Massachusetts Institute of Technology

April 6, 1983 Volume 27, Number 30

Computer info

As a result of many inquiries about the private purchase of personal computers, the General Purchasing Office has prepared information on where MIT people might buy their own computers at favorable prices.

Several sources have offered to provide discounts of 15 to 20 per cent off published prices on direct sales to individuals, according to Barry Rowe, director of purchasing and stores. Additional sources may also come forward with similar offers and will be added to the list, he said.

The list of present sources and their instructions governing sales to individuals is available by calling Elsia Bennett, x3-7241.

No Tech Talk

Tech Talk will not be published April 20 because of the Patriot's Day holiday. The Institute Calendar in next week's issue (April 13) will cover the period from April 13 through May 1. The deadline will be, as usual, noon Friday, April 8. The next Scheduled suspended issue will be May 18.

SAS open house

The Student Assistance Services (SAS) section of the Office of the Dean for Student Affairs will hold an Open House today (Wednesday, April 6) from 3-5pm. All students are invited to drop by a become aquainted with the variety of services available to them. Refreshments will be served.

Telephone change

The new MIT extension at Endicott House will be changed from x3-5000 to x3-5211 effective Monday, April 11. The Endicott House outside number, 326-5151, remains unchanged.

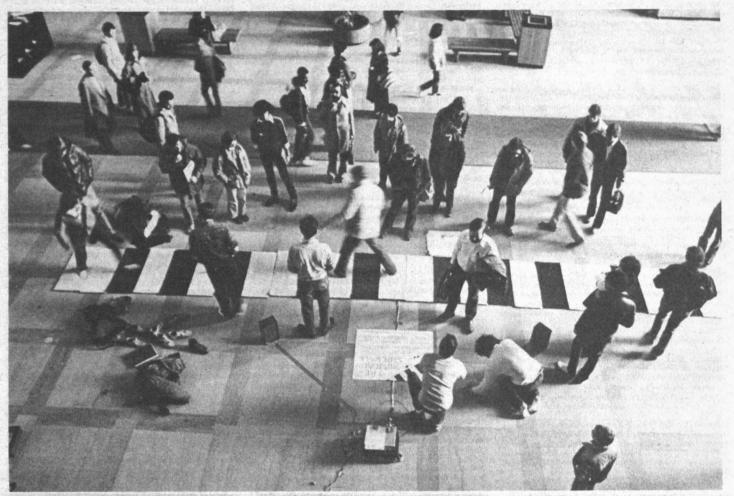
Publications?

Editors of student newspapers and magazines are requested to send a copy of their current issue to China Altman, 5-111, in the News Office for Part 2 of a series.

Ghost show

"Whither Thou Ghost," an original musical satire written by David M. Smith '85 of Storrs, Conn. as the annual Tech Show presentation of the MIT Musical Theatre Guild has three more performances: tomorrow (April 7) at 7pm and Friday and Saturday (April 8, 9) at 8pm in Kresge Auditorium. Admission: \$5; \$3 for students and senior citizens.





MIT students were charmed into displaying their "Fidgety Feet" in Lobby 7 last Wednesday though most of them may not have known of the great Dixieland show tune written by Ira and George Gershwin in 1926 for the musical "O'Kay!" Members of Tau Beta Pi, the National Engineering Honor Society, installed The Musical Sidewalk which was played by passersby for several hours. The sidewalk was invented and designed by John Campbell Gonzalez, who graduated from MIT last year in electrical engineering and Neil C. Singer, a senior in mechanical engineering. It was shown at the Cambridge River Art Festival last spring and at the Inventors' Weekend at the Boston Museum of Science last term. Students jumped, danced, leaped, somersaulted and collaborated enthusiastically to perform many melodies, including *Blue Danube*, *Happy Birthday*, *Mary Had a Little Lamb*, *The First Noel* and *Chopsticks*. One student was seen jumping from note to note with a sheath of sheet music from Bach. The Musical Sidewalk was partially funded by the MIT Council for the Arts, with equipment donated by Tapeswitch Corporation of American and American Microsystems, Inc.

-Photo by Calvin Campbell

Wadleigh to resign as VP, Graduate School dean

By CHARLES H. BALL Staff Writer

Professor Kenneth R. Wadleigh, MIT vice president and dean of the Graduate School, has decided to leave those posts at the end of the academic year to return, after a year's leave, to the mechanical engineering faculty, President Paul E. Gray has announced.

"Dean Wadleigh's leadership contributions to this institution cannot be measured by years of service or by span of administrative responsibilities alone," President Gray said. "Ken had a major role in the building of many vital MIT programs: our residence system for undergraduates; the organization and growth of student services throughout the 60s, including athletics, freshman advising and women's programs; the development of graduate school policies, recruitment of minorities and support for all graduate students, and the establishment of a high-quality health service for the entire MIT community. "All of us, students, faculty and fellow

"All of us, students, faculty and fellow administrators, have benefitted from and are grateful to Dean Wadleigh for his ideas, his energy, his dedication and loyalty to MIT throughout the past two decades. He has contributed greatly to the life of the Institute and we wish him well as he returns to the Department of Mechanical Engineering, where he began his career as a teacher 37 years ago. Twenty years ago, Ken Wadleigh encouraged me to undertake part-time administrative responsibilities working for him in the Office of the Dean of Student Affairs. I am grateful to him for all these years as mentor, colleague, and friend."

The administrative responsibilities which Professor Wadleigh now carries will be reassigned to several officers of the Institute.

Professor Frank E. Perkins will assume additional responsibilities as dean of the Graduate School, in addition to continuing as (continued on page 7)

German visit

Forty MIT students studying German got "hands-on" experience with the language last week when they were hosts to 40 German high school exchange students for a day.

The German students, from Bremen and Munich, are attending schools in Wellesley and Winchester this year. The MIT students are all enrolled in German IV (21.234).

Ground rule for the day was that only German would be spoken, according to Claire Kramsch, senior lecturer in German, who organized the visit.

"The German youngsters welcomed a relief from English," she said, "and the MIT students benefitted by practicing what they had learned in the classroom." While the German students visited classes, labs and dorms, Ms. Kramsch hosted the four German teachers.

The result? "Future pen pals, invitations to Bremen and Munich, and the reinforced conviction that a foreign language is an opening to the world," according to Ms. Kramsch. MIT will pause today (Wednesday, April 6) to honor a much-loved and a renowned emeritus professor, Harold E. (Doc) Edgerton, on his 80th birthday.

"The MIT community has been invited to join in a celebration from 3 to 4:30 p.m. in "Strobe Alley," the corridor outside Dr. Edgerton's fourth-floor office in Building 4 that serves as a gallery of sorts for a collection of the famous high-speed, stop-action stroboscopic photographs made by the professor and his colleagues over the years.

Refreshments will be served and music will be provided by the Electrical Engineering Alley Cats, specially named for the occasion.

Doc Edgerton turns 80: community party today

Dr. Edgerton, known as the father of electronic flash photography, didn't invent the stroboscope. But his genius transferred it into an important tool for science, industry and photography.

Dr. Edgerton has been teaching at MIT for 51 years, since 1932, and is both Institute Professor, emeritus, and professor of electrical measurements, emeritus. The title of Institute Professor is reserved for scholars of special distinction.

Generations of MIT students have remained devoted to Doc Edgerton and, in 1973, a \$900,000 fund was established in his name and that of his wife, Esther, to support research by younger faculty members and students. More recently, the MIT Provost established an annual \$5,000 award to a junior faculty member in Dr. Edgerton's honor. In addition, the MIT Sea Grant Program's research vessel is named the *Edgerton* in recognition of the fame he has gained as a deep-sea explorer and marine archaeologist through the application of sonar technology and stroboscopic photography to those fields. Dr. Edgerton developed an underwater

(continued on page 7)

Bailyn paper outlines workers' changing goals

Companies and employees will have to find ways of adjusting to conflicts between work and family life—perhaps through a process of "negotiating careers"—but this may have to wait for a "new generation" of managers, believes an MIT researcher. "What is needed," says Dr. Lotte Bailyn, "is

"What is needed," says Dr. Lotte Bailyn, "is a whole new set of assumptions" based on diversity instead of homogeneity. But new assumptions are not easy to acquire, she adds. "In fact, we may have to wait for a new generation to manage our organizations and for new procedures to emerge—both formal and informal—that respond to the needs of 'non-traditional' employees."

Dr. Bailyn, professor of organizational psychology and management in MIT's Sloan School of Management, defines non-traditional workers as those who, for family or other personal reasons, do not fit traditional organizational assumptions about employees—for example, that they should be totally workinvolved and that anyone who is any good wants to move up. It is now pretty much accepted, she says, that there are numerous exceptions to such traditional views. Still, she adds, these views continue to impede efforts "to provide a more flexible response to changing family/work patterns" because they give rise to a "notion of homogeneity: homogeneity in life circumstances, in expectations, in motivations."

"What's worse," she writes in a recent Sloan Working Paper on her ongoing studies

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INSTITUTE NOTICES

Announcements

International Honors Program—Students are invited to hear Marshall Strauss, Director, speak on this unique and rich Junior Year Abroad opportunity. MIT Faculty and undergraduates have participated in IHP in the past. Mr. Strauss will be accompanied by an alumnus of the program, questions will be answered and information/application materials will be available. Sponsored by the Dean for Student Affairs Office/Student Asistance Services Section/Foreign Study.

The Chemical Engineering Department will hold an Open House for Freshmen on Wed, April 13, 4pm, Rm 66-110. Hear about research areas, subject requirements, job prospects and talk to faculty and staff. Refreshments served.

Nominations for the John Asinare Award for Undergraduate Research in the Life Sciences-Undergraduates in Courses VII, VII-A and VII-B; Tom Lynch, Rm 56-524, x3-4711. Deadline: April 29, 1983.

Institute R/O-Anyone interested in working Institute R/O 1983, please leave a message for Lillian Chiang, R/O Coordinator, in the UASO, 7-105.

Humanities Open House^{*}-April 6, 2-4pm, Bush Room 10-105, Information about HUM-D subjects, Humanities subjects, Fields of Concentration, Major Programs. Refreshments will be served. For more information call x3-4443.

Basic Pistol Marksmanship Course^{**}-Last one for this season, April 7, 6pm, for five consecutive Thursdays, Du Pont Pistol Range. Course will stress safety, safe storage & handling of the firearms as well as develop good marksmanship skills. Mass. Gen. Laws pertaining to firearms will be covered as req'd by most police departments for pistol permits. Fee covers everything. Preregister with Andy Plataia x8-2072 Andy Platais, x8-2077.

Patriots Day-Library Hours: Monday, April 18, libraries on regular schedule except Aero, 9-5 (also closed April 16), Rotch Visual, 9-5; and Chemistry, CLSS, Institute Archives, Microreproduction, MIT Museum, Resource sharing, Schering-Plough, and Von Hippel, which are closed. Tues, April 19: libraries on regular shedule, except Aero, 9-5.

Official Notice Final Examinations-All students should obtain an examination schedule at the information center, 7-121. Examinations, not listed or a conflict in examinations, such as two examinations in the same period, must be reported to the schedules office, E19-338 by Friday, April 22, 1983.

The Advisory Committee on Shareholder Responsibility-will meet in the Maclaurin Room, 10-300 at 4pm, Wed, April 30 to review a number of questions on the proxies of companies in which the Institute is a shareholder.

MIT Honorary Matrons and the Faculty Emeriti-are invited for sherry at the President's House, Thurs, April 28, 11:30am. The Matrons' luncheon at the Faculty Club will follow at 1pm.

The Women's Telethon-will be held in the Bush Room on Monday, April 11th. Dinner 5pm. Telephone calls to e at 6pm

Summer Study in the Netherlands*-Nijenrode, the Netherlands Summer School of Business, is offering a course of study focusing on International Business (June 27-August 5). The School was founded in 1946 by several large Dutch Corporations (such as Philips, Unilever, L.L.M.). It is a residential school which offers programs on the undergraduate and the graduate level. MIT students have participated in further information, please call Dr. Gary De Vos, University of Massachusetts - Boston, 929-8076. Dean for Student Affairs Office/Student Assistance Services Section/Foreign Study. Section/Foreign Study

Club Notes

MIT Hunger Action Group[®]-You can make a difference. We need your help. All welcome, Thurs, April 7, 7pm, Student Center, Dining Rm #3, 3rd flr.

MIT/DL Bridge Club®-ACBL Duplicate bridge, Tues, 6pm, W20-473. Club Championship held April 12. For info call Gary Schwartz, x8-1484, Draper or Sam Smith, 244-4679.

The MIT Aikido Club**-meets Mon, Wed, & Thurs, 5:30pm; Tues & Fri 7:30am, DuPont exercise room. Aikido is a non-competitive Japanese Martial Discipline. Beginners welcome

MIT Badminton Club^{**}-Practice Fri, 7-10pm & Sun, 10am-1pm, Rockwell Cage. All levels welcome. Bring own equipment. For info call x5-9690 or x5-9593.

ACBL Duplicate Bridge at MIT*-Bridge games every Sat, 7pm; every Thur, 6:30pm, \$.50 entry fee, Rm 473, Student Center. Lessons free w/entry starting at 6:15pm from Bridge Masters. No partners necessary, all welcome. For info call Rajan Batta, 253-6185, 494-1968, 225-9563.

MIT Table Tennis Club**-Meets Sat, 4-6pm & Sun, 6-8pm, T-Club Lounge, All welcome. For info call Suguru Araki, 494-1100, x3-5342.

MIT Women's Ice Hockey**-Practice Tues & Thurs, 7-9pm, Ice Rink. All welcome. For info call Mary Bowden, 253-2272 or 721-2277.

MIT Figure Skating Club*-Weekend sessions. Only prerequisite is ability to skate forward & backward. Self-paced & informal. For info call Peter, x5-7269, Laurie, x3-

MIT Frisbee Club**-plays Ultimate Frisbee weekly & has occasional games vs other schools. John Schutkeker, captain, 876-1823 or Frank Revi, co-captain, x5-6167. Sat, 11am-2pm; Wed, 4-7pm, Great Court; Tues, 4-7pm, Briggs Field.

The MIT UHF Repeater Association **-offers radio unications assistance to any MIT event free of charge as a public service. If you or your group are interested call Richard D. Thomas, 354-8262 for details.

MIT GO Club^{*}—Play an Oriental game of high strategy, every Thurs, 8pm, Rm I-136. Will teach beginners. GO sets & books available.

MIT Judo Club**-Mon & Wed at 7pm, Sunday at 4pm, Special Fitness Rm.

MIT Cycling Team-Bicycle racers interested in mpetition should check the bulletin bo llegiate by the Dupont desk for information. Eric Martinot, 225-6107.

Religious Activities

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

Charismatic Prayer Group⁶—Mon eves, 6:45, Miller Room 1-114. Pot-luck supper followed by prayer meeting, Bible sharing, music & praise. Jim Mahoney, x3-3074.

Christian Science Organization at MIT^{*}-Weekly Testimony Meeting, Thurs, 5:15pm, 6th fir Lounge, Ashdown

Islamic Society*-Daily prayers, Ashdown house (basement), 5 times a day. Call 225-9837 for schedule. Friday prayer, Ashdown House 1-2pm, Khutba starts at 1:15pm, regation at 1:45pm.

Jewish Services*-Friday, April 8, 5:30pm, Reform Shabbat dinner, Next House, 5:30pm, Conservative/Reform Services at Hillel, 6pm. Orthodox services, Rm 50-010; 6:30pm. Shabbat dinner, Kosher Kitchen, Rm 50-007; Candle lighting, 5:58pm; Fri, April 15: 5:30pm, Reform Shabbat dinner, Next House, 5:30pm, Conservative/Reform Services, Hillel, 6pm; Orthodox services, Rm 50-010, 6:30pm. Shabbat dinner, Kosher Kitchen, Rm 50-007. Candle lighting, 6:06pm. Call x3-2982

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

Morning Bible Studies-Fri, 7:30-8:30am, L-217. Ed Bayliss, x3456, Lincoln.

Noon Bible Study^{*}-Every Tues, Rm 3-465, bring your lunch. Ralph Burgess, x3-8121. (Since 1965)

Prayer Time^{*}-Fri afternoons, 1-2pm, weekly bible class, Rev. Miriam R. Eccles, founder & director of Alpha and Omega Missionary Society. Guest speakers & refreshments. Center for International Studies, Seminar Rm III (E38-6th flr).

Tech Catholic Community*-Sunday Mass only, 9am, noon, 5pm, Chapel; week day mass, Tues, Thurs, 5pm; Fri, noon, Chapel, ible study, Thurs, 7:30pm, Ashdown, 6th flr Lounge. Call x3-2981.

The Gospel of John*-Bible study. How Christ came to be man's life to produce God's dwelling place on earth. Tues, noon-1pm, Rm 8-119.

The Church of Christ in Cambridge-Christians meet for worship, study, discussions, fellowship, Tang Hall, 1st & 3rd Sunday eve each month, 6:30pm. Call Robert Randolph, x3-4861/3-5085 or Claudia Lewis, 494-1326 (Ashdown).

Vedanta Society*-Meditation and discourse on the Gita by Swami Sarvagatananda of Ramakrishna Vedanta Society of Boston, Fri, 5:15pm, MIT Chapel.

The Lutheran Ministry and Episcopal Ministry—Hold weekly service of Holy Communion Wed, 5:10pm, Chapel. Supper, scripture study & discussion follows at 312 Memorial Drive. Call x3-2325 or x3-2983.

