising freelance copyediting and proofing; and maintaining editorial procedures and quality. Production duties will include scheduling; cost estimating and purchasing composition, printing, binding services, and stock; providing regular production reports and cost summaries; and maintaining production protocol and quality control of all outside suppliers. Will also supervise journals interface with system. Minimum three years production or production/editorial experience with either books, journals, or magazines required. Some management experience and word processing and/or microcomput-er experience preferred. Strong organiza-tional skills, ability to work with a varieof projects and people, costing and adget experience, and ability to work without direct supervision essential.

A86-700 Technical Staff, Physics, to be in charge of preparation and development of lecture demonstrations. Will work with physics faculty, staff, and students. Bachelor's degree in Physics or Electrical Engineer-ing and broad knowledge of physics with a strong interest in teaching required. Experience in teaching and a sense of the esthetic qualities of demonstrations essential. Experience with mechanical and electrical construction techniques ne sary. C86-175

Technical Assistant, Physics, to assist scientific staff in laboratory maintenance and development of physics experiments in the third year laboratory for Physics majors. Will have considerable interaction with students in all aspects of work; assist students with laboratory experiments; construct, operate, and repair experimen-tal and technical equipment; and assist in various physics teaching labs as needed. College degree or comparable experience essary. Familiarity with glassblowing vacuum systems, electronic circuit boards oscilloscopes, multichannel analyzers, drill presses and lathes preferred. C86-174

Assistant to the Vice President, for Information Systems, to provide overall planning and coordination of administrative computing activities for organizations reporting to three Vice Presidents. These new positions will report directly to their respective Vice Presidents and will form the core of a team that will implement the new strategic plan for administrative computing. Will establish and coordinate task groups; develop and implement Institute wide policies and standards; coordinate computing plans in administrative organizations with other MIT groups analyze information systems needs; and advise and consult with the Vice President, line managers, and information con-sumers. A well-balanced complement of technical, managerial, and interpersonal skills is important, as is a technical background including business analysis, project management, and computer hardware and software. Prior management ex perience and knowledge of university en vironment necessary. Excellent written and oral communications skills, demon strated effectiveness in team oriented work, leadership, creativity, and breadth of perspective essential. Bachelor's degree or equivalent combination of education and experience required. A86-695

#### Sponsored Research Staff

Purchasing Agent, Research Laboratory of Electronics, to process yearly volume of purchase orders for special materials from outside vendors as well as internal requisitions; the Purchasing Agent is re sponsible for total administration of the purchasing process. Will supervise one Buyer Assistant; prepare and supervise preparation of orders from requisitions; assist in resolving problems that may arise in invoicing, delivery, reject material, etc.; and assume responsibility for locating and placing business with minority, small and women-owned businesses and negotiating more favorable pricing arrangements with present sources. A college degree in accounting or business administration and several years experience as a buyer, or equivalent combination of education or experience required. Knowledge of computers and/or willingness to learn essential. Understanding of federal contract regulations highly desirable. R86-954

Technical Assistant, Biology, to provide technical support in a laboratory of 10 to 15 investigators. Will monitor laboratory equipment and supplies; prepare, sterilize and test cell culture media and biochemical buffers; and take initiative in assuring smooth day-to-day functioning of lab oratory. Previous laboratory training or experience, bachelor's degree in chemistry organizational skills are required. R86-952

Technical Assistant, Whitaker College of Health Sciences, Technology an agement, to support research directed toward understanding the mechanisms by which animals process extracellular molecules. Will isolate lipoproteins and lipoprotein-deficient sera from plasma, and prepare media for the growth of cells in culture. May also perform general lab-oratory maintenance and assist with biochemical experiments. B.S. in bio with exposure to biochemistry, cell biology, and animal physiology preferred. Laboratory experience using basic techniques of pipets, balances, pH meter and preparation of buffer solutions desirable.

Assistant Director of BPEC Consortium, Biotechnology Process Engineering Center, to provide services to th 25-member companies of the Consortium. Will plan and implement activities; act as liaison between representatives of ember companies, faculty participants (17 professors), and research staff (80 peo-ple); oversee the writing and production of quarterly technical newsletter, organize research briefings, workshops, and symposium programs for the industrial Conmbers; identify and coordinate specific technical needs and involvement between the Center's faculty members with the industrial sector, assist in the

preparation of budgets, proposals and annual reports of the Center and Consortium; oversee and design laboratory renovations; provide the interface for technology exchange and transfer in patents and licensing from the Center's research and development programs; coor-dinate short- and long-term visits by industrial scientists and engineers; and solicit research proposals from industry. Will also serve as liaison with the MIT community; respond to inquiries about the Center and Consortium; and solicit new Consortium members. B.S. in biology or chemical engineering and either a master's degree in a relevant field or two plus years experience in a chemical, pharmaceutical or biotechnological company required. Must be well-spoken and willing to travel. Skills in technical writing and communication are essential. R86-948

Scientist, Research Research Research Scientist, Research Laboratory of Electronics, to conduct both experimental and theoretical research on the mechanical properties of the receptor cells in the ear. Will perform experiments involving optical measurements of the motion of the receptor organ and the hair cell stepecilies and theoretical studies in. cell stereocilia, and theoretical studies in-volving both analytical and computer simulational 'investigations of the mechanics of motion of these structures. A doctoral degree in Physics or Electrical or Mechanical Engineering and three to or Mechanical Engineering and three to five years of experience are required as is demonstrated knowledge of Auditory Physiology. Familiarity with the numerical solution of partial differential equations is desirable. R86-947

Research Specialist, Chemistry, to per-form basic immunological and Research Specialist, Chemistry, to perform basic immunological and biochemical procedures in a large research group. Will prepare antigens, produce antibodies in rabbits and mice, perform radio immunoassays and further related routine biochemical assays. B.S. degree and one or more years experience in biological science research lab required. Ability to work independently on defined research projects important.