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

Graduate Studies

IREX Developmental Fellowship Program -the International Research & Exchanges Board (IREX) is pleased to announce a new program of graduate and postdoctoral fellowships to strengthen Soviet and East European studies in the U.S. Applicants from all disciplines rible and a he enrolled in at second year of studies. Post doctoral applicants must be

prepared to devote full time to this program. Fellowships include both academic study in the U.S. and research in Eastern Europe of the USSR. Application deadline: April 15, 1983. For information contact the Graduate School office, Rm 3-136

The Mary Ingram Bunting Institute—announces the "Peaceful Fellowship" for women "actively involved in finding peaceful solutions to conflict or potential conflict among groups or nations." Women working with a national or international group in the general area of peace and disarmament or other relevant issues are eligible to apply. The recipient is expected to be in residence at the Institute, at Radcliffe College, for the period of the fellowship. Fellowships average \$16,000 for 12 mo. Further information avail in the Graduate School Office, Rm 3-136. Deadline May 1, 1983.

New York State Senate Legislative Fellows Program—applications are being accepted through May 20, 1983. Fellows spend one year, beginning September, 1983, as legislative staff members in Albany, N.Y. A salary of \$15,800 will be paid to each of the ten fellows chosen. Applicants must be New York State residents who are currently graduate students. Students in all disciplines are invited to apply. Applications and more detailed information are available in the Graduate School Office, Rm 3-136.

The Carl E. Menneken Fellowship to further the progress of engineering and science in areas of importance to the Navy is announced for 1983-84. Candidates for the \$1,200 fellowship should submit the topic and a brief description of their thesis with a supporting document from his/her thesis advisor to the President, Naval Postgraduate School Foundation, Inc., Naval Postgraduate School (Code 007), Monteesve CA 93940 Eurther information is avail in the Monterey, CA 93940. Further information is avail in the Graduate School Office. Rm 3-136. Deadline: May 18, 1983.

UROP

Summer UROP-Second Call for Proposals-Proposals for summer UROP support are now being accepted. As usual, UROP funds will be disbursed on a first-come, first-served basis, so prompt submission is encouraged. We often begin to basis, so prompt submission is checkinged. We cause of discourage requests for real dollars after mid-April because of the large volume of money requests piling up for consideration. Proposals requesting only overhead waiver will be welcome well into May. Summer funding (including granting of overhead waivers) is contingent upon UROP's ceiving evaluations from faculty supervisor and student relating to previous undergraduate research. Summer research is expected to be a continuation of the student's past research. It is also expected that the student's UROP time commitment will be full time for the entire 12 weeks of the summer. We do not consider proposals for part-time work over the whole summer or full-time work over only a portion of the summe

As always M&S requests (including Travel) are welcome at any time. Funding decisions will be announced starting the week of April 11. Please read the "Participation" section of the UROP Directory, 11-20.

Joel Matthew Orloff Undergraduate Research Opportunities Program Prize Faculty Nominations Welcome-An award of \$1,000 and a certificate will be Welcome-An award of \$1,000 and a certificate will be presented this spring to the undergraduate felt by the selection committee to have demonstrated the most outstanding ability and creativity in physics-related research. Nominations are invited from faculty in any department. Please submit nominations, with appropriate documentation, by April 22, 1983 to Norma McGavern, UROP office, Rm 20B-141. The Committee's decision will be announced at the end of April. announced at the end of April.

Societal Controls for Health and Safety Hazards-A student who likes to dig out information is needed to assist in a study for the National Science Foundation. This is an historical and ethical assessment of what societal forces and concerns about risks brought about legislation for, air quality, aviation safety, consumer products, occupational health and safety, and pesticides. Part of the work involves combing indexes such as the Public Affairs Information Service to study the progression of public concern as indicated by references to relevant articles. Could include data reduction and analysis. May begin this spring and ssibly continue through summer. Pay Avail. contact Dr. Curt Priest, E40-241, x3-6469.

Opportunity in HST-Opening for a junior with background and interest in software and/or electronics hardware. Seek student with interest in medicine or biomedical engineering. Project involves use of a computer-controlled multigas transducer applied to several problems. Preference given to a student who eventually wants to make this a thesis. Contact Dr. James C. Weaver. x3-4194, 20A-128.

Internships

Cable Television Schedule

April 6-April 15

MORAL, the Massachusetts affiliate of the National Abortion Rights Action League, is offering full time and part time internahips to students for June through August, 1983. The interns, guided by an experienced staff member, will help plan, execute, and evaluate a project or projects. Projects may include the following: computer operations, research, phone banks and direct mail, fundraising, office systems and others. Some of the recommended skills needed: ability to work independently and in a group, ability to organize and carry through projects, good writing skills, pleasant and relaxed phone manner, initiative and motivation. Preference given to full time internships, June-Aug, but part-time hours are negotiable. Accreditation for internship may be available, check with your department to see if this is possible. For more information, please contact Robin Pelzman at the MORAL office, (617) 720-1880.

For further information concerning this opportunity, contact



New traffic patterns are scheduled to be implemented this spring in the Kendall Square area. This traffic light at the corner of Main and Vassar Streets is a sign of things to come. Details will be outlined in an upcoming issue.

4 faculty members receive Sloan grants

Four MIT faculty members are among 88 outstanding young scientists and economists who have been selected to receive two-year research fellowships of \$25,000 each from the Alfred P. Sloan Foundation.

The 1983 Sloan Research Fellows were selected on the basis of their exceptional promise to contribute to the advancement of knowledge in the early stages of their careers. Their average age is 3l.

The MIT Fellows are: Dr. Eric S. Maskin, professor of economics; Dr. David A. Vogan, associate professor of mathematics; Dr. Charles R. Alcock and Dr. Lennox L. Cowie, both associate professors of physics.

The selection committee included Dr. John S. Waugh, Arthur Amos Noyes Professor of Chemistry at M.I.T.

Oakwood Quartet to play in Chapel

The newly formed Oakwood String Quartet will perform in the Chapel on Thursday, April 14, as part of the Noon Hour Chapel Series. The Quartet will present Mozart's String

Quartet in F major K. 590; Ravel's String Quartet and Stravinsky's Three Pieces. The members of the Quartet, violinists Anne Hooper and Priscilla Hallberg, violist Francis Grimes and cellist Olivia Toubman, met while performing at the New England Bach Festival in Marlboro, Vermont. They are all Boston area professionals who perform frequently with Banchetto Musicale, the Civic Symphony, the Pro Arte Chamber Orchestra, the Opera Company of Boston, the Boston Ballet, the Boston Pops and the New England Chamber Orchestra.

Student Jobs

More jobs are available. Contact Student Employment Office, Rm 5-119.

B-R Services, Inc. needs student for part-time help in party serving, party cleaning, household chores (inside and outside), servicing the elderly, housesitting, babysitting, etc. The hours are flexible, \$5/hr. Contact Mrs. Paul Goldberg or

MIT Hobby Shop**-Complete facilities for wood working metal working & darkroom, Mon-Fri, 10am-6pm, Wed, 10am-9pm, W31-031. Fee: \$15/per term students; \$25/per term unity. For infor call x3-4343.

Tiddlywinks**-Interested in learning tournament style tiddlywinks? All welcome, learn or just observe Wed, 8-10pm, Student Center, Rm 473.

MIT Rugby Football Club**-All undergrads, grads & staff members encouraged to try rugby. No experience necessary. Practice, Tues & Thurs, 5pm, Briggs Field, games, Saturday afternoons, followed by party. Call Steve Schwed, 225-8336, Leo Casey, 225-7253, Dorm.

MIT Tae Kwon-Do Club*-Meets Mon, 6-8pm, Burton Dining Hall; Wed, 6-8pm, Burton Dining Hall; Fri, 6-8pm & Sun 4-6pm, T-Club Lounge. Tae Kwon-Do is a Korean Martial Art. For info call Charlie, 253-7764.

MIT Ice Dance Club[®]-Membership open to any skaters able to skate forward & backward edges, no experience necessary. For info call Beverly, x3-1512.

MIT Outing Club^{*}-Plan hiking, camping, canoeing, ski trips, rental equip avail, Mon & Thurs, 5-6pm, Student Center, Rm W20-461.

MIT Women's Rugby^e-Beginners, experienced, undergrads, grads, etc. For info call Holly Reese, McCormick Hall call x5-8607 Dorm.

MIT European Club^{*}-8pm, Tang Hall Lounge, 550 Memorial Dr. For info call 864-5510.

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and Placement Office.

Mrs. Richard Kay for more information; their answering service number is 527-4896

Programmer for 6502 assembler needed full time during the summer. Work with MIT grad in microcomputer educational games software development. Prefer someone with ability to program in FORTH (10/hr). If you are interested, contact Ken Madell at 876-9263. Job is in Somerville at 33 Beacon St.

Library researcher needed part time through summer. Must have car and be reliable. Knowledge of library systems necessary. Flexible hours; \$5/hr+mileage and expenses. Call David Barnes at 863-7350.



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Wed, April 6 Channel 8 10am, 6.343 Digital Speech Processing 4pm, "Blue Dance" by Gregory 7:30pm, 8.02 Help Session with Professor Lewin, This program will be repeated until 3am. Channel 10 10am, "Blue Dance" by Gregory Garvey 4pm, Boston VA Medical Grand Rounds 5pm, Committee on Immunology* Thurs, April 7 **Channel 8** Channel 8 5pm, "Blue Dance" by Gregory Garvey 7pm, "Blue Dance" by Gregory Garvey 7:30pm, "Vivre Sa Vie" directed by Jean-Luc Godard. Presented for 21.301, French New Wave Cinema Channel 10 5pm, Biochemistry and Molecular Biology* Spm, 18.03 Quiz Review with Professor Toomre. This program will be repeated until 3am Sat, April 9 2pm, "Vivre Sa Vie" See April 7 for details Channel 10 Channel 8

2pm, "Blue Dance" by Gregory Garvey

Mon, April 11 **Channel 8** 4:30pm, "Blue Dance" by Gregory Garvey Channel 10 4:30pm, Harvard Department of Biological Chemistry* Tues, April 12 Channel 8 7:30pm, "Blue Dance" by Gregory Garvey 7:30pm, 8.02 Help Session with Professor Lewin, This program will be repeated until 3am. Channel 10 12:15pm, Harvard Medical Area Showcase* 3pm, "Masculin-Feminin" directed by Jean-Luc Godard. Presented by 21.301, French New Wave Cinema. "Blue Dance" by Gregory Garvey Wed, April 13 **Channel 8** 10am, 6.343 Digital Signal Processing 7:30pm, 8.02 Help Session with Professor Lewin. This program will be repeated until 3am. Channel 10 4pm, Boston VA Medical Grand Rounds

* Program courtesy of Harvard Video Services.

Symphony plans NYC concert MacVicar, on partial leave, with 20th century program

By CHINA ALTMAN Staff Writer

The MIT Symphony Orchestra, conducted by David Epstein, will take a program of all 20th century music to Carnegie Hall in New York April 24.

In keeping with its commitment to modern music, the 100-peice orchestra wil give the New York premieres of two pieces: Incidental Music for Shakespeare's Merchant of Venice by John Harbison, Professor of Music at MIT, and Piano Concerto, Opus 90 by Vincent Persichetti. Soloist for the latter will be pianist Eugene List, in the 46th year of a distinguished career. The program also includes Igor Stravinsky's The Firebird (Suite, 1919 version).

Dr. Epstein, who is also the orchestra's music director, professor of music at MIT and head of the Music Section, Department of Humanities, said he has been able to compose the orchestra from "a stream of brilliant musicians" during his 18 years at MIT. "Literally 15 to 20 of those students auditioning for the orchestra each September could have been applicants for Juilliard," he said.

The Symphony, which was founded at MIT in 1884, is now drawn from a wide community. Among the students there are 44 from MIT, 14 from Wellesley College, two from the Berklee College of Music, two from Boston University, one from the New England Conservatory and one from the Boston Conservatory.

The assistant conductor is E. J. Eleftherakis, one of 11 affiliated artists in the Music Section, Department of Humanities. There are two symphony members from the MIT faculty: Nicholas A. Ashford, oboe, associate profes sor of technology and policy and director of the Center for Policy Alternatives; and Jane Coppock, associate professor of music, who is in the percussion section.

From the MIT staff: violinist Jane Serio is coordinator for the Impact 2 1/2 Project for the Laboratory of Architecture and Planning; oboe player Sandra L. Ayres is on the sponsored research technical staff in the Department of Psychology.

The MIT students in the symphony come from many areas of study, with the majority in biology, physics and chemistry. Others are from electrical engineering and computer science, mechanical engineering, chemical engineering, economics and aeronautics and

Recruiting begins for '87 advisors

"I don't know of any better way to keep in touch with what MIT is all about," says associate provost Frank E. Perkins of his experiences as a freshman advisor.

From a different perspective, Professor Kenneth M. Hoffman, also an experienced advisor, notes, "Every freshman needs a base to operate from, and the closer it is to the academic life of the Institute, the better.'

They are hoping their words of encouragement may help other faculty members decide to join the ranks of faculty freshman advisors for the class that will enter this fall. A recruiting drive to increase the number of faculty members serving as advisors was launched last week by the Undergraduate Academic Support section (UASO) of the Office of the Dean for Student Affairs.

'We understand that, as pressures on the faculty increase, it is difficult to fit additional duties into your plans," says the recruiting letter, "but the freshmen tell us that they need the sort of professional advice and contact which comes best from our faculty."

Being a freshman advisor takes an average of about nine hours per student, the UASO has found. The chief duties are:

-to be present during portions of Residence/ Orientation Week for briefing sessions and individual meetings with advisees to help astronautics. There is one graduate student who is specializing in ceramics.

Three of the symphony players will appear on tape on the Young Artists Showcase program of New York Radio Station WQXR at 9pm on Wednesday, on April 20. They are violinist and concert mistress Barbara J. Hughey of Ridgewood, N.J., an MIT graduate student in physics; flutist Anne Gorcyca of East Freetown, Mass. a senior at Wellesley College majoring in molecular biology and music; and principal violist Dorcas Ruth McCall of Huntington Station, N.Y., a junior and music major at Wellesley.

This will be the MIT Symphony's fourth trip to New York and its third appearance at Carnegie Hall. The last New York Appearance was in 1978 at Lincoln Center.

The MIT Symphony will play two more Massachusetts engagements before their April 24th appearance at Carnegie Hall. A concert is scheduled at Wellesley College on Thursday, April 14, at 8:30 and at Amherst College on Tuesday, April 19.

In the week following the Carnegie Hall concert, the Symphony will make a record with Swiss violist Ron Golan who performed with the Symphony at MIT in December 1982. To be recorded are Frank Matin's Ballade for Viola, Winds, Harp, Harpsichord and Per-cussion; Bohuslav Martinu's Rhapsody-Concerto for Viola and Orchestra, Paul Hindemith's Trauermusik and Gustav Holst's Lyric Movement.

So far the MIT Symphony has made seven recordings on either Vox/Turnabout or EMI labels. The Symphony's recording of the two piano concertos of Maurice Ravel, released by EMI in Europe, was extensively praised. It was the single best selling classical record in Portugal in 1982.

Two more recordings are scheduled to be made this year. The first will include Harbison's Incidental Music for Shakespeare's Merchant of Venice; Carl Ruggles' Portals and Henry Brant's Spatial Concerto for Piano and Orchestra. The second will feature Mr. List as soloist for two American piano concertos, by Persichetti and Howard Hanson.

Most of the Symphony's recordings have concentrated on 20th century American music. Profesor Epstein has said "The notion that this music is not liked is ridiculous. We consistently have large audiences at our concerts. "To the young musician," he said, "the

music we do is simply music. They don't make the distinction whether it's classical. To me this is an encouraging sign for the future. These people are living with the music of their time, and seeing it in the right perspective. It's a part of their world."

Professor Epstein was invited to speak at the Herbert Von Karajan Foundation in Slazburg, Austria April 5, on "The Experience and the Process of Time in Music.'

He will speak on the mechanisms of movement in Brahm's music during the International Brahms Congress being held by the Library of Congress in Washington D.C. May 5-8 in commemoration of the 150th year of the composer's birth.

His schedule also includes a meeting in Arezzo, Italy this July with the International Society for the Study of Time, a group including musicians, scientists, philosophers, sociologists and writers.

Professor Epstein's book, Beyond Orpheus, Studies in Musical Structure, was singled out as one of the outstanding academic books for the 1979-80 year. Milton Babbit of Princeton University praised the wisdom of the book, saying that it led to "considerations and reconsiderations of the most central questions of musical explanation and understanding.

Professor Epstein is now working on a new book about rhythm and tempo, its research partially funded by the Deutsche Forschungsemeinschaft while he was in re sidence at the Max-Planck Institute and the University of Munich.

will become Carnegie Inst. VP

By ROBERT C. Di IORIO Staff Writer

Dr. Margaret L.A. MacVicar, Cecil and Ida Green Professor of Education, associate

professor of physical science and director of UROP, has been appointed vice president of the Carnegie Institution of Washington, effective July 1. During the initial

months of what will be a period of dual association with MIT and Carnegie, Dr. MacVicar will be on partial leave from MIT. As vice president, she will work closely

with Carnegie's president, Dr. James D. Ebert, on research and education policy, personnel and financial matters as they relate to these, and the setting of research directionissues which are linked to one of her major professional interests: program and policy innovation in higher education.

Professor MacVicar will resume her regular teaching and advising responsibilities with the start of the spring term in 1984, and will spend the remaining half of her time on policy and financial administration at the Carnegie Institution.

While she is on partial leave during the 1983 fall term, the day-to-day operation of UROP will be in the hands of Norma McGavern, associate director, who has been with the Undergraduate Research Opportunities Program for almost seven years. Professor Mac-Vicar will remain in an oversight position with respect to UROP during her leave, as she did during her sabbatical in 1979.

Professor MacVicar's appointment was announced by Associate Provost Frank E. Perkins, to whom she will report during the time she holds the dual position.

In commenting on this change of responsibilities, President Paul E. Gray said, "In her work as founding director of UROP Professor MacVicar has made a singular contribution to the Institute which has had a major, lasting impact. The development of the program from the nugget of an idea to one which now affects the educational experiences of more than half of our undergraduates required sensitivity, effective leadership and impressive administrative skills. These qualities will be of great value to the Carnegie Institution as they are to MIT."

Professor Perkins said he is "pleased that MIT has the kind of administrative flexibility that permits this type of appointment, which is so important to the professional growth of our faculty.'

MIT and the Carnegie Institution have had close ties since Vannevar Bush left MIT as vice president and dean of engineering in 1939 to become president of Carnegie. At the same time, he became a life member of the MIT Corporation and continued his association with the Cambridge institution. He returned to MIT in 1957 as chairman of the MIT Corporation after organizing the nation's wartime research effort and guiding the postwar development of large-scale federal sponsorship of research in the nation's universities. In addition, the informal ties between the two nonprofit, research-oriented institutions of higher learning have been legion.

The Carnegie Institution of Washington was founded in 1902 by Andrew Carnegie as a national research institution that would increase knowledge and provide a source of strength for all universities in the nation.

Under the leadership of Robert Woodward, who became president in 1904. Carnegie adopted a departmental structure for most of its work, concentrating on fewer fields than at the outset. It was thus able to support significant groups of researchers and to give them consistent support and research independence over many years.

Today there are five departments-embryology, plant biology, terrestrial magnetism, the Mount Wilson and Las Campanas Observatories and the Geophysical Laboratorywith a faculty of approximately 60 senior scientists, 75 postdoctoral fellows and about 50 graduate students.

Placement Office inaugurates computer-aided job searching



Robert K. Weatherall, director of the Career Planning and Placement Office, and Steven M. Kostant of Somerville, a graduate student in architecture, use a new computer that matches candidates with job opportunities.

MIT is the first university in the country to hook into a new computer system matching candidates with job opportunities.

The Career Planning and Placement Office

wanted ads in the newspapers are telling candidates that they can scan their job listings by telephoning the company and plugging in their personal computer," he said. Clearly more job-matching will be done by computer and we should start learning about it." He continued, "Approximately 1,800 students each year seek our help in finding a job, and we hear from several hundred alumni interested in changing jobs. Connexions' services make sense for us. MIT students feel at home with computers. They are prime candidates to use a computer to assist their job search.



each register for the fall term.

-to get acquainted with advisees and build a basis for continuing communication.

-using performance evaluation forms, to review with advisees their academic progress at the middle and end of each term.

-to be available in mid-December and January to discuss fall term evaluations and spring term programs.

-to be available to assist the Committee on Academic Performance in January and June if advisees get into academic difficulty.

Also highly recommended is maintaining regular contact with advisees.

Most freshman advisors have assistance from associate advisors who are upperclass undergraduates. These students are particularly helpful in providing freshmen with advice on specific subjects and undergraduate life

"They particularly get to know their associate advisors who are very helpful to them, says Professor William F. Brace, head of the department of Earth and Planetary Science. "To be a good advisor, all you have to do is be accessible. It's good fun," he said. Interested faculty members are encouraged

to return the reply card from the recruiting material or to drop by Rm 7-103 or call Peggy Richardson or Holly Heine, x3-6771, for further information.

lves concert planned

Two musicians who have been collaborating since 1975 in the study and performance of the work of Charles Ives will play all four Ives Sonatas for violin and piano in Kresge Auditorium, Wednesday, April 20, at 8 p.m. The performance is free and open to the public.

The musicians are pianist Andrew Rangell, assistant professor of music at Dartmouth College, and violinist Andrew Jennings, founding member of the Concord String Quartet, in residence at Dartmouth. Mr. Rangell frequently collaborates with the quartet which has made many recordings on major labels

The two have regularly presented duo recitals since 1977 and they began their musical partnership while they were both members of Felix Galimar's chamber music class at the Juilliard School. In their separate careers both have devoted themselves to works of Ives and have received critical acclaim for their performances. Their project for the sonatas began in earnest with an all-Ives concert at Dartmouth in 1975. They anticipate recording the sonatas quite soon.

has installed a terminal by the Cambridge based firm that built the system, Professional Data Corporation. Called Connexions, the system publishes up-to-the-minute lists of help-wanted ads and allows computer users to submit their qualifications to employers.

An MIT alumnus, Dr. George S. Sacerdote, one of the founders of the company, hopes the terminal at MIT will help students and alumni learn of more jobs faster. "The procedure is simple to use," he explained. "Students and alumni can tell the computer the kind of job they are looking for, and the computer will tell them what's available. A candidate can answer pre-screening questions and, if he or she is interested in a particular opening, apply for it electronically," Sacerdote said.

"With this system," he added, "students and alumni can become familiar with and tie into the national job market, learning what's available, in what fields, what qualifications are necessary to get hired, and what salary ranges the industries will support. They can do this while avoiding lines, sign-up sheets, travel, mail delays, and complicated shedules."

Robert K. Weatherall, director of the Career Planning and Placement Office, said he welcomed the opportunity to use a computer matching system.

"A number of companies putting help-

Annuity meeting

The popular Tax Deferred Annuity Workshops will be given again this spring by the Benefits Office.

Representatives of the Prudential Insurance Company will be on campus today (Wednesday, April 6) in the Emma Rogers Room (10-340). There will be a presentation for current participants at 10am and presentations for prospective participants will be held at noon and 2pm.

Representatives from MIT's other tax deferred annuity company, Teachers Insurance and Annuity Association (TIAA), will hold workshops on campus later this month.

THE INSTITUTE CALENDAR

April 6-April 15

MISS THE TECH TALK DEADLINE?

Put your announcement on the MIT Cable System. "Today at the Institute" runs 24 hours a day on Channel 12 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. Note: If you have met the Tech Talk deadline, your announcement is automatically put on the cable (except for exhibits and some multimeetings programs).

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 ork in a department and field.

Special Interest

Technology Wives Organization is accepting applications through April 11 from those wishing to sell at the Spring Crafts Fair, to be held April 26 & 27, must be a member to participate. For information call Anne Marie, 494-0253

Tenth International Optical Computing Conference^{*}-April 6-8. Sponsored by IEEE Computer Society and International Commission for Optics. Major society and international commission for Optics. Major contributors from four continents will present their work. Associate Professor Cardinal Warde, Department of Electrical Engineering and Computer Science, local arrangements chairman. Registration fee, \$150. Student fee, \$50 includes admission to assist and the Martineeric Version and Ve 471 angulation of the session of the

The Student Assistance Services section of the office of the Dean for Student Affairs will hold an Open House^{*}-to introduce students to the services available. IDSA, April 6, 3-5pm, Rm 5-106. Refreshments served.

Cancer Education and Information Fair*-April 8, Lobby 7. Sponsored by Lambda Upsilon Chapter of the Alpha Kappa Alpha Sorority, Inc. in conjunction with MIT Health Education Services. All materials provided by erican Cancer Society

The 1983 Ralph E. Cross, Sr. Lectures in Manufacturing Sciences^{*}-Prof. Oyvind Bjorke, University of Trondheim, Norway. Lab for Manufacturing & Productivity. 10am Technical Seminar: Manufacturing Cells and Their Subsystems; 2pm General Lecture: Towards Integrated Manufacturing Systems, Rm 9-150. April 13 & 14.

Humanities Open House^{*}-Wed, April 6, 2pm, Bush Rm 10-250.

Holocaust Memorial Commemoration*-including Bertolt Brecht's one act play "The Jewish Wife". MIT Hill. Annual remembrance observance of the murder of six million Jews during World War II, April 11, noon, MIT Chapel.

Seminars and Lectures

Wednesday, April 6

Nonlinear Flow over Complicated Terrain^{*}-Dr. Larry Pratt, University of Rhode Island. Oceanography Sack Lunch Seminar, 12:10pm, Rm 54-425.

A Second Nuclear Era: Prospects and Perspectives*-Alvin M. Weinberg, Director, Institute for Energy Analysis. Department of Nuclear Engineering, Special Seminar Series, noon, Rm 66-110.

Research Trends in Fiber Optics*-K.C. Kao, I.T.T. Optics and Quantum Electronics Seminar, 11am, RLE Conference Rm 36-428.

Agreement (Subject/Verb and Noun/Pronoun)*-The Writing Center, 1:45pm, Rm 14N-317.

The Application of Nodal Methods to the Transport Equation*-Moon Hee Chang. Nuclear Engineering Seminar, 3pm, Rm NWI2-222.

Thursday, April 7

Building Ecology*-Professor Harvey Bryan, Department of Architecture, MIT. Joint Program for Energy Efficient Buildings and Systems Seminar, noon, Rm 1-114. Contact: Michael L. Joroff, Director, Laboratory of Architecture and Planning, x3-1350.

When User Hits Machine[®]-John Seely Brown, Principal Scientist. Distinguished Lecturer Series. Laboratory for Computer Science Lecture, 3pm, Rm 9-150.

Appropriate Technology To Alleviate Women's World Load: The Case of the Palm Oil Press in Sierra Leone[•] - Olubanke King-Akerele, Program Management Officer, Voluntary Fund for UN Decade for Women. MIT/Harvard Women and International Development Group, 4pm, HIID, Coolidge Hall, Rm 2, 1737 Cambridge St.

Facility Location in a Competitive Environment^{*}-Prof. Jacques Thisse, University of Louvain, Belgium. Operations Research Center, 4pm, Rm E40-298.

Biophysical Aspects of Monoclonal Antibody Techniques for Cell Surface Analysis[®]—Peter Hansen, PhD, Cambridge Research Lab. Harvard/MIT Division of Health Sciences & Technology, HST. 590:Biomedical Engineering Seminar, 4pm, E25-117.

The Future of Electronic Home Banking^{*}-Research Program on Communications Policy, 4pm, Marlar Lounge, Rm 37-252.

Present and Future of Concrete Gravity Platforms* Mr. O.T. Grudnestad, Statoil, Norway. Structural Engineering Seminar, 4pm, Rm 1-350.

Sudden Death-The Physics of Ventricular Fibrillation^{*}-Professor Richard J. Cohen, Physics Colloquium, 4pm, Rm 26-100. Refreshments at 3:30pm, Rm 26-110

The Membrane Paradigm for Black Holes*-Professor Kip S. Thorne, California Institute of Technology. Astrophysics Colloquia, 4:30pm, Phillips Auditorium, Harvard Univ, 60 Garden St. If you need transp call Susan Black, 253-7078 no later than April 5.

Towards a Critical Regionalism^{*}-Kenneth Frampton, Architecture Lecture Series, 5:30pm, Rm 9-150.

Friday, April 8

Planetary Atoms*-Richard R. Freeman, Bell Laboratories. Modern Optics and Spectroscopy Seminar, 11am, Marlar Lounge, Rm 37-252.

Intermodal Transportation: Problems and Prospects^a-Curtis D. Buford, chairman. Trailer Train Company, Inc. noon, Center for Transportation Studies Luncheon Seminar, location to be announced.

Effects of Immobilization Parameters on Macroscopic and Molecular Properties of Immobilized Enzyme Catalysts*-Mr. Douglas Clark, Department of Chemical Engineering, California Inst of Technology. Chemical Engineering Seminar, 2pm, Rm 66-110.

Human Limb and Muscle Response to Vestibular and Visual Stimulation^{*}-Dr. Yuli Toshev, Head of Department, Institute of Mechanics and Biomechanics, Bulgarian Academy of Sciences, Sofia. Man Vehicle Laboratory Meeting, 3pm, Rm 37-252, Marlar Lounge.

Career Development Mini-Symposium*-Dr. A. Obermeyer, Moleculon Corp. Dr. B. Greer, Manager of Atmospheric Sciences, Dr. C. Kolb, Dr. C. Frederick, MIT Chemist Club, 3:30pm, Rm 6-321.

Research in an Industrial Environment*-John P. Appleton, Vice President, Research and Development, Thermo Electron Corp. Mechanical Engineering Seminar, 3pm, Rm 3-133.

Instability of Displacement Processes in Porous Media*-Professor George M. Homsy, Department of Chemical Engineering, Stanford University. Chemical Engineering Seminar, 3pm, Rm 66-110.

Exciting New Results from Phaedrus*-Noah Hershkowitz, University of Wisconsin. Plasma Fusion Center Seminar, 4pm, Rm NW14-2209.

Prospects for the Development of a National Materials Policy in the 98th Congress*-Prof. R.M. Materials Policy in the 96th Congress - From Reim. Latanision, Department Materials Science and Engineering, MIT. Science Advisor, House Committee on Science and Technology, Center for Materials Science and Engineering Colloquium, 4pm, Rm 26-414.

Wittgenstein on Identity^{*}-Professor Hide Ishiguro, Barnard College, Columbia University. Philosophy Colloquium, 4pm, Rm 37-212.

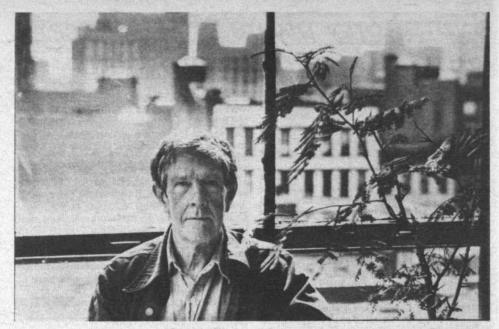
Vision in Action^{*}-Dr. David Lee, Department of Psychology, University of Edinburgh. Psychology Colloquium, 4:30pm, Rm E25-111.

Monday, April 11

Overcoming Writer's Block and Getting Started on a Paper, Part I-A Mini-session, The Writing Center, 12:15pm, Rm 14N-317.

Multi-Joint Impedance Control*-Neville Hogan, Laboratory for Biomechanics and Human Rehabilitation. Department of Mechanical Engineering Seminar, 4pm, Rm 1-114.

Pilot Proficiency as a Factor in General Aviation Accidents⁶-Dr. William Conroy, Behavioral Science Consultant, State University of New York at Buffalo, N.Y. Flight Transportation Laboratory. MIT Aviation Safety



Avant garde composer and writer John Cage, shown at the Boston Museum of Art, where he will appear tonight (April 6) at 8pm in a talk/concert, cosponsored by the MIT Writing Program. Tickets: \$6.50 or \$2 for students and senior citizens. Information: x3-7894. From Cage's writing: "I have nothing to say and I am saying it . . . There is all the time in the world for studying music, but for living there is scarely any time at all . . . Wisest is to open one's ears immediately and hear a sound suddenly before one's thinking has a chance to turn it into something logical, abstract or symbolical ... When a composer takes himself seriously and wishes to be considered great, he thereby diminishes his love and Photo by Robert Masotti increases his fear.'

Total Fault Coverage by Digital Circuit Transformation^o-R.J. Lipton, Electrical Engineering & Computer Science Department, Princeton Univ. VLSI Seminar, 4pm, Rm 9-150.

Migration of Soviet Jews to Israel: Economic Aspects⁹-Gur Ofer, Hebrew University and Harvard University. MIT/Harvard Research Seminar on Migration and Development, Harvard Center for Population Studies, 9 Bow Street, 4pm.

EMG Patterns in Normal and Pathological Gait^{*}-Jonathan Delatizky, PhD. Research Fellow, Harvard Medical School, affiliated with the Gait Laboratory at Children's Hospital Medical Center. Rehabilitation Engineering Seminar, 4pm, Rm 1-114.

Total Fault Coverage by Digital Circuit Transformation^{*}-Richard Lipton, Princeton University, Princeton, N.J., 4pm, Rm 9-150.

Two-Dimensional Design Method for Highly-Loaded Compressor Blades*-Mr. T.Q. Dang, Department of Aeronautics & Astronautics, MIT. Gas Turbine and Plasma Dynamics Laboratory Department of Aeronautics and Astronautics Seminar, 4:15pm, Rm 31-161.

Star Formation in our Galaxy*-Dr. Bart Bok, Steward Observatory, Univ of Arizona. Astrophysics Colloquia, 4:15pm, Rm 37-252.

Wednesday, April 13

Nuclear Power-Is it Worth Saving?*-S. David Freeman, Director, Tennessee Valley Authority. Department of Nuclear Engineering Special Seminar, noon, Rm 66-110.

The 1983 Ralph E. Cross, Sr. Lectures in Manufacturing Sciences"-Prof. Oyvind Bjorke, University of Tondheim, Norway. Lab for Manufacturing & Productivity. Joam Technical Seminar: Manufacturing Cells and Their Subsystems; 2pm General Lecture: Towards Integrated Manufacturing Systems, Rm 9-150.

Gulf Stream Warm Core Rings*-Dr. Terry Joyce, Woods Hole Oceanographic. Oceanography Sack Lunch Seminar, 12:10pm, Rm 54-915.

Overcoming Writer's Block and Getting Started on a Paper, Part II*-A Mini-session, The Writing Center, 12:15pm, Rm 14N-317.

Multifrequency Laser Gyros*-T.A. Dorschner, Raytheon. Optics and Quantum Electronics Seminar, 11am, RLE Conference Rm 36-428.

Infrastructure: The Opportunities and Challenges⁶-Arthur J. Fox, Jr., Editor, Engineering News Record, Construction Engineering and Management 1983 Seminar Series, 3:30pm, Rm 3-270.