Sponsored Research Staff, Laboratory for Nuclear Science (temporary, one-year appointment). The Center for Theoretical Physics is seeking highly qualified ap-plicants in the areas of nuclear or particle theory. Ph.D. in nuclear or particle theoretical physics, superior graduate record, and demonstrated ability to do ef-fective research in areas of interest to members of the Center are required. members of the Center are required. Selection is based on letters of recommendation, published research, and perhaps a visit or seminar. There is a possibility of renewal for a second year. R86-942, R86-943

Research Associate, Center for Technology, Policy, and Industrial Development, to act as Environmental Health Risk/Policy Analyst. Will lead and participate in science-based policy analy-sis projects related to biotechnology and to occupational and environmental health. Requirements include a Ph.D. in chemistry, biology, biochemistry, molecular biology, bacteriology, genetics, biostatistics, or another allied discipline; at least two years of relevant experience beyond the Ph.D. using scientific information to illuminate public policy questions excellent writing skills; and good quantitative modeling ability and capability to analyze environmental health problems and data in terms of different technical and policy perspectives. Position available as of July 1, 1986. R86-941

Technical Assistant, Center for Cancer Research, to perform laboratory research on molecular and cellular analysis of mammalian genes. Will take care of tissue culture of adhesive as well as suspended cells, such as lymphocytes, work on various types of biochemical preparation and analysis of nucleic acids and proteins, including cloning of mam-malian genes by recombinant DNA techniques; and handle mice for injection of cells and chemicals and for preparation of antisera. B.S. and minimum of 2-3 years experience with at least some of the above techniques required. Experience in tissue culture essential. R86-940

Research Specialist, Cell Culture Center, to perform a variety of cell culture related duties including the preparation and quality control of cell culture media, mass production of anima cells as well as large-scale concentration and purification of virus. The cell culture work involves growth of cells from primary culture as well as production of cell lines in suspension and monolayers B.S. or B.A. degree required. Some experience in animal cell culture desired

Technical Assistant, Psychology, to ad minister neuropsychological tests. Will score tests and enter scores into computer database; perform descriptive analyses sometimes by hand and other times by computer, schedule patients for testing at MIT and schedule the appropriate testers to see each patient; inform other areas of patients' special needs and accompany patients to outside appointments; and give updates on individual patients and families, including evaluating test procedures, relating new problems and inter esting issues that arise, and remaining alert to new variables that may be important to study. B.A. or B.S. in psychology, biology, or psychobiology, and experience in devising and running experiments and working with computers required. Experience with testing patients and some knowledge of neuropsychology and psychobiology preferred. NON-SMOKING OFFICE. R86-932

Administrative Officer, Sloan School of Management/CCREMS, to manage licensing of CCREMS' econometric modelling software package, TROLL, including responding to inquiries, negotiating with prospective licensees, supervising an assistant in the accounts receivable function, and maintaining files for licensees Will also monitor all Center accounts, in cluding TROLL and research accounts supervise reconciliation of monthly state-ments, produce projections, and generate reports comparing actual and projected financial performance. Other duties will include overseeing general office func-tions; serving as liaison between CCREMS and all centralized MIT functions, such as accounting, personnel, pur chasing, and telecommunications; and maintaining the records related to these interactions. Will process all payroll documents, assist in development of

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# **POSITIONS AVAILABLE**

It is Institute policy not to discriminate against individuals on the basis of race, color, sex, sexual orientation, religion, handicap, age, or national or ethnic origin in the administration of its programs and activities.

This list includes all nonacademic jobs currently available on the MIT campus. Duplicate lists are posted outside the offices of the Special Assistant (10-215) and in the Personnel Office (E19-239).

Information on openings at Lincoln Laboratory (Lexington, MA) is available in the Personnel Office. Persons who are NOT MIT employees

should call the Personnel Office on extension 3-4251. Employees at the Institute should continue to contact their Personnel Of-

ficers to apply for positions for which they feel they qualify. Ken Hewitt 3-4267 Dick Higham Virginia Bishop 3-4278

Appointments: Therese McConnell 3-4274 3-1594 Oveta Perry Kenneth W. Chin 3-4269 Sally Hansen Appointments 3-4275 3-4268 Maureen Howard

3-4076 Kim Bonfiglioli Appointments: Nancy Collins

## Administrative and Academic Staff

Assistant to the Administrative Officer, Whitaker College of Health Sciences, Technology and Management, to assist in the financial and personnel administration of the Department of Brain and Cognitive Sciences. May assist in some or all of the following areas: the development and preparation of sponsored project budgets; the interpretation of In-stitute and sponsoring agencies' policies; the review and analysis of financial reports, budget and accounting data for appropriate preparation of account projections and financial reports; the assessment of oper-ational needs and/or problems and in making recommendations for solutions; and other related duties as assigned. Will and other also work closely with faculty staff and support. Bachelor's degree or equivalent combination of education and experience, and two to three years experience in a responsible position that inork with spons red accounts are required. Excellent organizational skills ability to prioritize, and ability to work well under pressure in a very busy en-vironment essential. Ability to work well with others, exercising tact and discre-tion, and good oral and written commun-ication skills necessary. Experience using automated spreadsheets (Lotus or Multiplan) and some word processing preferred. Registered Senior Dental Hygienist,

Medical Department, to report to the Director of the Dental Service. Clinical duties will include initial comprehensive examination and charting, prophylaxis, periodontal treatment, plaque control, taking and processing dental x-rays, screening dental emergencies and conducting education programs. May be called upon to do occasional assisting. Duties will also include assisting the Director in administration, including coordination and direction of technical staff. Applicant ist be a registered dental hygienist. A.B. or B.S. in dental hygiene is pre ferred, as is some previous work experi-ence, particularly in periodontal care-Sensitivity to the needs of patients, abil-

search plans, and coordinate paperwork associated with staff and visitor appointments. Candidates should have prior financial control experience, as well as office management experience. Position requires individual who is well-organized and detail-oriented. Knowledge of and experience with computers for financial (especially Lotus 1-2-3) and word processing applications preferred. Excellent communication skills necessary. MIT experience preferred. A Bachelor's degree in business administration or equivalent education/experience required. R86-914