Overlapping Spreading Centers and the Tectonics of Fast-spreading Ridges^{*}-Prof. Ken MacDonald, Department of Geological Sciences, Univ. of Calif., Santa Barbara. Earth and Planetary Sciences Seminar, 4pm, Rm 54-915.

The Politics of Indebted Economic Growth*-Professor John Freeman, Assistant Professor, MIT Political Science Department. CIS Latin America Energy Policy Seminar, 4pm, Rm E38-615.

Militarization of the Philippine Government: Post-Marcos Scenario[®]-Senator Benigno S. Aquino, Jr., CIS Visiting Fellow, elected to Philippine Senate in '67 and Secretary General of the Liberal Party. Center for International Studies Seminar, 3pm, Rm E38-762.

Experimental-Theoretical Studies of a Lizard Ear⁴-Tom Weiss, PhD. Harvard/MIT Division of Health Sciences & Technology. HST 590: Biomedical Engineering Center, 4pm, E25-117.

The Core of a Convex Game and Its Extremal Properties*-Dr. Donald Topkis, Bell Labs. Operations Research Center Seminar, 4pm, Rm E40-298. Coffee &

The Evolution of the Mexican Political System^{*}-Peter Smith, Associate Dean, School of Humanities and Social Science, MIT. Mexican Revolution to the present, with projections for the future. AMEX MIT, 4:30pm, Rm 54-100.

Friday, April 15

Applications of Holography to High Energy Physics⁶-Irwin Pless, MIT. Modern Optics and Spectroscopy Seminar, 11am, Marlar Lounge, Rm 37-252.

The State of Transportation in the States*-Francis B. Francois, Executive Director, American Assoc. of State Highway, Transportation officials, Center for Transportation Studies Seminar, noon, Mezzanine Lounge.

The Electrodynamic Themogravimetric Analyzer*-R. Erik Spjut, Chemical Engineering Seminar, 2pm, Rm 66-110.

Frontiers of Chemical Engineering in the Oil Industry*-Warren K. Lewis Lecturer, George M. Keller, Chairman of the Board, Standard Oil Company of California. Chemical Engineering Seminar, 3pm, Rm 66-110.

Laser Produced Polarized Sources-Possible Fusion Applications⁶-Michael Feld, Director of the Spectroscopy Lab, MIT. Plasma Fusion Center, 3pm, RM NW14-2209.

Finite, Very Small Semiconductor Devices and Superlattice Arrays^{*}-Prof. David K. Ferry, Department of Electrical Engineering, Colorado State University, MIT/Harvard Cambridge Semiconductor Seminar, 12:15pm, Kolker Rm 26-414.

Re-Mapping Development: The Power of Discrepant Data*-Dr. Carol Gilligan, School of Education, Harvard University. Psychology Colloquium, 4:30pm, Rm E25-111.

Transfer and Expression of Genes in Plants Using Ti Plasmids as Vector*-Dr. Jeffrey Schell, Max-Planck Institute, Koln, Germany. Biology Colloquium, 4:30pm, Rm 6-120.

Community Meetings

Alcohol Support Group**-Meets Weds, 7:30am, sponsored by MIT Social Work Service. Call Ruth, x3-4911.

Future Opportunities in Private Development^{*}-Edward H. Linde, President, Boston Properties. Construction Engineering and Management 1983 Seminar, 3:30pm, Rm 3-270.

Adhesion at the Fiber-Matrix Interphase in Composite Materials*-Dr. Lawrence T. Drzal, Air Force Wright Aeronautical Laboratory, Mechanics and Surface Interactions Branch, Wright-Patterson Air Force Base. Laboratory for Manufacturing and Productivity Seminar, 3pm, Rm 35-520. Coffee served.

Thermodynamics of Electrical Noise^{*}-Professor John Wyatt, Department of Electrical Engineering and Computer Science. Thermodynamics Seminar. This seminar has been postponed; further information will be announced at a later date.

Atomic Motions during Melting and Vaporization Processes-Computer Simulation Films*-Professor Sidney Yip, Department of Nuclear Engineering, MIT. Applied Radiation Physics Seminar, 4pm, Rm 24-115.

Global Digital Network: The Seismologist's Nightmare"-Professor Adam Dziewonski, Department of Geological Sciences, Harvard University. Department of Earth and Planetary Sciences Seminar, 4pm, Rm 54-915.

On Learning, Teaching, and Electrodynamics^{*}-Professor Hermann A. Haus. Killian Award Lecture, 4:30pm, Rm 10-250.

The Dynamics of the European Arms Race^{*}-Dr. George Rathtens. Disarmament Study Group, 5pm, Rm 4-163.

Analysis Seminar, 4pm, Marlar Lounge, 35-252.

Shafting Systems Alignment^{*}-Marine Engineering Seminar, 4:15pm, Rm 1-190.

Technology and Policy: The Case of National Groundwater Contamination^e-Paula J. Stone, Office of Technology Assessment, U.S. Congress. Water Resources and Environmental Engineering Seminar, 4pm, Rm 48-316.

Solitons and the Inverse Scattering Transform in Multidimensions^o-Prof. A.S. Fokas, Clarkson College, Potsdam, N.Y. Applied Mathematic Colloquium, 4pm, Rm 2-338. Refreshments at 3:30, Rm 2-349.

Academic Freedom and the Integrity of the University: The Influence of Funding-Impact of Funding Sources of MIT: Education, Research and Public Service^{*}-Walter Rosenblith, Institute Professor and Provost Emeritus. The Technology and Culture Seminar, 4pm, Rm 9-150.

Solitons and the Inverse Scattering Transform in Multidimensions^{*}-Professor A.S. Fokas, Clarkson College, Potadam, N.Y. Applied Mathematics Colloquium, 4pm, Rm 2-338

Everything You Wanted To Know About Contraception^{6*}-Dr. Lois Eichler, Psychologist, and Ms. Karen Halorson, R.N., McCornick Housemasters, Discussion. 7:30pm, McCormick Housemasters Suite.

Tuesday, April 12

Fusion Diagnostic Systems: Experiments to Reactors"-James F. Baur, General Atomic Company Plasma Fusion Center Seminar, 3:30pm, Rm NW12-222

Pronunciation: B/V and P/F-A Mini-session for those for whom English is a second language, The Writing Program, 4:15pm, Rm 14N-317.

Open House^{*}-The Chemical Engineering Department, 4pm, Rm 66-110.

A Thermodynamic Analysis of a Continuous Reheat A Thermodynamic Analysis of a Continuous Reheat Gas Turbine Cycle*-Professor Maher El-Masri, Department of Mechanical Engineering, MIT. Thermodynamics Seminar. This seminar has been postponed; further information will be announced at a later date

Noise, the Uncertainty Principle, and Picosecond Optics*-Professor Hermann A. Haus, Killian Award ectures, 4:30pm, Rm 10-250.

Jews and Gentiles in Love: Interdating, Intermarriage and Conversion^{*}-Ken Bruss, Jewish Family and Children's Service and Rabbi Dan Shevitz of MIT Hillel, MIT Hillel. Discussion for Undergraduates, 8pm, Baker House Master Suite Lounge.

Thursday, April 14

The 1983 Ralph E. Cross, Sr. Lectures in Manufacturing Sciences"-Mr. Philippe Villers, Automatix, Inc., USA. Lab for Manufacturing and Productivity. 10am Technical Seminar: Technologies of Lectures in Robotics and Artificial Vision Systems; 2pm General Lecture: Robotics and Artificial Vision: Their Role in Industrialization of America and Its Social Significance, Rm 9-150.

Ove aters Anony ous**-Will meet weekly in Rm 4-149 on Sunday morning, 9:30am-11am. All welcome

Al-Anon^{*}—Meetings held every Tues, noon-1pm, Moore Rm 6-321; 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 Ruth or Shirlee, x3-4911

MIT Faculty Club**-The Club is open Mon-Fri. Luncheon hours: noon-2pm; dinner hours: 5:30-8pm. For reservations call x3-4896

Nightline*-We're a student run hotline from 7pm-7am on the MIT campus. For information or just to talk, give us a call at x3-7840.

MIT Women's Forum**-Part of a lecture series conducted onals in the Boston area by women profess

Weekly Exercise Classes**-Patricia Murray, one of Maggie Lettvin's teachers. Technology Wives Organization. Thurs, thru May 12, 7:30-8:30pm, Exercise Room, 2nd flr, DuPont Gym, \$2/TWO members; \$2.50/non-TWO member per class.

Maggie Lettvin's Exercise Class**-For less capable women, Thurs, 11am, Rm 8-219. Wear loose, comfortable clothing. Athletic card req.

Maggie Lettvin's Self-Designed Fitness Satellite Classes**-First class every Mon, Wed, & Fri, Alumni Pool area, 1-2pm, taught by Janice Novak, 2nd class Wed & Fri, Rm 8-219, 1-2pm taught by Suzanne Walker. Wear leotards & tights or sweat suits. Athletic card req.

Maggie Lettvin's Self-Designed Fitness Classes*-Mon-Fri, noon, Wrestling Rm, DuPont Gym, 5pm class, T-Club Lounge, gym. Wear loose, comfortable clothing. Athletic card req.

DeJeuner Francais*-Dominique Rabate, Visiting instructor from the Ecole Normale Superieure. Foreign Languages & Literature. A French lunch every Tues, noon, Muddy Charles Rm. For info call x3:4771.

Parent Support Group*-Health Education Service Support system for working parents of the MIT Community open to prospective parents as well as new parents, April 19, Rm E23-501. Call x3-6320 or x3-1744.

Wives' Group'-Wed, April 6: Japanese flower arranging, Mrs. Fumiko Masubuchi, 3-5pm, Rm 491, Student Center; April 13: Canada, presented by Betty Kotels, 3-5pm, Mezzanine Lounge, Student Center. All women in MIT Community welcome. Babysitting available during afternoon groups in Rm 473.

Technology Wives Organization—is accepting applications through April 11 from those wishing to sell at the Spring Crafts Fair, to be April 26 & 27, must be a member to participate. For information call 494-0253.

Volunteers*-to help organize May 1, Walk for Hunger, assist in registering, driving, etc. For information call Jackie, x3-1957/or 58 to schedule organizing meeting.

Reflexology and Health^{*}-Bettina Richichi, every Tues, noon-1:30pm, Rm 1-134. Sessions demonstrate benefits of reflexology. Call x3-3979.

Activities Committee

MITAC, the MIT Activities Committee offers discount MITAC, the MIT Activities Committee others discount movie tickets for General Cinema and Sack Theaters. Tickets are \$2.50 each and are good 7 days a week, any performance. Regular theater admission is \$4 so you can save \$1.50 per ticket. In addition MITAC will be selling discount passes for the Museum of Science which are good any time through Dec. 31, 1983. Passes are \$1, plus \$1 at the door, a \$2.50 savings on the regular \$4.50 adult admiss

Bus Tour to Newport, Rhode Island Mansions⁶-Leaves MIT West garage at 9am, return at 6pm. Trip includes round trip passage, ride along the 10 mile "mansion" drive; private tour of the Breaker's Mansion; drop-off for lunch/shopping (lunch not included) at the newly renovated Brick market; private tour of the Rosemont Mansion. Price is \$19.50 (reg. \$24) which includes mansion admission. Tickets must be purchased by Fri, April 15.

Movies

La Quarantaine®-Anne-Claire Poirier. Film/Video Section, April 6, 7pm, Rm 54-100.

Nlai, The Story of a !Kung Woman*-John Marshall. Film/Video Section, April 11, 7pm, Rm 54-100.

Sunset Boulevard*-LSC Classic Movie, April 8, 7:30pm, Rm 10-250. Admission: \$1 w/MIT or Wellesley ID.

Deathtrap^a-LSC Movie, April 8, 7 & 10pm, Rm 26-100. Admission: \$1 w/MIT or Wellesley ID.

Diva -- LSC Movie, April 9, 7 & 10pm, Rm 26-100. Admission: \$1 w/MIT or Wellesley ID.

Lolita*-LSC Movie, April 10, 6 & 9:30pm, Rm 26-100. Admission: \$1 w/MIT or Wellesley ID.

Das Boot*-LSC Movie, April 15, 6:30 & 10pm, Kresge Admission: \$1 w/MIT or Wellesley ID.

The Secret of NIMH*-LSC Movie, April 16, 7 & 9:30pm, Rm 26-100, Admission: \$1 w/MIT or Wellesley ID.

Shane^{*}-LSC Classic Movie, April 15, 7:30pm, Rm 10-250 Admission: \$1 w/MIT or Wellesley ID.

Music

Thursday Noon Hour Chapel Series*-April 7: Charlotte Kaufman, harpsichord; Catherine Folkers, flute and Susan Kuzma, soprano; April 14: The Oakwood String Quartet, works by Mozart, Ravel and Stravinsky; April 21: Margaret Daniels, baroque dance, Mitzi Myerson, harpsichord; Sara Cunningham, gamba, Monica Huggett, violin; April 28: Spectrum Concert, a performance of West African music by the Tufts University West African Drum Ensemble, David Locke, director. Noon, MIT Chapel.

LOG JAM[®]-The Logarhythms, MIT's men's close harmony singing group, will be hosting groups for a concert Saturday, April 9, at 7:30pm, Rm 10-250. Among the visiting ensembles will be Yale's Mixed Company and Wellesley's Tupelos, All welco

Computer Music at MIT^{*}-April 12: Perceptually-based Algorithms for Computer Music, Seminar, John P. Stautner, MIT Experimental Music Studio, 4pm, Rm 110, 25 Ames St.

Cage on Cage^{*}-John Cage appears with pianist Stephen Drury and violinist Daniel Stepman, sponsored by Museum of Fine Arts and MIT Writing Program, April 6, at 8pm, Remis Auditorium, Museum of Fine Arts, Huntington Ave., Boston, West Wing Entrance. Tickets for sale in Lobby 10 and The Writing Program Office, 14E-310, \$6.50/person; \$2/students and Senior Citizens.

MIT Symphony Orchestra Concert^{*}-April 14. David Epstein, conductor. Eugene List, pianist. John Harbison's "Incidental Music for Shakespeare's Merchant of Venice" also Stravinsky and Persichetti. Houghton Chapel, Wellesley College, 8:30pm, Admission: \$1. Free to MIT and Wellesley College Communities.

Wellesley Events

Wellesley College Exhibition Gallery Talks*-Sundays at 3pm for general public, by special request for groups of more than 10. Interpreter for the hearing impaired available second Sunday each month. Access for the handicapped available. Admission: Free. Hours: Mon-Sat, 10am-5pm; Sundays, 2-5pm.

Special Collection Exhibition*-Exhibit of autographs First editions and association copies illustrating Robert Frost's literary career, Margaret Clapp Library, April 1-June

Julian Bond^{*}-April 7. Spokesman for the New Politics since the late 1960's and first Black in history to be nominated for Vice President of the U.S., speaker for Black Quintessence Week, Wellesley College, Spm, Houghton orial Chapel.

Springtime '83 Fashion Show'-April 8. Sponsored by Ethos, Alianza and Slater International organizations at Wellesley College, 8pm, Alumnae Hall. Tickets \$7; \$5 w/college ID.

Black Entrepreneurs: Taking Care of Business*-April 9. Panel discussion in the Library Lecture Rm, 2pm

Special Chapel Service*-April 10. Conducted by Minister Keith Darlington, 11am, Houghton Memorial Chapel.

L'Amfiparnaso*-April 8. Madrigal, opera by Orazio Vecchi, 8pm, Jewett Auditorium

Brass Concert*-April 10. Worcester Tech Brass En Douglas Weeks, conductor, members of the Wellesley College Chamber Music Society, 7:30pm, Science Center.

MIT Symphony Orchestra Concert^e-April 14. David Epstein, 8pm, Houghton Memorial Chapel.

Masterpieces of the French Calotype*-April 15-June 12. A Still Life Instinct, lecture by Eugenia Parry Janis, Professor of Art History, Wellesley College, Wellesley College Museum

Exhibits COMMITTEE ON THE VISUAL ARTS

Hayden Gallery: Wakeby Day/Wakeby Night*-Exhibition of largest monotypes ever made, commissioned from artist Michael Mazur, Boston, for MIT's new dormitory, including two completed triptychs, sketches, drawings and intermediary scale monotypes. Through April 24, 10am-4pm. Free.

Hayden Corridor Gallery: Strange Stories*-Paintings on paper by two artists, Judith Linhares of New York and Marilyn Holsing of Philadelphia, reworking traditional myths in contemporary forms. Through May 1. Free.

THE MIT MUSEUM

New exhibits at The Museum: Math in 3D: Morton C. Bradley's richly colored geometric sculptures revolve in space to evoke Plato's thought: "Perfect beauty is geometric

beauty." 9am-5pm; April 11 - June. Free. Zen Zuh Li '22: Painter and Poet Landscape paintings in scroll and sheet form in the traditional Chinese style.

Scroll and sheet form in the traditional Chinese syste. Opening May 17 through September. Ongoing exhibits: Jan Van Goyen (1596-1656)*-Five chalk drawings by the Dutch landscape master; Mechanical Computing: slide rules, slide rules, and more slide rules; George Owen '94 Yacht Designer': Drawings, half models and photographs of sailing vessels by a master ship builder and designer (MIT '94); A Bunch of Electricals: An MUT Electrical Environment the discount of the section of the se MIT Electrical Engineering Retrospective. Including the Bush Differential Analyzer and the Edison Dynamo given to MIT by Thomas A. Edison in 1887. Through June.

Margaret Hutchinson Compton Gallery^{*}-Engineering Wizard of Bristol: Nathanael G. Herreshoff. Models, drawings, artifacts of the legendary naval architect and marine engineer Nat Herreshoff (MIT 10700 of Bristol, K.I. In his 75-year career he designed more than 800 vessels, including a torpedo boat for the U.S. Navy. The exhibit includes a Herreshoff dinghy and one of his steam engines. April 21-Sept. 24. Opening Reception: 4-7, April 21. His grandson Halsey Herreshoff will attend. 1870) of Bristol, R.I. In his 79-year career he designed more

Hart Nautical Galleries"-The America. Color lithographs of schooner Yacht America, winner of the 100 Guinea Cup later known as the America's Cup. William A. Baker '34: A Tribute. A memorial exhibition of his watercolors, drawings, plans of historic vessels, etchings and models. Through June. Daily 9am-10pm, Rm 5-126. Free. Ongoing exhibits: MIT Seagrant-A review of MIT ocean research; English Harbor Scenes 1829-Etchings by E.W. Cooke. Etchings published in London in 1829 show the variety of ships and craft to be found in English harbors at the beginning of the Industrial Revolution; Collection of

the beginning of the Industrial Revolution; Collection of Ship Models-Half models and drawings. Historical view of the design and construction of ships

Corridor exhibits: Building 1 & 5, 2nd floor: John Ripley Freeman Lobby. Building 4: Samuel Cate Prescott, Rogers Building, Norbert Wiener, Karl Taylor Compton. Community Service Fund, Ellen Swallow Richards. Building 6: Laboratory for Physical Chemistry. Building 8: Solar Energy, Society of the Sigma XI. For information call MIT Museum, X3-4444.

CREATIVE PHOTOGRAPHY LABORATORY Photographs-by MIT graduate students Terrence Crane and Micaela Garzoni Rantoul. April 20-May 20. Opening Reception: April 20, 5-8.

Stereoptics*—A selection of creative and technical spatial images in a variety of 3D formats, from stereoscopes to holograms. Through April 13. Gallery Hours: Monday-Thursday 9am-11pm; Friday 9am-6pm; Saturday 10am-6pm; Sunday noon-8pm. Rm W31-310. Free.

Stroboscopic Light Laboratory Corridor*-Permanent exhibit of high speed photographs. Main corridor, near Rm 4

Rotch Visual Collections^{*}-Changing exhibitions pertinent to the School of Architecture and Planning. Weekdays 8:30am-6pm, Rm 7-304. Free.

Theater

Wither Thou Ghost^{*}-Musical comedy written and produced by MIT students in the Musical Theatre Guild. April 8, 9 at 8pm; April 7 at 7pm, Kresge Auditorium. Admission: \$5, \$3 for students, senior citizens. For information and reservations call x3-6294.

The Two Gentlemen of Verona[®]-by William Shakespeare, The MIT Shakespeare Ensemble, April 14-19, 8pm, Sala de Puerto Rico, Student Center.

Dance

Ongoing Yoga Classes*-Begin now. Intermediates, Mon, 5:45; beginners, 7:20; Thurs, lunchtime, 12:05. All levels begin in Feb., Rm 10-340. for info call Ei Turchinetz, 862-2613.

Children's Dance Class**-Instructor, Pamela Day. Creative Movement Classes for children ages 3-4 meet Mon and Wed 2-3pm and Sat 10:30-11:30am. Creative Movement/Modern Dance Classes for children ages 5-12 meet Sat 9:30-10:30am. West Campus location. For info and registration call Pamela x3-5758.

MIT Dance Workshop^{**}-Regular meetings. Beginning technique, N.W. 3-5, T-Club Lounge in Dupont; Composition/Improv; Th, 3-5; Intermediate Technique, T, Th, 5:30-7pm, Walker 201. Beth Soll, Director. For info call x3-

Sports

HOME EVENTS: April 6: M V tennis, Bowdoin, 3pm; J V lacrosse, Bentley, 3:30pm. April 7: baseball, Babson, 3pm; lacrosse, Holy Cross, 3pm; M V tennis, Amherst, 3:30pm. April 8: V golf, WPI & Babson, 1pm; M V tennis, Colby, 3pm; M F tennis, Belmont Hill, 3pm. April 9: W crew, Brown, Northeastern & Radcliffe, M V sailing, MIT Brown, Northeastern & Radcliffe, M V sailing, MIT Invitational, 11 am; softball, Western Conn & Wheaton, 1am; M V & F tennis, Williams, 2pm; track, Bowdoln, 12:30pm. April 10: baseball, University of New England, 1pm; M V sailing, MIT Invitational, 9:30am. April 11: baseball, Brandeis, 3pm; lacrosse, Babson, 3pm; softball, lasalle, 3pm. April 12: M F tennis, Harvard, 3pm; JV track, Naval Academy Prep & Holy Cross, 4pm. April 13: golf, Northeastern & Harvard, 1pm; lacrosse, Merrimack, 3pm; M V tennis, Tuffs, 3pm. April 15: M V tennis, Vermont: 3pm April 16: golf Colby, 1pm; M V & tennis, Vermont, 3pm. April 16: golf, Colby, 1pm; M V& Ftennis, Trinity, 2pm; W crew, Simmons, Wellesley & Wesleyan, April 16 & 17: W sailing, Emily Wick Trophy, 11am.

*Open to the public **Open to the MIT community only ***Open to members only

nd notices for Wednesday, April 6, through Sunday, April 17, to Calendar Editor Rm 5-113, before noon, Friday, April 1.

Philip Glass Ensemble coming

The Philip Glass Ensemble will appear at Kresge Auditorium on Tuesday, April 26, at 8pm as the 22nd annual presentation of the Abramowitz Lecture Series which has been bringing distinguished artists to MIT since 1961.

Free tickets may be obtained by sending a stamped, self-addressed envelope to the MIT Music Office, 14N-429.

Mr. Glass is an American avant garde composer whose work has found enthusiastic support among jazz, rock and classical music aficionados. The MIT program will feature music from The Photographer, a chamber opera commissioned by the Holland Festival in celebration of the Dutch-American Bicentennial in 1982. The piece will have its American stage premiere at the Brooklyn Academy of Music next fall.

Also to be performed will be music from Einstein on the Beach, a work which resulted from Mr. Glass' collaboration with American stage director/designer Robert Wilson and which has been described as a contemporary opera legend. Other selections will come from Glassworks, Dance and Music in Similar Motion.

Program notes for the occasion have been

wild man emerging from the undergrowth to seize polite convention by the scruff of the neck. He's got background, he's proved his talent, and he still has something new to say."

A musical prodigy, Mr. Glass played flute at 8, entered the University of Chicago at 15, majoring in philosophy, studied at the Juilliard School and also in Paris with the late Ms. Boulanger.

The Abramowitz Lecture Series was established at MIT by William L. Abramowitz, '35 as a memorial to his father. It has been sustained since his death through the interest of his wife and children.

Keller to give Lewis Lecture

George M. Keller, Standard Oil Company of California's board chairman and chief executive officer, will deliver

the annual Warren K. Lewis Lecture in ChemA BU AND A BAS A

George Wayne, president of Gentest, Inc., presents to Dr. Paul E. Gray a check covering a \$150,000 fee for a license agreement under which Gentest will receive a limited-term license to three existing patents and two pending disclosures relating to mutation assays. In addition to the licensing agreement, Gentest will sponsor research in the laboratory of Dr. William G. Thilly, right, associate professor in the Department of Nurtition and Food Science.

written by MIT Professor of Music John Harbison, a composer whose work has received increasing critical acclaim. Professor Harbison is Exxon composer-in-residence with the Pittsburgh Symphony Orchestra this year.

The Philip Glass Ensemble includes composer and performer Jon Gibson, saxophonist Jack Kripl, producer and sound engineer Kurt Munkacsi, soprano Dora Ohrenstein, saxophonist, composer and visual artist Richard E. Peck Jr., composer Michael Riesman and pianist and keyboard player Paul Suits.

Among the numerous critical accolades of the Ensemble's music, this one from writer Tim Page of the Wall Street Journal is typical: "One doesn't really listen to a Glass piece in the traditional sense—one becomes immersed in his sonic weather, swept into an aural kaleidoscope that slowly turns, revolves and develops.

John Rockwell wrote in The New York Times: "His music is both intellectually rigorous and accessible, appealing to audiences that normally have little use for each other's music.

Writing in the New Musical Express last April, Felix Jay said: "As a (Nadia) Boulanger pupil with all the conventional degrees and ten years or so spent composing quite traditional stuff before he evolved the style he's now exclusively known by, Glass is no

ical Engineering April 15 in Rm 66-110 at 3pm.

His lecture, "Frontiers of Chemical Engineering in the Oil Industry," will make the point that the country needs bright, innovative chemical engineers to lead it out of the economic doldrums, especially now

that all the "easy oil" has been found and new ways are needed to coax out the remaining oil and gas reserves

Mr. Keller, head of the nation's fourth largest oil company, is an MIT alumnus (SB, chemical engineering, 1948). He is a member of the MIT Corporation, a member of the Friends of the Practice School Committee in the Department of Chemical Engineering, and past president and a long-time director of the MIT Club of Northern California.

The distinguished lectureship honors the memory of Warren K. Lewis (1882-1975), who is considered the father of chemical engineering. Dr. Lewis spent nearly his entire professional career at MIT and in 1920 became head of the Department of Chemical Engineering, the oldest in the United States.

Cross Lectures to be given April 13, 14

Professor Oyvind Bjorke, head of the Pro-duction Engineering Laboratory at the University of Trondheim, Norway, and Philippe Villers, founder, president and director of Automatix, Inc., of Billerica, Mass., will deliver the 1983 Ralph E. Cross Sr. Lectures in Manufacturing Sciences on April 13 and 14 in Rm 9-150.

The lectures, given under the aegis of the Laboratory for Manufacturing and Productivity, were established to honor Ralph E. Cross, Sr., chairman of the board of Cross and Trecker Corp., whose generosity to the laboratory has allowed it to launch many new research efforts in productivity analysis techniques, laser micro-machining and robotics. Mr. Cross is a member of the MIT Class of 1933.

Each year leading figures in the manufacturing world are invited to lecture and to give workshops at MIT on pivotal issues in the manufacturing sciences.

Professor Bjorke, an international authority on many facets of manufacturing engineering, will conduct a technical seminar at 10am on April 13. Its subject: Manufacturing Cells and Their Subsystems. He will cover

quality monitoring, process monitoring and cell supervision.

At 2pm on April 13 Professor Bjorke will give his lecture, "Towards Integrated Manu-facturing Systems." He will present an overview of the philosophy and the approach of partly unmanned manufacturing systems, emphasizing the integration of CAD and CAM systems and the human and economic aspects of manufacturing facilities.

Mr. Villers, a member of the Visiting Committee to the Department of Electrical Engineering and Computer Science, will conduct a technical seminar at 10am on April 14 on Technologies of Robotics and Artificial Vision Systems. He will show a film on the use of robotics and artificial vision systems on the factory floor

At 2pm Mr. Villers will deliver a lecture, 'Robotics and Artificial Vision: Their Role in the Industrialization of America and its Social Significance." He will discuss the social significance of productivity-increasing techniques such as robotics.



For Sale

Rossignol Strato 102, 170 cm w/Saloman 404 bindings, exc beginners skis, reasonable cond, \$30. Call 247-2011.

TI-59, charger, 2 cases, documentation, \$100. Nick, x3-2436.

Two large orange corduroy pillows, 20x20, flr seats or throws. Debbie, x3-4004.

Tires, 1 almst new FR-15 steel belted, 1 gd FR-15, both for \$75. Lee, x3-7950.

Blaupunkt 3001 Digital Cassette Deck Dolby/auto scan, 12 sta mem/clock, lock rev & ff, metal capability, spkr cntrol, 4 spkr sys, \$250/best. Steve, x3-2806 or 666-3131.

Old sofa bed, \$50. Call 253-8068 or 489-0176. Raleigh record, 10 spd bike. Call 494-1430. HP-11C calculator, exc cond, ed little, \$60/best. Call x5-8894 after 6pm.

Stereo components, must sell dynaco 3-way ldspkrs, \$180/pr, Heathkit integrated amp, 50 watts, RMs per channel, \$170. Dan, 738-7974 after 6.

Konica 35 mm autoreflex T3 (black only), w/50 mm F104 lens, 28 mm F2,8 lens, 100 mm fl.8 & access, exc cond, price negot. Must sell. Call x3-1606 or 07.

70" sleeper couch, off wht fabric w/blue piping, side bolsters & skirting, 1 yr old, exc cond, \$700. Hazem, x3-1420 or 491-

Men's precision roller skates, \$60, new hardly used, sz 9-10, \$35/best. Steve, 536-1300.

X-country skis, Hart Classic, waxable fiberglass, 205 cm, too long for me, you should weigh, 125 lb, mounted 3 pin bindings, used 10 times, \$50. Chris, x3-3593 or 497-9589

King sz mattress, box spring & frame, on casters, sheets, dust ruffle, blanket & mattress cover, all \$50. Fran, x3-7287.

Boys Ross Apollo 20" 3 spd bike, hand & coaster brakes, basket, practically new, \$75; women's 3 spd Raleigh sport, 26", like new, \$90/best. Call 862-3952.

Set of 2 tires, 6,00x15 non radial, low mileage, on Volvo whls, fits up to '74 Volvo, \$60. Call x3-3140 eves or 862-5561.

8 pc ornate DR set, Paine's incl custom pads & 3 lvs, \$750; Scand 6x9 red wool rug w/pad, \$150; mod blk recliner, \$90; baby change tbl, playpen, slide. all exc cond. Call 862-6329.

Twin mattress, \$25; Wilson, Jack Krammer, tennis racquet, press, cover, \$40; Good Year Tiempo new tire, P155/80R13, \$35; lined winter coat, sz 5/6, \$20; Koss hdphones, \$20; table lamps, irons, \$5; wicker basket, \$15. Mumu, 437-4526 or 253-6442.

Spks, top of the line, Realistic 50 watt gd sound, gd cond, \$15/spker. Jim, x5-6651 mornings best.

New Everready 732, 12 volt lantern battery, never used, less than half price, \$5. Larry, x3-3939.

Furniture, dbl bed, \$80; dining tbl w/4 chrs, \$100; convertible sofa, \$160; sml tbles, \$20 & \$10; radio cassette, \$60; 3 spd bike, \$70; TV set B&W, \$60; K appliances, avail end of May. Call 494-1102.

Men's 19" ten spd bike, compl reblt, \$140. Tim, x5-7408 or lv message, x5-7449.

way Amtrak ticket from Boston N.Y.C. must be used by April 26th, \$18/best. Brad, x3-6298.

Qn sz bed, mattress, frame, box sprg, \$50; plus sheets, pillow cases, matching dust ruffle, \$65. Don, x8-3548.

Canon movie camera w/zoom lens & case used once, \$90; Bundy clarinette, \$125; yellow wing chr, \$15; 2K wall cabinets dbl doors, \$20/ea; oriental rug. made in Pakistan, pd \$850, sell \$450 Call x3-6085.

Brand new tanneau and 1/2 tanneau covers for MGB vehicle, never used, \$250/best. Adele, 245-1969 after 7pm.

pile. 12-0 Rugs, 1 dark brw

TRS-80 model I, \$120; AiWa walkman, exc cond, \$95. Ray, 225-9278 or 494-9128. Yellow trestle tbl & benches, \$25; Quartz hter, \$20; Sears humidifier, \$10; Crockpot, \$5; 5-gal aquarium, used for plants, \$3; women's 3 spd bike, \$10; desk, \$10. Mary, x3-7217.

HP-97 calculator, \$200; sz 9½ E Chippewa, Vibram-soled, insulated bts, \$25, exc cond, prices negot. Kem, x3-6082 or 782-7515.

New cloths dryer, Whirlpool, elec, 4 cyl, best offer over \$300. Patti, x3-6975 or x3-

Aquariums, Two 29 gal all glass tanks w/step stand, hoods, filter, and gravel, \$110/best. Darryl, x7543 Lincoln.

Two mahogany step end tbls, 1 damaged but fixed mahogany coffee tbl, all 3 units for \$60. John, 183-270.

VW tires, 4 exc used + 1 fair tire on rim, sz 600x15, \$50 for all. Call x3-4978.

Vehicles

'69 VW Beetle, reliable local transp, 115K on reblt engine, new tires, nds rust repair, \$300. Tony or Sue, x7275 Lincoln.

'69 Valiant, 2 dr, slant 6 cyl, standard transm, body & mech fine, vy reliable must sell, new car here, \$400. Tom, 776-0223

'70 BMW 2002, runs well, nds new battery, some rust, \$600. Mark, x3-3356. '70 Chev Impala, oldie but goodie running cond, \$400/best. Call x3-4315 or 494-8570.

'71 Mercury Comet, wht, 76K, p/s several new parts, gd running co \$600/best. Call x3-3438 or 492-5162.

'71 Chevy Malibu, 83K, runs gd, body OK, 3 extra tires & ski rack incl, \$600/best. Murthy, x3-3222 or 494-1443. '74 Ford Pinto, autom trasm, 78K, runs great, well maintained, many new parts, body rusted, must sell, bought another car, \$400. Dan, x4432 Lincoln or 738-7949 eves.

'74 Ford Gran Torino, runs gd, nds muffler, \$300. Marilyn, x3-6829.

'74 Chevelle Laguna, 350 auto, wht w/maroon stripes, a/c, AM/FM w/8 track tape, tilt whl, new carb, tires, brakes & exhst sys, some rust, vy dependable & well maintained, 74K, \$1,400. Judy, x2374 Lincoln.