#### Library Support Staff

Junior Microfilmer, MIT Libraries — Microreproduction Laboratory, to perform elementary technical tasks in the production of microforms and receive instruction in additional technical disciplines. Will be responsible for meeting production goals, while observing quality standards and helping to maintain equipment; operate a planetary microfilm camera in the production of roll film or microfiche, a rotary camera, a microfilm step and repeat camera, and a microfiche printer/processor; perform darkroom work; and operate binding equipment. High school graduate or equivalent preferred. Mechanical ability desirable. L86-315

Library Assistant IV, MIT Libraries — Catalogue Department, to catalogue MIT publications. Will catalogue theses directly online according to AACR2 catalogue code, OCLC bibliographic input standards, and MIT cataloguing policies; assign OCLC field and subfield codes and indicators; barcode publications; verify personal names and series in MIT and online authority files and create new authority records for personal names; resolve personal name heading conflicts and initiate correction to bibliographic records and authority files to reflect AACR2 rules of entry; direct student assistant; maintain statistics of number of items catalogued; and perform auxiliary assignments as required. Minimum 2.5 years direct/related experience and high school degree or equivalent required. Some college study preferred. Working knowledge of the MARC format, preferably in the OCLC Cataloguing Subsystem, experience using AACR2 catalogue code, and experience—with CRT operations desirable. Accurate typing (40 wpm) and attention to detail essential. L86-314

#### Secretary/Staff Assistant

Administrative Secretary, Resource Development, to provide administrative and secretarial support for two staff members in the Office of Leadership Gifts. Will perform general secretarial duties; organize calendar, travel plans, files and correspondence; prepare information on donors and prospects; and enter and retrieve this information on the prospect donor base. Strong executive secretarial skills (including 65wpm typing), solid competence in word processing and database entry and retrieval, and ability to interact professionally with senior alumni volunteers essential. Minimum 4.5 years direct/related experience required. B86-328

Administrative Secretary, Center for Transportation Studies, to provide administrative and secretarial assistance to the Director and be generally responsible for overseeing headquarters operations. Will coordinate activities, meetings, and travel itineraries; answer telephones; type correspondence; maintain files; provide reception to visitors; work closely with Administrative Officer with respect to certain financial information, correspondence and Center's activities; and provide occasional typing services to transportation faculty. Minimum 4.5 years direct/related experience or equivalent combination of education and experience required. Excellent typing, organizational skills, command of English, and ability to use DECmate word processor essential, as is a facility for working with various groups of people both at MIT and outside. Ability to work well in a busy environment with significant interaction and interruption necessary. Familiarity with MIT desirable. B86-323

Administrative Secretary, Architecture, to provide secretarial support to the Head of the Department. Will answer phones and screen calls and visitors, maintain Head's schedule, make travel arrangements, and schedule meetings of department committees; open and route mail and reply to routine letters independently; type reports and correspondence for Head and Assistant to Head; assist in compiling tenure, promotion and reappointment cases; maintain complete filing system; and order lunch and dinner for meetings when necessary. Minimum 4.5 years direct/related experience required. Excellent typing skills, good educational background, ability to recognize priorities of requests, and good organizational skills are essential. Requires ability to work independently with interruptions. Intelligence, maturity, patience, flexibility, and good judgment are essential. Knowledge of word processing highly desirable. B86-321

Administrative Secretary, Biology, to provide, with Senior Secretary, administrative support for two biology pro-fessors and their laboratories. Will monitor spending of research grants and other accounts; prepare financial projec-tions and proposal budgets for sponsored programs; order supplies and keep ment of laboratory spending patterns; prepare time cards and personnel appoint prepare time cards and personnel appointment forms; allocate payroll to accounts and keep records of funds expended for l; assist in the preparation of manuscripts, reports, correspondence, course materials and new research pro posals; and answer phones, make appointments, and keep calendars for both faculty members. Minimum 4.5 years direct/related experience required. Prior experience with or willingness to learn word processing, spreadsheet, and com-puter skills are essential. Editorial and typing skills and ability to work indepenntly and function sn oothly in the face of frequent interruptions important.
Knowledge of the MIT accounting system desirable. B86-320

Administrative Secretary, Laboratory for Electromagnetic and Electronic as, to provide sole support to one member and two research staff members and assist and interact with numerous other laboratory members. Will type research proposals, reports, scripts, corre ondence, etc. on both word processor and typewriter; answer telephones; monitor monthly statements of research accounts, handling discrepancies, petty cash, salary distribution be tween accounts, etc.; requisition lab equipment and supplies, monitor pur-chase orders, and process invoices for pay-ment; file; make travel arrangements; organize meetings and seminars; scan and ganize meetings and seminars; scan and distribute mail; admit and direct visitors to the laboratory; make appointments; re-quest building repairs and improvements; assist foreign visiting scientists with housing arrangement; process payroll for housing arrangements; process payroll for visiting scientists and some other labora tory personnel; assist students in use of word processor; maintain undergraduate student advisees' files and process rele vant paperwork; oversee office equi operation; interact with laboratory quarters, Electrical Engineering Depart ment, Office of Sponsored Research, and other administrative offices; and assist in other administrative duties as required Minimum 4.5 years direct/related experience required. Ability to organize work, set priorities and work independently toward various deadlines essential Knowledge of MIT's administrative proce dures for Accounting Office and Office of ored Programs highly desirable

Administrative Secretary, Industrial Liaison Program, to handle various secretarial duties for an Assistant Director and Industrial Liaison Officer in the Industrial Liaison Program. Will have con siderable contact with corporate members of the ILP and Institute faculty and staff; compose and type correspondence, reports such as summaries on member con activities, and visit and travel agendas; assist in scheduling appointments; arrange for company research briefings, including room scheduling, catering and audiovisual equipment; make travel arrangements, obtain travel advances and prepare travel expense vouchers; main-tain files; assist with telephone coverage in working group suite and answer in-quiries related to servicing member com-panies of the Program; independently reply to correspondence when appropriate; perform computer input and retrieval on various member company statistics and requested publication information; and epare Institute forms, such as requisi-ons. Will handle administrative and confidential matters for the Assistant Direct tor regarding the Liaison Program and working group and participate in training for support staff personnel within working group; may oversee workload priorities within group. Excellent secretarial and organizational skills and experience with and/or willingness to learn word processing essential. Flexibility, strong interpersonal skills and initiative, ability to work both independently and as part of a team, and ability to prioritize work load important. Minimum 4.5 years direct/related experience required. B86-310

Administrative Secretary, Laboratory for Information and Decision Systems, to perform complex and diverse secretarial duties for the Laboratory Director and Administrative Officer in a busy Head-quarters Office. Will arrange meetings and seminars, schedule appointments, handle busy telephone contact and referral, set priorities, arrange and document travel, type, word process, proofread, organize and maintain administrative files, perform special projects and tasks as needed, and act as liaison between department headquarters, the Dean's Office and the Laboratory. Minimum 4.5 years direct/related experience required. Good interpersonal and typing skills and knowledge of and/or willingness to learn word processing essential. Efficiency, good organizational skills, and the ability to work with minimal supervision necessary. B86-308

Administrative Secretary, Earth, At-

mospheric, and Planetary Sciences, to per-form diverse secretarial duties for the Director of the Earth Resources Laboratory, Principal Research Scientist, and Industry Consortium Project. Will schedule complex travel, meetings, appointments, and special events; maintain Director's calendar; review and distribute large volume of mail: independently initiate and compose replies and correspondence, type manuscripts, proposals, cla material and correspondence; answer and screen phone calls; establish and main-tain extensive publication and other files for director; serve as information source for internal and external Lab inquiries Will also take initiative in generating cor respondence and mailings, fielding requests and making arrangements for twenty mer per companies of industr research consortium. In collaboration with Lab Administrator, will maintain ERL publication files and other Lab data bases, prepare and submit sponsored research proposals, and undertake various Lab projects as they arise. Minimum 4.5 years direct/related experience required. Excellent typing (including technical). superior editing and proofreading, and strong interpersonal skills as well as facility with both written and oral communication and the ability to work inde pendently, stay highly organized, set priorities, and meet deadlines in a hectic office environment essential. Willingness to learn VAX UNIX text formatting nec essary. Initiative, attention to detail, accuracy, flexibility, and willingness to work as part of a team important. Occasional weekend work. NON-SMOKING **OFFICE. B86-305** 

Sr. Secretary, Sloan School of Management, to support three faculty members in the Management Information Systems group in the Management Science Area. Will type and proofread correspondence, course materials, manuscripts, etc. and photocopy as appropriate; maintain complex calendar; schedule appointments; make travel arrangements; answer phones; interact with students and outside visitors; process mail, monitor accounts; order supplies; and perform other duties as required. Other duties will include helping other secretaries in the Area as well as the Area Head and the Area Coordinator when the need arises. Minimum 2.5 years direct/related experience required. Excellent typing and orga-

nizational skills and the ability to handle several tasks simultaneously and to work well under pressure essential. Word processing skills and/or the desire to learn necessary. Knowledge of MIT preferred. NON-SOKING OFFICE. B86-329

Sr. Secretary, System Dynamics Group, Sloan School of Management, to provide overall support for one faculty and two research staff members. Will type manuscripts, reports, correspondence and class materials; photocopy; coordinate schedules and travel arrangements; assist in summer session project administration which includes planning, logistics and expense management. Additional duties include maintaining reprint inventory, receiving and directing visitors, answering telephones, and assisting other support staff as needed. Minimum 2.5 years direct/related experience required. Strong typing skills (55wpm), good editing skills, word processing experience and willingness to learn list processing essential. Good attention to detail and ability to organize and set priorities with minimal supervision necessary. NON-SMOKING OFFICE. B86-327

Sr. Staff Assistant, Career Services and Preprofessional Advising, to perform complex secretarial and administrative duties for Associate Director. Will draft correspondence; anticipate and initiate actions regarding office operations; compile annual data; maintain Associate Director's calendar; manage files and records of premedical and prelaw students, including typing, filing, copying and mailing; and assist in the functions of general office operations. Excellent interpersonal skills and a friendly, caring and perceptive manner essential. Ability to exercise discretion regarding confidentiality of material and in obtaining sensitive information, and pleasant office manner and ability to work well with students and alumni as well as Institute faculty and staff essential. Typing necessary; word processing skills helpful. B86-325

Sr. Secretary, Office of the President, to perform wide variety of secretarial duties in very busy office. Minimum 2.5 years direct/related experience required, as are excellent typing, shorthand, organizational skills, and command of the language. DECmate and IBM word processing skills or willingness to learn, ability to assume responsibility and to work under pressure, and ability to work as a team member essential. Resourcefulness in handling complex situations, discretion, tact, good judgment, and sense of humor important. Overtime sometimes necessary. NON-SMOKING OFFICE. B86-319

Sr. Secretary, Environmental Medical Service (temporary, four month position), to provide general secretarial support. Will type, file, keep records, and deliver materials within the Institute. Minimum 2.5 years direct/related experience required. Good communication skills and poise in dealing with people necessary. Knowledge of DECmate II word processor preferred. B86-317

Sr. Secretary, Sloan School of Management, to provide secretarial support to three professors in the Economics, Finance and Accounting Group. Will type, proofread and reproduce manuscripts, reports, exams, and correspondence, often of a technical nature and sometimes requiring transcription from dictaphone; assist with preparation of course materials and notes, as well as for meetings and seminars; answer telephones and student inquiries, schedule appointments; arrange travel; photocopy; maintain files; and respond to routine inquiries. Minimum 2.5 years direct/related experience or a combination of education and experience required. Excellent typing, proofreading and general office skills, as well as good organizational skills and the ability to work under minimal supervision essential. Technical typing skills, dictaphone experience, attention to detail, and the willingness and ability to learn word processing highly desirable. B86-313