'75 Olds Starfire, no rust, p/s, p/b, a/c, AM/FM stereo cassette, V-6, new radials, transmission, clutch, brakes, muffler, battery, 80K, exc cond, \$1,900/best. Steve, 536-3931.

⁹75 Honda Civic, 4 sp, 50K, nds body work but mech sound, \$700. Call 643-8711 after 6pm.

'76 Triumph Spitfire, conv, 45K, new battery, muffler, vy gd cond, \$2,300/best. Roman, x3-6489 or 484-0307 after 7pm.

'76 VW Rabbit, 1 owner, 87K, AM/FM cassette, gd cond, \$1,650. Bing, x2895 Lincoln.

'76 Dodge Wagon, gd cond, \$950/best. Call 527-3723 after 6pm. '77 Datsun Sedan, gd all around, \$2,300/best. Bill, x3-2776. '78 Honda Accord, low mileage exc cond, 5 spd, a/c, \$3,750. Barbara, x3 4003 or 497-6117 eves.

'78 Mercury Zephyr station wgn, exc d, autom transm, 8 cyl, p/s, cond, loade p/b. AM/FM cassette, roof rack, a/c, rr defrost, radials w/snows, rust proof, recent tune up, new exhst sys, \$3,000/best. Candy, x3-6275.

'78 Ford Mustang, 35K, dark blue w/yellow stripes, perf cond, in/out, beaut look, eng, runs perf, rust proof, protected by Identicar, AM/FM, 8 track stero, snow tires, \$2,950. Call 494-1102

'78 Plymouth Horizon, 4 dr, autom, p/s, p/b, a/c, AM/FM, exc cond, 26K, \$2,950. John, x8-3955, Draper.

'79 Chevy Luv 4 whl dr pick up, blck, sun roof, aux lights, slding rr window, 4 new exc cond, 48K. Rick, x2740 tires, Lincoln.

'79 Dodge Omni hatchback, 60K, 4 dr, 4 spd wht/lt blue int, some new parts, runs, nds work, as is, \$1,500/best. Linda, x3-7845, 9-5.

'79 Toyota Celica, GT, lift back, 4 cyl, 5 spd, a/c, rust proof, alarm sys, exc cond, \$5,695/best. Mike, x3-4765, 8-5.

'79 Honda Civic CVCC, 5 spd, 48K, no rust, vy gd cond, \$2,950. John, x3-4200, or 547-3937.

'80 Mustang, hatchback, drk red, low mileage, 16K, manual transm, 6 cyl, tape deck, gd cond. Call 566-5599.

'81 Datsun 210 wagon, many extras, 13K, exc cond, \$4,500/best. Call x3-

Rosslyn, VA condo w/view of park & monuments, quiet, clean, comfy, 6 min walk to Metro, 2 BR, 1 B, cac, w/w, dswhr/dspsl, pking. Call 703-276-9523 eve/wkend.

Saugus, 3 lg BR, fp LR, DR, eat-in K, 1 B, hrdwd flrs, lg priv yard, 20 min to Camb, nr rts 93 & 128, owner selling, \$77,500. Kitty, x3-6166.

A gentle foreign scholar is looking for shelter in native American family in the suburbs after summer, possible part time help for housework. Call 876-4018. Weston, summer rental 2/3 months, 20 min MIT, contemporary 3 BR, 2½ B, hse in country setting, exc town recreational fac, \$750/mo. + util. Call 235-2955 or x3-7586.

Wanted

Childcraft library & dictionary published by World Book, offer, \$100 depending on cond. Ed, x3-3456 Lincoln or 275-9265.

3 BR apt/hse for June, July & Aug, in Camb/Brookline area, pref back yd, will consider awap in Denver, Colo. Dave, x3-7947.

MIT working mother needs experienced babysitter on campus immed for infant of 1 month, vy gd pay. Call 1-586-4762. Job Hunters. Training & Support Group. Carl, 876-5085.

Day care needed for 5 mo old infant, M-F, in Cambr area, pref surrounding w/other infants/children. Lorrie, 956 0320 or 576-2676 eves/wkends

French girl, 23, visiting the States in August, looking for family to date her as a paying guest. Call 494-1102.

Mature woman, active with enthusiasm for life, but bereft of family, seeks room & board w/Christian family, would have much in common with MIT family. Coll x 34105 family. Call x3-4105.

Lost and Found

Lost: a book Interpretations of Fascism, writen by E. De Felice, was lost around Lobby 7 on March 24. It's for term paper, very urgent. Wu, x3-3886.

Roommates

Arlington professional male, 28, seeks professional female/male non smoker, for roomy 2 BR apt, in hse nr center, T, no pets, \$262.50/mo + util. Nick, x2712 Lincoln or 641-1791 eves/wkends.

Female, 25+, easy going, responsible, wanted to shr sunny Central Sq apt avail immed, conven to MIT, T, shops, \$225/mo incl 2 rms, all util. Sabrina, x3-7385 after 4pm.

Watertown, F. 29, looking for non smoking F rmmte to shr 2 BR apt, nr River & busses, avail 4/1, \$238/mo incl util. Call 924-5405.

M/F wanted to shr lge 4 BR hse in Brighton, nr T, lge attic, basement, yard, wshr/dryr, \$237/mo + util. Call 783-2675.

Miscellaneous

Job avail for typist, nd 20 cassette tapes transcribed during month of April. Roz.

491-3474, 8am or 10:30am best time. Person who bought BSO tickets for 4/27

note date change to 4/25. Will type theses, term papers, etc. reasonable rates. Call x3-7303.

French lessons, grammar, literature,

conversation, can be tailored to your needs, French native, master of art from the Sorbonne. Call 646-7369.

Hardworking dependable students to provide professional service for you. Kyle, 267-9287.



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.

Administrative and Academic Staff

Administrative Officer of the Center for Transportation Studies, to take responsibility for financial management as well as personnel and space administration in this interdisciplinary research and educational body. Will oversee monitoring of research contracts and preparation, submission of propo-sal packages. Involves working closely with MIT faculty and staff, numerous MIT departments, and professionals from outside agencies. Requires mini-mum of 3 years related experience along with excellent interpersonal and orga-nizational skills. Bachelor's degree preferred. A270

Dental Hygienist for the Dental Service of the MIT Medical Department. Will perform initial examination and charting, prophlaxis, peridontal treat-ment, plaque control. Will also take and process dental X-rays; screen dental emergencies; conduct patient education programs; and occasionally assist with dental procedures. Candidates must be registered dental hygienists, with preferably an AB or BS in Dental Hygiene. Excellent interpersonal skills vital for continual interaction with patients and staff. Directly related experience plus some background in peridontal care preferred. Recommen dations important. NON-SMOKING AREA C082

Sponsored Research Staff

Technical Assistant (part-time), Center for Cancer Research, to handle production and quality control of cell culture and bacteriological media. Involves preparation of media accord-ing to specific needs of approximately 15 researchers of immunology laboratory, as well as maintaining adequate stocks of various media. Requires BS or BA in Biology or Chemistry, along with capacity to follow instructions accurately. Meticulous work habits vital vital. Familiarity with sterile techniques helpful. R1025

Research Specialist, who will opera an Ortho Diagnostics System 60H within the Cell Sorter Laboratory of the Cell Culture Center, Will also collaborate with interested individuals while taking full responsibility for operation, maintenance and new procedure devel-opment for this established service facility. Candidates must have BS in Biochemistry or Biophysics, along with experience in a wide variety of applications, some understanding of inter-active software, plus ability to communicate easily with untrained users. Capacity to function independently essential. Two to three years background operating cell sorters preferred. R1024

Computer Manager for the Research Laboratory of Electronics, who will manage the computer facility of the Digital Signal Processing Group; develop and maintain operating system programs, application software and hardware for research in digital processing; maintain audio and picture processing facilities; supervise purchase of equipment and supplies; take charge of computer documentation and backup; as well as assist students and staff in using facility. Involves few recurring outside contacts. Requires BS in Electrical Engineering & Computer Science, along with a year's work experience, or equivalent computer experience while in school. Some experience with Berkeley UNIX, PDP 11 and VAX-750 preferred. R1023

Research Scientist, Spectroscopy Laboratory, to conduct investigations into use of lasers and fiber optics in specialized surgical techniques. In ddition, will assist other researchers at MIT Regional Laser Center, working closely with graduate students, technicians, medical doctors, etc.; as well as organizing and pursuing research programs. Involves coordinating efforts of other scientists and technicians. Candidates must have PhD in Physics or Chemistry with broad background in lasers, optics and spectroscopy. Mini-mum 3 years experience with pulsed UV/visible/IR laser systems and CW ion-dye lasers, plus expertise in optical imaging techniques and spectroscopic analysis crucial. R1022

Technical Assistant, Whitaker Col-lege of Health Sciences, Technology & Management. Will participate in research directed toward understanding of mechanisms by which animal cells process extracellular macromolecules, including hormones such as insulin, transport proteins such as transferrin h as major terol carrier, LDL. Primary duties include isolation of lipoproteins and lipoprotein-deficient sera from plasma and the preparation of media for growth of cells in culture. Other duties may include laboratory maintenance and assisting with biochemical experiments. Candidates should have BS in Biology. Exposure to biochemistry, cell biology animal physiology, as well a and laboratory experience using basic techniques of pipets, balances, pH meter and preparation of buffer solu-tions preferred. R1019

rience in electrical engineering, includ-ing signal processing, and computer science, plus RSX/11M and VMS operating systems essential. Participa-tion in research through interaction with staff and students will be encouraged. R1018

Research Associate: Statistician, Sloan School of Management, in the Center for Computational Research in Economics & Management Science. Position focuses on expert computing in statistics and econometrics with strong graphics emphasis. Requires PhD in statistics or econometrics, as well as strong computational training and experience. Knowledge of TROLL and LISP preferred. R1012

Instrumentation Engineer, Labora tory for Nuclear Science, to join small engineering team in support of group of physicists performing high energy physics research (group part of international consortium of universities design ing, constructing and operating particle detectors). Will work under supervision of team leader; interact with physicists, engineers and technicians involved in designing, developing, installing and testing electronic instrumentation for monitoring, control, data acquisition and data reduction in experiments conducted at domestic accelerator sites. Involves participating in upgrading of current systems as well as travelling to experimental sites for equipment checks. Candidates must have BS in Electrical Engineering plus 3 to 5 years experience with formal training and/or experience in one or more of the following: analog circuit design, including low-level amplification and detection; signal digital logic design using ECL, MOS, TTL, integrated circuits; interfacing to micro/mini computers including associated software for diagnostic/test purposes; fabrication and packaging techniques for electronic instrumentation. Good communication and documentation skills preferred. R1011

Research Associate: Technical Manager, Electrical Engineering & Computer Science, who will participate in development of laboratory and will later manage it on behalf of its Director and in cooperation with chief administrator. Major responsibilities include development and maintenance of processes for fabrication of advanced integrated circuits, as well as specifying equipment and developing computer aided management system. Position has supervisory authority over support-ing staff of technicians and equipment nent operators. Requires advanced degree in relevant field with 5 or more years experience in IC processing, plus working knowledge of latest related equipment. Demonstrated capacity for mature decision making and excellent interpersonal skills vital for leadership role in this technical research setting. Position calls for continual interaction with faculty, students and other re-search staff. R1009

Library Support Staff

Library Assistant IV (part-time and temporary), Laboratory for Computer Science, to file catalogue cards; discharge and shelve library materials; assist in online cataloguing; answer routine reference questions; provide other user services; assist in production of acquisitions bulletin; and perform other duties as required. Applicants must have 2.5 years related experience, or an equivalent combina-tion of education and experience. Good interpersonal skills along with sufficient organizational ability to manage tasks with minimal supervision needed. Data entry background plus knowledge of computer science preferred. NON-SMOKING OFFICE B2193

Secretary/Staff Assistant

Administrative Secretary, Urban Studies & Planning, to provide admin-istrative and secretarial support with one other support staff member. Will proofread and type reports, manuscripts, correspondence, etc.; arrange meetings, seminars, and travel; reproduce reports and class materials; collect and prepare data for reports and correspondence; set priorities for handling work generated by 7 faculty members. Involves provid-ing occasional general support in completing departmental office work Requires 4 to 5 years relevant experi-ence or an equivalent combination of education and experience. Excellent typing and general office skills neces-sary. Ability to order priorities and delegate responsibility also important. Word processing helpful. B2217

ability needed for managing substantial workloads despite frequent interruption. Command of English grammar also important. B2211

Sr. Secretary (temporary: April 15

through August 15, 1983) in the Office of the Dean for Student Affairs

Will provide office support for the

Associate Dean in charge of Residence & Campus Activities as well as for the Program Coordinator in charge of

Dining & Residence programs. Will answer inquiries regarding housing, and have substantial contact with

students and other members of the MIT community about related matters. Involves developing thorough knowl-

edge of departmental and Institute resources in order to provide proper referral service to students. Candidates

must have 2.5 years direct/related

secretarial, proofreading and interper-sonal skills essential. Discretion in handling confidential information plus

willingness to perform word processing

also important. Familiarity with MIT helpful. This is a busy, non-smoking

Sr. Secretary-Technical, Mathe

matics, to perform secretarial services for a group of 10 to 12 faculty members.

for a group of 10 to 12 faculty members. Will answer phones; photocopy; type class notes, teaching materials, corre-spondence and manuscripts; assist faculty members who edit professional

Jacuity memory who can protessional journals with work on same; and occasionally assist other office support staff persons when necessary. Requires 2 to 3 years applicable experience, or an equivalent combination of education and experience. Excellent general twning skills essential: technical twning

typing skills essential; technical typing

experience preferred. Excellent secre-tarial skills, including the ability to function with minimal supervision,

Sr. Staff Assistant, Research Labora

tory of Electronics, to provide general

secretarial and administrative support to 4 faculty members. Will perform

general and technical typing; manage office; arrange meetings and appoint-ments; answer and oversee handling of

telephones: receive and screen visitors:

photocopy; provide liaison with other Institute offices and departments; and

interact continually with faculty, students and staff. Requires 2 to 3 years applicable experience, or an equivalent

mbination of education and experi

ence. Strong typing and interpersonal skills essential. Well developed organi-

zational ability also needed for manag

Sr. Staff Assistant, Research Labora-

tory of Electronics, to assist in Docu-ments & Publications Group. Will type

manuscripts, technical reports, corre spondence, etc. on text editor; assist in preparation of annual report and other

publications; prepare purchase orders; process books and journals; maintain collections; and develop familiarity

with all phases of Document Roon

experience, or an equivalent comb

operation. Calls for 2 to 3 years related

tion of education and experience. Good

typing and general office skills needed. Knowledge of or willingness to be

trained on text editor essential also. This is a busy, non-smoking office.

Sr. Secretary, Humanities & Social Science, to handle all record keeping for course XXI students, as well as monitor

their registration. Will provide liaison with Registrar's Office, Curriculum

Committee, as well as between student

and faculty counselor. Will keep records of theses proposals; handle delivery, deposit and use of same records;

arrange policy committee meetings; prepare reports, statistics; handle

correspondence for 1 faculty member

share receptionist duties with one other support staff member. Requires 2 to 3

years direct/related experience, or an

equivalent combination of education and experience. Excellent typing, interpersonal, and organizational skills

essential. Word processing skills also

Sr. Secretary, Humanities & Social Science, for central position in this busy undergraduate office. Will answer

phones; respond to inquiries from students, faculty and staff; disseminate

information about courses and pro

grams; share receptionist responsibility with one other support staff person;

handle student payroll; arrange film screenings; and perform other related duties as assigned. Applicants must have 2.5 years related experience or an equivalent combination of education and experience. Good typing, organiza-tional and general office skills vital

tional and general office skills vital. Pleasant telephone manner and capa-city to function with minimal supervi-

sion also important. Word processing.

their

vital. B2200

B2199

ing office independently. B2208

experience or an equivalent combin of education and experience.

helpful.

office. B2210

vital. B2209

\$250 and 1 yellow 9x12 pile, \$40, both gd cond. Phillips, x7680 Lincoln.

Kitchenaid dshwshr, \$100; Westinghse, dryer, \$100; Sears wsh/mch, \$80; Frigidaire Refrig, \$50; match couch & chr. \$75. Gina, x3-6557.

Fabiano hiking boots, sz 9, used 1 season, orig, \$80, sell \$50/best. Call 494-8683.

Wood desk, \$50; Sony fan, \$30; b shelf, \$15; desk lamp, \$5; bike lock, \$5; bk board, \$3-\$5/ea; new wool overcoat, \$50 & clothes, med, K uten. Call 876-4018.

Full bed, box sprg & mattress, \$50; twin bed, frame, box sprg & mattress, \$30; 3 tbl lamps, \$10/ea; 1 twin mattress, \$10. Call 566-7390 after 6pm.

Hitachi 8R 5010 stero recvr, 50 watts per channel, exc cond, \$180. Marcia, x5-8584.

9" GE B&W portable TV, old but good, \$25. Call 926-5784.

4 pc living rm set, lrge brw sofa matching chr, unusual coffee table matching corner tbl, asking, \$550. Call 648-1444

Pr Scott hi-fi spkrs, \$75; Royal typewriter, w/extras, \$200; Sola 250-watt powerline isolator-regulator, \$60; B&D rotary saw, \$30; 12" green video monitor chassis, \$50. Martha, x3-2342.

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'81 Yahama, Chappy moped, auto transm, locking ign, kick starter, luggage baskets, windshld, twin rr view mirrors, driven only 1700 mi, vy econ, 75 mpg, \$495/firm. Call 646-4484.

Animals

Two puppies nd good homes, 9 wks old healthy w/first shots, gd dispositions, mother is an Australian Shepherd, father is a Labrador. Tony, x4878 Lincoln or 862-5936.

Housing

Cambridge, condo for sale, nr MIT, 1 BR, eat-in K, a/c, w/w over wood parquet, dshwshr/dspsl, laundry, elev, roof deck, gas heat, water, mod bldg, \$51,000. Connie or Mike, 926-5400.

Cambridge, East, apt sz hse, newly renov, 2-3 BR, eat in K, B, sml yd, walk to Kendall Sq., hi-effic gas ht, \$625/mo+ util. Call x3-8067.

E. Falmouth, waterview, new, 8 rm colonial, 2 B, w/dshwshr/dspsl, \$500/week. Call 862-6732.

Lincoln, sale or rental sharing, major solar extension, active & passive and pool space, large 3 BR, 2 B, SR & DR, lg glass sun rm, \$200,000. Call x3-2308.

Paris, house for rent, date avail flex, July '83 to July 84 five BR, garden, nr schools, nr train station, 10 min to Paris by train. Call 926-0758.

This list includes all nonacademic jobs currently available on the MIT campus. Duplicate lists are posted on the Women's Kiosk in Building 7. outside the offices of the Special Assistants (10-215, 10-211) and in the Personnel Office (E19-239).

Persons who are NOT MIT em-ployees should call the Personnel Office on extension 3-4251.

Employees at the Institute should ntinue to contact their Personnel Officers to apply for positions for which they feel they qualify.

Pat Williams	3-1594
Ann Perkins	3-6511
Dick Higham	3-4278
Appointments:	
Deborah Reate	3-4270
and the second second	11. 19. 19. 19.
Virginia Bishop	3-1591
Susan Gaskell	3-4266
Ken Hewitt	3-4267
Appointments:	
Lauren Stevens	3-4268
Sally Hansen	3-4275
Vera Ballard	3-4277
Kenneth W. Chin	3-4269
Appointments:	A STATISTICS
Kate Young Caley	3-4274

Manager of Communications Research Computer Facilities, Re-search Laboratory of Electronics, to take responsibility for overall operation and maintenance of computer systems used for research in hearing and speech communications. Will handle mainte-nance of RSX and VMS operating systems running on PDP/11 and VAX computers; involves doing sysgens, installing autopatches, and writing device drivers. Other responsibilities include installation, integration and maintenance of utilities for scientific programming and statistics; applicaand scientific program ming including interactive real-time graphics and sonics; supervision of technical support staff in maintenance of hardware, documentation and user assis tance: as well as interaction with service personnel in troubleshooting. Requires master's level training or equivalent background in electrical engineering & computer science: Expe-

Sr. Secretary (17.5 hrs/wk), to provide secretarial and administrative support for one faculty member in Mechanical Engineering. Will prepare technical manuscripts and reports; distribute similar materials; answer telephone inquiries and correspondence; compile, edit and produce departmental calendar of events; prepare teaching materials; as well as interact with students and with agencies funding research. Calls for high school graduation or the equivalent, along with 2.5 years direct/related experience, or an equivalent combination of education and experience. Excellent technical typing and organizational skills capacity to manage detailed tasks independently vital. Good interpersonal skills also essential for functioning in this busy, non-smoking office. Knowl edge of basic accounting important. Familiarity with MIT helpful. B2214

Sr. Secretary who will provide office support for the Deputy Director and other staff members within the Center for Transportation Studies. Will perform office duties in center headquarters, including typing, arranging travel, processing mail; arranging weekly luncheon seminars; and performing related duties as assigned. Applicants must have 2 to 3 years direct/related experience, or an equivalent combination of education and experience. Strong typing, business and general office skills essential. Organizational

Sr. Secretary, Laboratory for Com puter Science, to perform variety of secretarial and administrative duties. Will serve as information resource for laboratory; receive visitors; cover phones; type, edit and proofread manuscripts, reports, correspondence, etc.; arrange appointments, conferences, seminars and travel; update office and computer files; and perform other related duties to ensure coverage of Director's and the administrative office. Applicants must have 2.5 years relevant experience, or an equivalent combina tion of education and experience. Good interpersonal skills as well as attention to detail vital. Organizational ability essential also for managing workloads while meeting deadlines. Involves handling sensitive information with discretion and learning computer system. B2192

Sr. Staff Assistant, Research Laboratory of Electronics, to perform complex secretarial duties for 1 faculty member. Will perform administrative functions during supervisor's absence. Will arrange travel and appointments; answer phones; provide reception handle expense reports; type technical manuscripts, tables, charts, correspondence, etc., from rough data and drafts; research references; proofread manuscripts; compose letters from verbal instructions; respond to standard inquiries from visiting scientists as well as MIT faculty, staff and students. Applicants must have 2 to 3 years direct/related experience, or an equiva-

Katz drawing added to MIT collection

A drawing by the widely known American artist, Alex Katz, has been given to MIT by the American Academy and Institute of Arts and Letters

Entitled "Study for Ada and Flowers," pencil on paper, 143/4 by 22 inches, it was drawn by Mr. Katz in 1980. MIT was one of 16 institutions honored this year by the Academy-Institute's Hassam and Speicher Purchase Fund Program. The drawing will become a part of the MIT permanent collection, administered by the Committee on the Visual Arts.

This is the first year that MIT, through the Hayden Gallery and the CVA, has been asked to participate in the unusual gift program in which museums and university galleries are invited to recommend painters whose work they wish to acquire. The Academy-Institute invites the chosen artists to submit work to an exhibition from which selections for purchase are made by a jury of Academy-Institute members. Founded in 1898, the Academy-Institute has a membership limited to 250 Americans selected for their achievement in art, literature or music.

Born in New York in 1927, Mr. Katz studied at the Cooper Union Art School of New York and the Skowhegan School of Painting and Sculpture in Skowhegan, Maine. His work is

lent combination of education and experience. Strong general and techni-cal typing as well as organizational bills generated P0191 sential. B2181 skills

Secretary to the Head of Urban Studies & Planning Department. Will type correspondence, reports, manuscripts and teaching materials, arrange appointments, committee meet ings and travel; maintain files: answer phones; and perform word processing as needed. Requires high school gradu ation along with a minimum of a year's related experience, or an equivalent combination of education and experience. Excellent typing, organizational skills essential. Good interpersonal ability and sense of discretion in handling confidential information also vital. Knowledge of or willingness to here used necessing importent B2206 learn word processing important. B2206

Secretary (part-time), Council for the Arts, to provide secretarial support and reception for busy office of several administrators and volunteers. Will perform heavy typing of correspondence, memoranda, and reports; answer phones process mail; file; photocopy; handle large mailings; receive visitors; and assist with special projects as assigned. Calls for discretion in handling confi-dential material. Applicants should have 2 to 3 years relevant experience or an equivalent combination of education and experience. Excellent typing, proofreading and general communica-tion skills vital. Good interpersonal ability also important for functioning in this busy, non-smoking office. B2205

Technical Support Staff

Sr. Technical Artist, Plasma Fusion Center, to create technical illustrations and creative graphics materials for publications, presentations and dis plays for the Alcator Research Program Duties include laying out and inking charts, graphs, schematics or free-hand illustrations using color, or black and white, or leroy lettering. Will create drawings from rough sketches, blueprints or actual machinery, and plot curves from data provided. Includes construction of isometric and orthographic projections of technical equip-ment and ability to use computer graphics output device. Will write supplemental software and develop a user-oriented computer graphics filing system. In addition, will coordinate use of photography, printing and typeset ting services when needed. This individual must have experience in technical illustration; be familiar with state-ofthe art typography, printing and photo graphic processes; and able to spec type for publication or large display graphics. Experience with a pen plotter and/or experience in computer graphics is highly desirable. Must be able to work independently and meet deadlines. Some overtime expected. B2198

Dental Assistant (through 9-9-83). who will assist in MIT Dental Service. Position reports to Head Dental Assistant. Will assist dentists and dental hys with dental dures; prepare required solutions; sterilize instruments; maintain examining rooms; and assist with record the rooms; and assist with record keeping. Requires high school gradua-tion as well as completion of an approved dental assistant program. Two to three years as a dental assistant or an equivalent combination of education and experience essential. Strong interpersonal abilities as well as capacity to function as team member important. NON-SMOKING AREA represented in the museums and art centers of many American cities as well as in Mexico, Israel and Europe. An exhibition of his paintings is currently on view at the Marlborough Gallery in New York.

Panel to discuss institutional funding

The third of four discussions at MIT on the effect of outside funding on universities will be held Monday, April 11, at 4pm in Rm 9-150 and will be chaired by Walter A. Rosenblith, Institute Professor and Provost Emeritus.

Panelists for the session, entitled "Impact of Funding Sources on MIT: Education, Research and Public Service," will be J. Herbert Hollomon, Japan Steel Industry Professor of Engineering and former director of the Center for Policy Alternatives; Charles P. Kindleberger, Ford International Professor of Economics, Emeritus; Jonathan A. King, professor of biology; David F. Noble, associate professor of the history of technology, and Thomas B. Sheridan, professor of engineering and applied psychology. An informal supper and discussion will follow the meeting.

proofreading skills also vital. Experience in or willingness to be trained in word processing important. Position orking toward deadlines. **NON-SMOKING OFFICE B2207**

Administrative Assistant for the Architecture Machine Group, to handle financial affairs of group. Will handle financial affairs of group. Will prepare monthly budget projections, reports, financial statements and data; have regular meetings with Director regarding general finances; monitor lab. expenditures; prepare travel and transfer vouchers; handle cash and monthly salary distribution of person-nel; maintain financial records; prepare and annotate hudget pronosale keen and annotate budget proposals; keep abreast of changing MIT accounting guidelines; type to support own work as needed; and perform some general office procedures in this busy setting. Appli-cants should have 4 to 5 years related experience, or an equivalent combina-tion of education and experience. Strong accounting background and interest in computers important. B2201

Service Staff

Sr. Electronic Technician, National Magnet Laboratory, to assist in laboratory research or analytical work under supervision of scientific personnel; operate highly technical apparatus; may direct and train technicians of lower grade; has understanding of the theoretical aspects of experiments; has demonstrated outstanding skill and performance in this field; requires little or no supervision; will construct and test complex electronic equipment for laboratory research under direction of scientific personnel (equipment to consist of HF and VHF transmitters and receivers, both computer controlled, which are components of nuclear magnetic resonance imaging systems). This individual will design and lay out printed circuit board artwork; as well as construct the apparatus and perform final tests. Requires graduation from 2 year day technical school or its equiva-lent plus minimum of 5 years applicable experience. Strong background in HF-VHF and analog electronics with some digital experience essential. Experience with printed circuit board network desirable, but individual can be trained. H798

Sr. Detailer, Plasma Fusion Center, to prepare detail drawings, assembly drawings and material lists. Includes some layout and graphic art work of ink illustrations and graphs for publica-tions. Will work from Engineer's layouts, sketches and verbal instructions. This individual must have a high school diploma and working knowledge of tolerancing, symbols for machined surface quality, welding, parallelism, perpendicularity and concentricity. Five years experience and two years of day-technical school, or some formal drafting courses, preferred. H797

Shop Helper B, Chemical Engineering, who will assist a project machinist, technician, other skilled employee or staff member in the performance of general shop or laboratory work. Under supervision, may be required to operate or maintain shop tools or laboratory equipment; assist in cleaning equipment and performing miscellaneous work necessary to the shop or laboratory which may not require the service of a project machinist, technician or other skilled employee. Vocational or cooperative school training preferred. H791

SPONSORED

RESEARCH STAFF: R1002; R1003; R1004, Technical Assis tant, Laboratory for Computer Sci-

ence R983, Research Associate, Materials

Science & Engineering R981, Bioengineer/EEG Technologist, National Magnet Laboratory R1005, Research Specialist, Earth &

Planetary Sciences R1001, Sponsored Research Staff, Haystack

R988, Experimental Physicist, Center for Space Research R987, Posdoctoral, Center for Space

arch Re R986, Postodoctoral, Center for Space

Research

R984, Research Associate, Chemistry R983, Research Associate, Materials Science & Engineering

R975; R976, Jr. Electrical Engineer, Center for Space Research R966, Research Scientist, Plasma

Fusion Center R731, Research Associate, Technology

Adaptation Program R959, Research Scientist, Nutrition & Food Science R957, Digital Logic Programmer, Lab-

oratory for Computer Science R955, Organic Chemist, National Mag-

net Laboratory R943, Postdoctoral, Center for Space

Research R942, Postdoctoral Fellowship, Re-

search Laboratory of Electronics R940, Research Associate, Research Laboratory of Electronics

R934, Accelerator Controls Engineer/ Physicist, Laboratory for Nuclear

Science R927, Research Staff, Laboratory for

Computer Science R926, Research Staff, Laboratory for

Computer Science R925, Magnet Design Engineer, Na-

tional Magnet Laboratory R923, Research Scientist-Experimen-tal, Plasma Fusion Center R922, Research Scientist-Experimen-

tal, Plasma Fusion Center 917, Research Scientist-Experimental/Theoretical, Plasma Fusion Cen-

R913, Research Specialist, Artificial

Intelligence Laboratory R896, NMR Imaging Scientist, National Magnet Laboratory R825; R826; Sponsored Research Staff

(postdoctoral), Laboratory for Nucle-ar Science

R873, Sponsored Research Staff (En gineer/Applied Physicist), National Magnet Laboratory

R857, Research Specialist, Artificial

Intelligence Laboratory 856, Research Scientist, Artificial R856, Intelligence Laboratory

R855, Research Scientist, Artificial Intelligence Laboratory R835, Research Associate, (beginning

12-1-82), Physics R434, Systems Programmer, Laboratory for Computer Science

R397, Biomedical Engineer, Depart-ment of Mechanical Engineering

SECRETARY/STAFF ASSISTANT A2164, Administrative Secretary in the Center for Information Systems Re-

B2187, Sr. Secretary, Aeronautics &

Wadleigh to resign as VP, dean

(continued from page 1)

associate provost. In his new role, he will have increased responsibility for policy and program coordination in the area of undergraduate education as well. "Under this arrangement," Dr. Gray said, "one senior academic officer will have responsibility for all Institute-wide issues relating to undergraduate and graduate education.

As dean of the Graduate School, Professor Perkins will be working with Dr. John Turner, associate dean for program development, and Ms. Jeanne Richard, associate dean for administration, in identifying and addressing issues which arise from the changing patterns of education and support for graduate students in the 1980s. MIT's regular graduate students now number some 4,400, compared with 4,500 undergraduate students.

As vice president, Professor Wadleigh has had administrative responsibility for the Medical Department, which will in the future report to Vice President Constantine B. Simonides; for the Division of Comparative Medicine, which will report to Associate Provost and Vice President Kenneth A. Smith, and for the Registrar's Office, which will report to Jack H. Frailey, director of Student Financial Services. This latter change is expected to facilitate increased coordination between the financial aid, student account and registration areas.

As vice president, President Gray noted, Professor Wadleigh oversaw the development of the MIT Health Plan, a group practice health maintenance program that has more than 3,800 subscribers and provides health care for about 8,200 persons. Last year witnessed the move of the medical services into new facilities adjacent to the Whitaker College, and for the first time in nearly 20 years, the health care offices and the infirmary are in contiguous space.

Earlier in his tenure as vice president, Professor Wadleigh had major responsibility for coordinating the planning of student housing, both on and off campus. "Under his guidance," Dr. Gray said, "MIT's residential facilities were greatly enhanced, adding immeasurably to what Ken has called MIT's 'sixth School,' that is the extracurricular programs and activities of the Institute. He was instrumental in developing the housemaster-tutor programs in the Institute Houses-activities which have greatly enriched the quality of life here. His steadfast support of the independent residences, and his encouragement of the Independent Residence Development Fund, have enhanced the effectiveness of those essential components of our undergraduate housing system.'

Professor Wadleigh received the SB and SM degrees in mechanical engineering from MIT in 1943. He became an instructor in the Department of Mechanical Engineering in 1946 and an assistant professor in 1949. He received the ScD degree from MIT in 1953, was promoted to associate professor in 1954 and became a full professor in 1961. He served as dean of Student Affairs from 1961 to 1969, when be became vice president. He assumed additional responsibilities as dean of the Graduate School in 1975 when Professor Irwin Sizer retired from that post.

Dr. Edgerton remains best known, however,

for his stop-action photos, which have frozen

the rapidly fluttering wings of a humming

bird and "stopped" a bullet as it shattered a

Dr. Edgerton was born April 6, 1903, in

Fremont, Neb., and received the SB degree in

electrical engineering from the University of

Nebraska in 1925. He received the SM degree

from MIT in 1927 and the ScD degree in 1931.

After serving as a research assistant and an

instructor, he became an assistant professor

of electrical measurements in 1938 and full

professor in 1948. He was given the addi-

light bulb or smashed through an apple.

Doc Edgerton's birthday

(continued from page 1)

camera for the famous French explorer, Jacques Cousteau, in 1952, at the beginning of a long collaboration. In recent years, using side-scan sonar that reveals the shapes of objects on the ocean bottom, he helped find the remains of the Civil War ironclad Monitor. He also participated with his sonar in an attempt to solve the mystery of the Loch Ness Monster in Scotland.