Sr. Secretary, Harvard-MIT Division of Health Sciences and Technology, to perform a variety of secretarial duties for Director of Hyperthermia Center. Will answer and place phone calls; receive patients; take messages from doctors and patients; respond to routine phone inquiries, receive other visitors and schedule appointments; compose letters; type correspondence, manuscripts, grant proposals, etc.; and perform other duties as necessary. Position involves considerable interaction with students and staff, patients and doctors, and other visitors to the Center. Minimum 2.5 years direct/related experience required. Excellent typing, proofreading, and general office skills as well as the ability to organize and set priorities necessary. Discretion, tact, and good interpersonal skills essential. Knowledge of word processing and familiarity with medical terminology preferred. 886-311

Sr. Secretary-Technical, Chemistry, to support one chemistry professor. Will type correspondence, technical manuscripts and grant proposals; answer telephones; arrange appointments and travel; file; and monitor research accounts. Minimum 2.5 years direct/related experience required. Excellent typing skills, word processing experience or willingness to learn, strong interpersonal skills, and ability to set priorities and organize work without detailed supervision essential. Familiarity with M.I.T. desirable. B86-309

Sr. Staff Assistant, Research Laboratory of Electronics (part-time, 30 hours/week), to perform secretarial and clerical duties for one or more professors and be responsible for office. Will take and transcribe difficult dictation including that involving specialized terminology; type technical manuscripts and statistical tables and charts and assure the accuracy of their material, format, punctuation, paragraphing, etc.; make appointments and travel arrangements; distribute office mail, independently reply to routine inquiries; and compose letters from oral instructions to respond to nonroutine inquiries. Minimum 2.5 years direct/related experience required. Excellent typing skills and knowledge of some method for taking dictation essential. B86-302

Sr. Staff Assistant, Research Laboratory of Electronics, to perform secretarial and clerical duties for a large and active staff. Will assume responsibility for running the office; type correspondence, technical manuscripts, statistical tables and drafts; be responsible for accuracy of typed

# Gospel recital planned Saturday

A concert featuring gospel music written by graduate student Tyrone R. Williams will be

presented Saturday (April 12) at 8pm in Kresge Little Theatre. Williams is a member

Williams is a member of the MIT Gospel Choir which will present its spring concert in Kresge Auditorium on Saturday, April 26 at 7:30pm.

The April 12 concert will feature six new works to be sung and played on the piano by Williams, a tenor baritone. There will also be appearances by the

Voices of Faith and the New Temple Singers. For his songs, Williams will be accompanied by an ensemble of friends from the MIT Gospel Choir.

This recital is being supported in part by the Council for the Arts at MIT and is sponsored by the Black Graduate Student Association.

Williams received two degrees in architecture from Prairie View A&M University of Prairie View, Texas. At MIT he is a candidate for the master's degree in urban studies and planning.

His interest in writing music began during his first year at Prairie View when he wrote

material, setting up manuscripts from rough data and for the routine verification of footnotes and references; make appointments and travel arrangements, distribute office mail; independently reply to routine inquires; compose letters from oral instructions for nonroutine inquiries; and deal with a number of foreign visitors. High school training and minimum 2.5 years direct/related experience or equivalent combination of education and experience required. Excellent typing skills, willingness to learn technical typing and excellent command of English language and grammar essential. Dictaphone experience desirable. Non-smoker preferred. B86-301

Sr. Secretary, Treasurer's Office, to

cover the full range of secretarial duties and general support of a two-person office. Will transcribe, type, file, screen telephone calls, and perform task projects including secretarial administration of the faculty second mortgage program. A demonstrated capability to interact comfortably within and outside MIT, to work independently, to organize office activities and to establish priorities of work flow is necessary. Facility with legal, financial, and investment terminology; excellent secretarial skills, including machine transcription; the demonstrated ability to work well under pressure; maturity to make decisions; and poise to effectively and diplomatically represent the office with senior staff offices and external legal and business offices essential. Familiarity with modern office equipment preferred. College education preferred. Minimum 2.5 years direct/related experience required R86.290

Sr. Secretary, Sloan School of Management, to work for three faculty members in the Operations Management subgroup of the Management Science Area. Will type and proofread correspondence, course materials, manuscripts, etc.; maintain complex calendar; schedule appointments; make travel arrangements; answer telephones; interact with students and outside visitors; process mail; monitor accounts; order supplies; and perform other general office functions. Willingness to handle confidential material and assume responsibility for accuracy of materials, and ability to work well under minimal supervision and under pressure essential. Knowledge of or willingness to learn technical typing, word processor, and IBM PC desirable. Minimum 2.5 years direct/related experience and excellent typing and organizational skills required. Knowledge of MIT preferred. NON-SMOKING OFFICE. B86-239

Staff Assistant, Personnel-Benefits Office, will assist Benefits Office Staff members in the completion of a variety of special projects including the development and conversion of office records to an automated database. Will provide editorial assistance and support in the redesigning of various benefit summary plan descriptions. Will utilize DECII word processors to generate various correspondence and for letters pertaining to MIT's retirement plans. Fully developed DECII word processing skills highly desirable. The ability to organize work, set priorities and work independently toward deadlines is essential. NON-SMOKING OFFICE B86-243

#### Office Assistant

Administrative Assistant, Resource Development, to provide general administrative assistance to the Director. Will process incoming and outgoing mail, including gathering data and drafting memos and letters; work with group heads in office to maintain schedule of assignments; proofread documents generated by staff members; oversee the maintenance of files and supervise office assistant in file maintenance; and contact staff members both within and outside Resource Development on behalf of the Director. High school graduate or equivalent and 4.5 years direct/related experience are required. Good writing, research and proofreading skills, and ability to work independently essential. Ability to organize and plan projects to meet deadlines, ability to handle details in written work, good interpersonal skills with all staff, and discretion and tact in obtaining and providing information are necessary. S86-324

Administrative Assistant, Center for International Studies, to provide general secretarial support to the Director of the Center. Will type, maintain files, arrange meetings, and handle extensive telephone



eight songs for that university's Joyful Noise Choral Ensemble. "They wanted to create their own kind of sound," Williams said. "I showed up at their doorstep and they opened their arms to me."