Shortly after World War II, Dr. Edgerton was a founding partner, with two graduate students, of EG&G, Inc., of Wellesley, Mass., a corporation specializing in electronic technology. The three men-Dr. Edgerton, Kenneth J. Germeshausen and Herbert E. Grier, with their wives-have provided support for the EG&G Educational Center, now nearing completion on the MIT campus.

Workers' goals are outlined

(continued from page 1)

in the field, "it is a homogeneity that is particularly unlikely to fit the life situations of many young people beginning careers today. And, since the older and more traditional managers still set the tone in today's organizations, they tend to reinforce the existing pattern.

They do this, she said, by "assuming that what is true for them is true for all," and by presuming that what people do "is solely determined by who they are and by their basic, and probably unchangeable traits and competencies."

Managers also must guard against overreacting to new trends and adopting procedures "based on the exact reverse of traditional assumptions. Rather, Professor Bailyn says, it is the underlying assumption of homogeneity "that needs rethinking."

As an example of new procedures carried to an unwarranted extreme, she mentions an employee who is not offered a promotion requiring a transfer because his manager assumes mistakenly that he does not want to move-he has a son in high school-and therefore doesn't want to put him in the position of turning down a promotion.

Professor Bailyn believes the answer to the erall problem of career-family conf

because so-called "occupational investment" varies over a lifetime, as work and family

demands change, the negotiation itself needs

Obituaries

to be periodically renewed.

Professor L.J. Heidt

Dr. Lawrence J. Heidt of Arlington, associate professor of physical chemistry emeritus at MIT, died Monday (April 4) in the New England Rehabilitation Hospital in Woburn. He was 78.

A funeral Mass will be said in St. Agnes Church, Arlington, Thursday, April 7 at 9am.

Dr. Heidt received a bachelor of arts degree in physics and a master of science in PhD in physical chemistry from the University of Wisconsin. He did postdoctoral research at Harvard University from 1930 to 1935, when he joined the faculty at MIT. He remained at the Institute until his retirement in 1969,

tional title of Institute Professor in 1966. Although now emeritus, Dr. Edgerton maintains his laboratory and a daily schedule at

Office Assistant

Administrative Assistant to the Associate Director of the Resource Development Office. Will compose management reports, including monthly gift report, outstanding pledge summary, gift range tables, and project status reports. Will also research and analyze Treasurer's Office records in order to update reports on word processor and then distribute: process involves Development Office corporate, foundation and individual files. In addition, will proofread material generated by the several high level depart mental administrators as well as enter related data on word processor during high activity periods. Candidates must have 4 to 5 years of direct/related experience, or an equivalent combina-tion of education and experience. Excellent organizational, interpersonal skills plus attention to accuracy of detail essential. Strong writing and

The following positions were still available at Tech Talk deadline. Complete descriptions of all available positions are posted in the Personnel Office (E19-239), and at locations listed at the beginning of Positions Available section.

ADMINISTRATIVE AND

ACADEMIC STAFF: A269, Applications Programmer I, Information Processing Systems A268, Program Manager, Laboratory for Health Care Studies A266, Applications Programmer, Information Processing Services C081, Librarian I: Assistant Science Librarian for Processing, Libraries C080, Librarian I: Department of Transportation Liaison Librarian (part-time), Libraries A263, Managing Editor of Technology Review, Alumni Association C078, Postdoctoral Associate, Nutrition od Science A252, Area Manager for the Application Services' Section of Information Processing Svces. C076, Postdoctoral Associate, Nutrition Food Sciences A240, Sr. Systems Analyst, Information Processing Services

Astronautics

B2189, Secretary/Receptionist, Biomedical Engineering Center B2182, Sr. Staff Assistant, Sloan School of Management

B2181, Sr. Staff Assistant, Research Laboratory of Electronics B2180, Sr. Technical Typist (part-time),

Chemistry B2177, Sr. Secretary, Treasurer's Office B2171, Sr. Secretary–Medical, Medical B2132, Sr. Secretary, Biology B2151, Administrative Secretary-Technical to the Director of the **Plasma Fusion Center** B2122, Sr. Secretary, Biology B2111, Sr. Secretary, Medical

OFFICE ASSISTANT

B2162, Sr. Office Assistant: Data Tech nician, Center for Space Research

SERVICE STAFF

H793, Technician B (Electro-Mechanical), Plasma Fusion Center

H785, Sr. Technician (Electro-Mechan-

ical), Haystack

H771, Sr. Electronic Technician, Re search Laboratory of Electronics H779, Technician A (Electro-Mechani-

cal). Center for Space Research

H765, Instrument Systems Worker, Physical Plant

H768, Sr Electro-Mechanical Technician, Aeronautics & Astronautics H767, Machinist A, Nuclear Reactor

Laboratory H708, Machinist A, Mechanical En-

gineering H637, Engineer 2nd Class, Physical

lie in a system that provides for "negotiating careers.

"For example," she writes, "a technician can be assigned routine tasks or more complicated, responsible ones. The latter is more appropriate for an employee with high occupational investment, the former for one whose investment is low."

She continues: "Assignment to enriched jobs, therefore, should be negotiated on the basis of an individual's level of commitment to that job as determined by the person's assessment of interests and capacities in all areas of his or her life.'

Similarly, she says, managerial jobs ought to be able to accommodate employees with different levels of occupational interest. "Our usual assumption about managerial careers is that they continuously increase in the level of complexity and responsibility they demand. But this requires a continuous increase in the level of occupational investment for effective performance and individual satisfaction to be maintained. Otherwise, anxiety or underperformance will result."

In summary, Professor Bailyn suggests a process whereby individuals take responsibility for assessing their own priorities and translate this into the level of commitment they are willing and able to give to work. And

teaching courses in general and physical chemistry.

After his retirement, he joined the faculty at Emmanuel College for five years.

He had been a Guggenheim fellow in Japan and Australia. His research was largely in photochemistry, and he held patents for a sterile invert sugar solution used in intravenous therapy, as well as patents on procedures used in the electrical insulation of power cables.

He leaves his wife, Agnes (Kiley) Heidt; two daughters, Marianne Ockerbloom of Avon, Conn., and Barbara Ryan of Burlington, Mass., and a son, David J. Heidt of Marshfield.

Marion B. Oliver

A funeral Mass was held Monday, April 4, for Marion B. Oliver, 68, of South Burlington, Vt., who died March 29 following a long illness. Mrs. Oliver was a senior clerk in Physical Plant from 1946 until her retirement in 1977. She is survived by her husband, Joseph A. Oliver, and two brothers, Paul L. Casey of Burlington, and Daniel G. Casey of Lexington.

Access to president is available to all

The people who study, teach and work at MIT are a diverse lot, but all have one thing in common: easy access to the person at the top of the organization—President Paul E. Gray.

The mechanism for this low-barrier access is the open office time that Dr. Gray schedules from 3:30 to 5:30pm every other week. The specific day is announced in advance in Tech Talk and a 15-minute appointment can be arranged by calling x3-4665 or by going to the president's office, Rm 3-208, on the day of open hours.

During the 18 months that this practice has been in effect, Dr. Gray says he has met with "everybody imaginable"—students, physical plant staff, secretaries, administrative and academic staff members, research staff members and librarians.

That diversity surprised Dr. Gray, who had thought that nearly all of his visitors would be students. Most are, but 20 per cent of those taking advantage of the open hours have come from other segments of the MIT community. In a couple of cases his visitors had an indirect tie to MIT—they were married to employees or students. Three or four faculty members also have chosen the open office hours route to the president during the last 18 months, Dr. Gray said.

The president says he is extremely pleased at how well the open hours have succeeded in bringing him together with many people he would not ordinarily have an opportunity to meet. He has also found the meetings useful in dealing with the occasional unsubstantiated rumor that is accepted as reality because erroneous reports sometimes "develop a kind of currency and validity of their own."

Who comes to open hours and why? Dr. Gray gave this rundown on a recent afternoon's schedule:

-Eight members of the Association of Puerto Rican Students came in to tell Dr. Gray about their group, to explain its objectives and its efforts to make the group more visible.

Dr. Gray's next open office hours will be Tuesday, April 12, 3:30-5:30pm. To make an appointment, call x3-4665 earlier that day or drop by the reception area in Rm 3-208.

-Two students invited him to dine with their living group.

-Two graduate students expressed their concern about the format of commencement, the quality of the sound system, and the choice of musical selections.

Repeat visits are not unusual, Dr. Gray said. Several people have come twice and one person has made four appointments, "not because there is a problem, but because she wants to share with me her views on the Institute and how it operates," Dr. Gray said.

Visitors fall roughly into three categories, Dr. Gray said. There are those that have a well developed problem about a grade, a bill or some other matter; those that want to express a point of view on a given subject, ranging from tuition to thesis supervision, and those who come to get to know the president.

On two occasions, Dr. Gray noticed the names of people involved in formal grievance proceedings with the Institute among those who had scheduled appointments. He did not see those people to avoid prejudicing the grievance proceedings.

Dr. Gray says he has tried hard not to get involved in the loop of resolving problems. He has often identified for his visitor the appropriate person to see about the problem and in some cases has followed up with a phone call or a note to that person outlining what the visitor had to say.

Occasionally, however, a matter of concern to a visitor receives direct presidential involvement. Dr. Gray told of one such incident last fall when he was speaking at the 100th anniversary banquet of the Department of Electrical Engineering and Computer Science. Dr. Gray had mentioned the unflagging enthusiasm of Institute Professor Harold E. Edgerton, a member of the department for more than 50 years, whose ability to interest students in his research is legendary. "I'll give you an example," Dr. Gray told the banquet audience and related this story:

A young undergraduate came to see the president during open hours, distressed at what the student characterized as glorification of war by virtue of a "missile" being displayed outside Building 20. The student told Dr. Gray that he understood the necessity for ROTC training, but could find no excuse for the brandishing of weapons.

"On my way home that night I took a slight detour by Building 20," Dr. Gray said. He found a naval shell bearing the engraved inscription "Property of Harold E. Edgerton, MIT." Dr. Gray guessed—correctly, as it turned out—that Professor Edgerton used the ordnance in his underwater exploration work. He wrote the student and suggested that he drop by Doc Edgerton's Strobe Lab for a chat. The student did.

Given the demands placed on the person who is president of a place like MIT, personal inspection tours are rare. But the opportunity to meet face to face with students, employees and staff members has a high priority with Dr. Gray. He intends to continue the practice and would like more people to pay him a visit.

"I thought about having open appointments right after I became president," Dr. Gray said, "but in the rush of other events I did nothing for several months." Then came a visit from Barry S. Surman, at the time a reporter for The Tech, now its editor-inchief. "He suggested I have open hours," Dr. Gray said, "and that nudge led to the practice now in place."

MIT's president doesn't know whether university presidents elsewhere have the same practice. "I know Don Kennedy at Stanford jogs every morning and several people are in the habit of running with him, but I don't know how much talking can go on while you're running.

"I certainly can't do much while playing squash."

Ensemble to present 'Two Gentlemen of Verona'

The MIT Shakespeare Ensemble will present *Two Gentlemen of Verona* as its fully staged spring production April 14-19 in the Sala de Puerto Rico.

Performances are at 8 p.m.; tickets are \$4.50 general admission, \$3 for students and senior citizens. For reservations call x3-2903.

Four members of this year's graduating class have important parts in the production of this light comedy in which Shakespeare deals with the conflict between the claims of friendship and love. Charlie Frankel of Crotonon-Hudson, N.Y., is directing as well as playing a minor role. Cast members from the Class of '83 are Richard Michalski of Cambridge; David Brackman of Rockville Center, N.Y., and David Innis of Honolulu.

Three members of last year's class are participating: Thomas Garvey of Houston, Texas, as set designer; cast members Geoffrey Pingree of Cambridge; and from Wellesley College, Daria Lisa Martel of Los Angeles.

From the junior class: David Serafini of Malden is technical director; cast members are Barbara Moore of Park Forest, Ill.; Andrew Borthwick-Leslie of Wichita, Kan.; Debra Durney, Wellesley College '84, of Los Angeles, and David Sarr of Darien, Conn. From the sophomore class: Stephen Ng of Alameda, Calif.; Maurice Karpman of Omaha, Neb., and Edward MacGregor of Fayetteville, N.Y.

From the freshman class: Lighting was designed by Jonathan D. Wyss of Luxembourg. Cast members are Stephen Genn of Vienna, Austria; Charlotte Kemp of Gloucester, Va.; Michael Levine of Newton, and Scott Pollack of East Hanover, N.J.

Costumes were designed by Larch Miller of Cambridge.

The MIT Shakespeare ensemble came into being in 1974 when a group of MIT and Wellesley College students presented *Twelfth Night* to the MIT community. Since then, it has expanded and now offers two major productions annually, maintains an active repertory of some 80 scenes, brings many scene productions to Boston area schools and goes on an annual tour. The group toured England in 1980.

The ensemble is under the professional direction of Robert L. Lane who taught acting and directing in the Department of Drama at Stanford University before coming to MIT last year. Its concentration on Shakespeare makes the ensemble unusual among university

CSF announces April road race

The third annual MIT Community Service Fund Road Race will be held Sunday, April 24, starting at 10am. The four-mile run, open to all members of the MIT and Wellesley communities, and Draper and Lincoln Labs, begins at the Walter C. Wood Sailing Pavilion, proceeds along both sides of the Charles River, and ends at McDermott Court.

The entry fee is \$4 (\$5 for post-entry). Trophies will be awarded to the overall male and female winners and the masters champions (male and female over 40). All runners will receive an official CSF road race T-shirt.

Registration forms along with the signed

release are available in Rm 5-208 and at the Athletic Department Equipment Desk. Preentry closes Thursday, April 21. Diane McLaughlin, administrative officer of the psychology department, is the race director.

Proceeds from the race will go to the Community Service Fund, an organization formed in 1968 to encourage MIT volunteer involvement in various projects in the Cambridge-Boston area. CSF is presently halfway through its annual Institute-wide fundraising effort.

Among race sponsors this year are Bay Bank/Harvard Trust, Draper Lab, McDonacting groups. An extracurricular program, it requires about 10 hours per week through the academic year, roughly the equivalent of a varsity sport. Company members are selected, by audition, from the MIT and Wellesley College communities. They attend six hours of classes each week in verse, voice and movement.

Mr. Frankel's work as director of the spring production culminates four years of extraordinary involvement. Last summer he received support from the MIT Council for the Arts to attend an intensive seven-week acting course at New York's Circle in the Square Theatre. He also has studied playwriting under playwright A.R. Gurney, professor of literature in the Department of Humanities.

Bishop to go to Penn

Dr. James J. Bishop, former associate dean for student affairs at MIT and more recently dean of students at Amherst College, has been appointed vice provost for university life at the University of Pennsylvania.

Dr. Bishop received the PhD degree in chemistry from MIT in 1969 and became assistant to the dean for student affairs here that year. He was made assistant dean in 1970 and associate dean in 1973. He became dean at Amherst in 1978.

ald's, the MIT Graduate Student Council, MIT Graphic Arts Service, the MIT Undergraduate Association and Seilers.

Last year's race attracted 380 runners, according to Ron Suduiko, special assistant in the Office of the Chairman of the MIT Corporation and secretary of CSF. "We're expecting another large turnout this year," he added.

Suduiko also noted that April 24 is the first day of Daylight Savings Time. "All runners should remember the fact that clocks will be set an hour ahead," he said.

Steve Bratt won the inaugural race in 1981, while former MIT track standout Colin Kerwin was the overall winner last year.

Bike ride planned to help charities

Marc Simmons is a young man with a mission.

Later this month, possibly as late as the first of May, he plans to embark on what he calls his "Freedom/Charity Ride" in which he proposes to ride his bicycle from 77 Massachusetts Avenue to his home in Dix Hills, N.Y.

The "Freedom" in the title denotes his completion of requirements for the SB degree he expects to receive in engineering and anthropology at Commencement in May. The 'Charity" indicates his hopes that various charities may use the 180-mile bike ride to raise funds for their groups. The MIT Community Service Fund has expressed an interest in his ride and so has the Massachusetts Association of Retarded Citizens, particularly if his ride coincides with its annual Bike-a-thon May 1. How it works is that the charity seeks ride sponsors who will donate a given amount per mile ridden to the charity. Usually there are checkpoints where witnesses verify that the rider has completed that particular leg of the trip. With Marc, the trip will be on the honor system, although he promises to drop a postcard to sponsoring charities to affirm that he completed his ride. Marc plans to ride from Cambridge to New London, Conn., a ride he has completed before "under the worst possible conditions," he said. From New London, he will take the ferry to Orient Point at the east end of Long Island, where he will resume pedalling some 70 miles to his home. He hasn't ridden this leg before and expects it to be tough because he will likely be riding into a head wind the whole way.

REGISTRATION FORM Return to 5-208

Name	Sex
Address	Age on race day
Telephone	T-shirt size

RELEASE FORM (Mandatory)

In consideration of accepting this entry, I, the undersigned, intending to be legally bound, hereby, for myself, my heirs, executors and administrators, waive and release any and all claims for losses and damages I may have against the Massachusets Institute of Technology and the City of Cambridge and all other parties and their representatives, successors and assigns for any and all injuries suffered by me in said event. I attest and verify that I am physically fit and have sufficiently trained for the completion of this event and my physical condition has been verified by a licensed medical doctor. Further, I hereby grant full permission to any and all foregoing to use photographs, videotapes, motion pictures, recordings or any other record of this event for any purpose whatsoever.

NO ONE MAY ENTER THIS EVENT WITHOUT SIGNING THIS OFFICIAL WAIVER.

Signed:

Date:

If under 18, signature of legal guardian is required

Charities that would like to use Marc's ride for fundraising are invited to call him at 237-4537.

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