His musical work received national visibility during his senior year in 1984 when he wrote the theme and three songs for the Gospel drama, God's Trombones, presented at the Kennedy Center in Washington by the Charles Gilpin Players from the Drama Department of Prairie View University.

Williams comes from a musical family: his mother plays the piano, his dad and brother, the drums. His father was leader of a professional band which played clubs in Houston during the early 70s. He began singing in the Beth Elder Baptist Church in Rosharon, Texas when he was four, started playing the saxophone when he was in the fifth grade, and later taught himself to play the piano.

"As far as the idea of writing music goes," he said, "it started in 1977 when I joined a church where the organist wrote 80 per cent of the Gospel music sung by the choir. I was astonished. Up to that point I thought the only ones that could write Gospel music were the famous people. Being in that choir changed my attitude. I began to pick out lines on the piano."

volume; manage seminar program for the Center, including space management and seminar publicity; and lend assistance as need arises in small, busy office. Minimum 4.5 years direct/related experience required. Excellent typing skills, communications and telephone ability, flexibility, and ability to work with people essential. Knowledge of or willingness to learn Wang word processing system necessary. S86-312

Accounting Assistant, Comptroller's Accounting Office, to perform internal cost audits of research contracts and grants. Will coordinate accounting, audit and cash flow functions with Office of Sponsored Programs, MIT departments and schools. General business education with 3-5 years of accounting experience or B.A. in Accounting or equivalent combination of formal education and experience required. Ability to communicate well with MIT department personnel and representatives of outside sponsors essential. S86-307

Administrative Assistant, Earth, At-

mospheric, and Planetary Sciences, to manage office and perform administrative and secretarial tasks for a group of professors of marine geophysics and geology and their research staff and students. Will prepare and submit research proposals with good knowledge of agency regulations; manage research contracts, which will entail administrative liaison with OSP, budget forecasting, salary allocations, monitoring of monthly statements, and arranging travel; handle all bureaucratic matters for graduate students and staff; coordinate typing of all manuscripts with department word processor operator; type correspondence, proposal budgets, class material, etc.; answer phones, sort mail, and maintain files; and edit, proofread and assist in writing technical reports. Minimum 4.5 years direct/related experience required. Excellent typing, organizational, and communication skills as well as the ability to anticipate problems essential. Experience with handling administrative problems at MTT preferred. NON-SMOKING OFFICE. S86-304

Sr. Office Assistant, Project Athena, to perform accounting and financial duties. Will check and process monthly accounting statements; process the weekly student payroll; prepare cash, transfer, and travel vouchers; handle petty cash, issue keys; order equipment and supplies; set up and maintain files and records; operate office machines and equipment; process forms and correspondence; and perform other clerical, financial, and secretarial duties as necessary, including phone coverage for receptionist. Minimum 2.5 years direct/related experience required. Willingness to work with computers and learn electronic mail, a text editor and formatter, and MIT's computerized expense accounting system necessary. Ablity to work independently and organize tasks in a busy environment, effectiveness in dealing with a variety of people, and attention to detail are essential. Familiarity with MIT's accounting system desirable. NON-SMOKING OFFICE.

Sr. Office Assistant, Foreign Languages and Literatures Section (10-month position), to staff the front office of Section Headquarters and provide office support services to the faculty. Duties will include answering telephones, handling mail, providing xerox services, ordering supplies and maintaining office equipment. Additional responsibility for classroom and event scheduling, processing of book orders, maintenance of office records and preparation of specialized mailings. Good typing, excellent organizational skills, flexibility and attention to detail essential. Will train on DEC word processing system. Familiarity with another language helpful. Minimum 2.5 years experience in an office setting preferred. S86-274

Receiver (Service Assistant II), Food Service, to receive all food, supplies and equipment, and verify the proper count or weight. Will certify invoices for prices and amounts; determine that product quality meets specifications; store all merchandise in a proper sequence; and maintain an up-to-date file on price structure. Other duties will include maintaining sanitary food handling procedures in the storage of all food; cleaning and maintaining all storage areas; assisting with daily, weekly or monthly inventories; and performing other related duties as assigned.

Experience in warehouse/stock procedures and ability to handle heavy lifting required. Clerical ability in the areas of handwriting and mathematical computations necessary. S86-330

Office Assistant, Personnel — Faculty and Staff Information Services, to process and maintain employment information concerning faculty and staff, under supervision of the assistant manager. Will use word processor and/or typewriter to prepare notification letters; update computer files daily; respond to telephone and written inquiries; assist in salary verification and review processes; and assist, as necessary, in preparation of various reports and special projects. Will also have contact with other Institute and outside offices and agencies on a daily basis. High school degree or equivalent combination of education and minimum one year direct/related experience required. Good basic office skills, close attention to detail, and absolute discretion in handling confidential personal information necessary. Experience with wor.\(^1\) processing (Digital) and computer terminals highly desirable. S86-319

Office Assistant, Medical Department (part-time, 25 hours/week), to work in Psychiatric Service of the Medical Department. Will process patient records, file, photocopy, run errands, type, perform general clerical tasks, and provide relief assistance with telephones, including phone and direct patient contact. Minimum I year direct/related experience required. Good typing skills, aptitude for detail work and routine clerical tasks as well as ability to work as part of a team, share information and take direction from support and medical staff essential. Flexibility and ability to deal with frequent interruptions in busy office also necessary. Work schedule is 9:00 — 2:00, Monday to Friday. S86-299

## Service Staff

Laboratory Assistant, Electrical Engineering and Computer Science, to perform various routine jobs related to the EECS Audio/Visual Facility, such as loading slide projector carousels, mounting films for projection, operating audio equipment, etc. Will assist staff member with classroom demonstrations as needed, maintain a running inventory of equipment, and keep the facility (projection, audio and video rooms) clean and in operational condition. Must have the ability to communicate and interact with EECS lecturers in regard to the lecture hall facilities and equipment and be willing to work flexible hours on occasion. Familiarity with Audio/Visual equipment and general electronics is desirable. NON-SMOKING AREA. H86-364

Laboratory Assistant, Energy Laboratory, to provide laboratory assistance to the Research Staff engaged in the laser synthesis and processing of ceramic powders and thin films. Duties will include cleaning and reassembly of laser reactors, transfer and storage of powders, preparation of substrates for thin film deposition, and maintenance of gas cylinder inventories. Possible additional duties may include pressing and firing of ceramic pellets and routine maintenance of laboratory equipment. Should have some mechanical aptitude, but no previous experience required. H86-362

Assistant Animal Technician, Division of Comparative Medicine, to perform duties involved in the care of laboratory animals. Will maintain proper levels of food and water for animals in accordance with established procedures; clean animal cages and trays; change bedding materials and/or litter; wash cages, trays, water bottles, and related items; perform miscellaneous housekeeping functions [such as cleaning laboratory walls, floors, etc.) in animal areas, using cleaning equipment assigned; monitor animals and notify Animal Technologist or supervisor if condition of animals dictates; and perform other related duties as assigned. Graduation from high school and knowledge of and ability to work with animals required. Willingness to partake in AALAS seminars and training program and 1 to 2 years animal care experience preferred. H96-360



Ofer Jacobowitz, a sophomore from Lawrence, N.Y., affixes coins and dollar bills to a "miracle mile" tape his fraternity, Theta Xi, installed from Lobby 7 through the Infinite Corridor last Thursday. They raised more than \$1,300 to benefit the Muscular Sclerosis Foundation. Theta Xi wishes to thank all who donated. -Photo by Paula M. Lerner

# Campus Preview scheduled for admitted women

(continued from page 1)

as a result of suggestions from the previous two, is largely unstructured, so that the visitors can observe MIT just as they might as

They will be given orientation materials, including class schedules, at an opening reception where they will be greeted by Professors S. J. Keyser, associate provost, and Mary C. Potter, faculty chair, Holly Heine, associate dean for student affairs, and Admissions Director Michael C. Behnke.

MIT undergraduate women will be their hosts on a one-to-one basis beginning Thursday, April 10, with the visitors staying in the various Institute residences. On Friday, they may attend whatever classes and extracurricular activities attract them. Tours of the campus, sports facilities, and projects in the Undergraduate Research Opportunities Program and a panel discussion by undergraduate women also have been arranged.

On Saturday morning, the visitors will be treated to a mini-competition in MIT's famed Introduction to Design (2.70) course. The Campus Preview will close at a brunch follow-

ing the competition. Though MIT has been coeducational almost since its beginning 125 years ago (the first woman student was Ellen Swallow Richards who graduated in 1873), the number of women remained low until the 1960s. In 1962-63 there were only 98 undergraduate women.

The following year Stanley McCo Hall-endowed by Katharine Dexter McCormick '04-opened as the first on-campus residence for women students and the number rose to 122. An addition to McCormick Hall five years later made residential space available for more than 100 more women.

The advent, in 1969, of coeducational residences meant that admission to MIT could be sex-blind. Since then, all but two of the dormitories have become coeducational; McCormick remains a women's dorm and MacGregor is a men's dorm. This year there are 1.176 undergraduate women, an all-time high. Next year a new record will be set.

## Errata

The caption that accompanied last week's Tech Talk story on crime prevention visits by campus police incorrectly identified Officer Raymond Roberts as Officer Richards.

-In the story that announced civil engineering's new Engineering Systems and Computation program, the telephone number was inadvertently off by one digit. The correct extension is x3-7106. Our apologies.

Junior finds creativity a part of life at MIT

every stereotype. The students here do study until the rising sun, but certainly not every night of the term. I must admit that I have never pulled an all-nighter here at MIT though I have come quite close on a few occasions. I have found that MIT is what the individual makes it and not the other way around.

What I think of as my detour through MIT began with the Experimental Studies Group in my freshman year. This offered independent study at my own pace and provided a nice transition from high school, where everything was spoon fed, to MIT where you quickly learn to fend for yourself.

I falsely believed at the beginning that MIT stifled creativity. But I only had to venture outside my room to find the Student Art Association. Once I found this outlet, I soon disco-

Modern dance with Beth Soll lifted my spirits and the physical awareness of my body. When I took Introduction to Women's Studies, I was surprised at the reactions on campus to even the word, "feminism." I became inspired to work for my exhibition and to adopt Adrienne Rich's theory of Revision (from her book, On Lies, Secrets and Silences) as a personal theme in the show:

Revision-the act of looking back, of seeing with fresh eyes, of entering an old text from a new critical direction—is for women more than a chapter in cultural history: it is an act of survival.

When I chose to be an architecture major, I found one more outlet through which my creative juices could flow. It may surprise some people when I say I am also a pre-med student.

## April artists plan holography show

The April artists in residence in The Reference Gallery of MIT's List Visual Arts Center will be Ruth Maleczech, a member of the collaborative theatre company Mabou Mines, and Linda Hartinian, an artist who frequently works with the company.

During their residency, April 14-28, they will present holographic performances, continue their research in the uses of holography in experimental theatre, and take part in several educational events.

Mabou Mines, founded in 1969 and based in New York City, is a collective of nine writers, directors, designers, and performers who collaborate on original theatre work.

Ms. Hartinian is a sculptor, set designer, and performance artist. She is the winner of the Maharam Award for Design for the puppet "John Greed" in A Prelude to Death in Venice in 1980 and again in 1983 for the set design of Cold Harbor and for the mask and makeup for

Ms. Maleczech is a performer, director, and founding member of Mabou Mines. For her work with the company she has received Village Voice Obie awards for her performances in Through the Leaves and Hajj, and a Villager Award for her direction of Wrong Guys.

## Science writer to speak

Pulitzer Prize winning journalist, Jon Franklin, will address the question "Can Science Writing be a Literary Art Form?" as the guest of both the MIT Writing Program and the Boston University Program for Reporting on Science and Medicine. His presentation will be on Tuesday, April 15, from 3:00 to 4:30 p.m. in Rm 12-122.

Mr. Franklin, a high school dropout, is interested in the power of literature. As a science writer for the Baltimore Evening Sun, he has won two Pulitzer Prizes, first in 1979 for "Terrifying Journey Through Tunnels of the Brain," a dramatic account of an unsuccessful surgical procedure, and in 1985 for his seven-part series called "The Mind-Fixers.

#### Zebrowski to give recital

MIT Affiliated Artist Marek Zebrowski will present a piano recital on Sunday, April 13 at 8 pm in Kresge Auditorium. Admission is free. His program will feature Haydn's Sonata in E Minor, Prokofiev's Romeo and Juliette, and Schumann's Symphonic Etudes.

Mr. Zebroski, born in Poland, studied with Robert Casadesus and Nadia Boulanger in France and with Russel Sherman at the New England Conservatory where he obtained both bachelor and master degrees in music. An active recitalist, Mr. Zebrowki has appeared extensively in this country and Europe, on public television broadcasts and on Polish

In addition to his MIT affiliation, he is currently on the music faculty of the University of Massachusetts, Boston.

#### Killian lecture today

Professor Franco Modigliani, 1985 Nobel Laureate in economics, gives his final Killian Award lecture today (April 9) at 4:30pm in Huntington Hall (Rm 10-250). The lecture, "Application of the Life Cycle Hypothesis to Policy Issues," demonstrates that his theory about the determinants of individual thrift and national wealth has implications for a number of significant policy matters, including the economic consequences of a large national deficit. The lecture is open to the MIT community.



Jennifer Lin'87, with her ceramic sculpture, Fallen Pieces.

-Photo by Paula M. Lerner

Sometimes people tell me that such a combination is impossible. I feel that anything is impossible if one does not try.

Creativity is not limited to what I have mentioned. It survives whenever someone composes a piece of music, a poem or an equation. MIT promotes such creativity in many areas. One has only to search for it.

Nothing is worth discovering without

# Brain and Cognitive Sciences Department to be established

(continued from page 1)

based competence is vital because the brain is best studied with an interdisciplinary ap-

The extent of the interdisciplinary involvement in these areas at MIT can be illustrated by ongoing research in vision and in motor control. Vision research involves physiologists, psychophysicists, computer scientists and mathematicians. Work on motor control involves brain scientists, mechanical engineers, computer scientists and mathe-

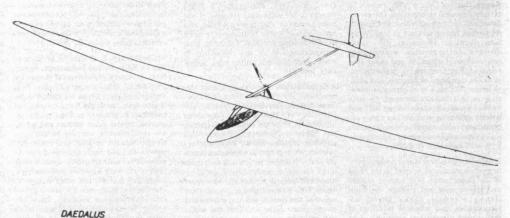
Dr. Bizzi said that computation is a powerful unifying factor in MIT's work in the brain and cognitive sciences. "Theoretical advances in the field of artificial intelligence provide new intellectual thrusts in a number of areas in the cognitive and neurosciences, including vision, motor control, language and knowledge representation. We intend to strengthen this focus with new appointments who have experience and expertise with computational approaches. The alliance between experimental brain science and computation will benefit both fields," he said.

As for neurobiology, the new department's

other important focus, Dr. Bizzi said that neuroscientists "have been borrowing techniques from molecular biology, biochemistry, biophysics, immunology and genetics. The application of these technologies is leading to exciting studies on the nervous system, which provide new understanding of fundamental mechanisms of brain function. In addition, these studies have profound clinical implications, in part by generating a framework for the treatment of neurological and psychiatric disorders." Whitaker College's current collaboration with the Department of Biology, which Dr. Bizzi termed fruitful, will continue in the new department.

Dr. Bizzi will be assisted in governing the new department by a steering committee of three faculty, each representing one of the major subdivisions of the department: neurobiology, systems neuroscience/computation, and cognitive science. The committee will assist the head of the department in coordinating the intellectual activities of the department, in promoting communication among subgroups, in developing new teaching curricula and in integrating new appointments

into the department.



# Legendary Daedalus to fly again

(continued from page 1)

flight-power, full duration (four hour) test on an ergometer (used for measuring work performed by muscles) was successfully conducted.

-Meteorology. Analysis of historical weather data from the region suggests favorable winds and temperatures during the three months of the year designated for the flight. Automatic weather stations have been situated at planned take-off and landing sites and will be monitored during the next year.

The feasibility study, which cost \$74,000, was underwritten by MIT and the museum. The project also received the support and cooperation of the Greek government, Aanderaa Instruments and the Union Carbide Corporation.

The museum said its interest in the project is threefold: to stimulate improvement in aircraft structures, aerodynamics and aircraft design; to advance understanding of the limits of human performance; and to increase awareness of connections between art and science and between technology and Western

The project was named for the mythical Greek inventor who flew to freedom from the island of Crete using wings he had fashioned himself from feathers and wax. In legend, at

least, Daedalus is credited with being the first

mortal to fly and Western civilization's first engineer. His son, Icarus, as the tale goes, flew too close to the sun, which melted the wax, and he fell to his death.

The projected Daedalus flight will be at a much lower altitude, probably some 30 to 40 feet over the water on a route that would take it from Chania at the western end of Crete to touchdown four or five hours later on the tip of the Peloponnesian peninsula in southern

The plane itself is likely to be made of graphite epoxy and foam. It's expected to weigh about 70 pounds, have a wingspan of 100 feet and be powered to a speed of about 17 miles per hour by a pedal-driven propeller.

## Dr. Rosner wins grant

Dr. Marsha R. Rosner, assistant professor of applied biological sciences, has received one of the first \$100,000 International Life Sciences Institute Research Foundation research grants. The three-year grant supports efforts to better understand the effects of toxic substances on the nervous system.

Dr. Rosner's work will focus on a group of proteins essential for the transmission of nerve signals. The other award recipient is Dr. Melvin Billingsley of the Hershey Medical Center at

Pennsylvania State University.