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 able 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 individ uals 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Tech Talk will not be published April 20 because of the Patriot's Day holiday.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 whe the services availl will be served

## Telephone change

The new MIT extension at Endicott The nell be changed from $\times 3-5000$ to $\times 3-5211$ effective Monday, April 11. The Endicott House outsidenumber, 326-5151, remains unchanged.

## Publications?

Editors of student newspapers and magazines are requested to send a copy of their current issue to China Altman 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.

## 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 learnedin 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 lan-" according to Ms. Kramsch.


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 "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 bell Gonzalez, who graduated from Mr last year in electrical ing. 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 enth Happy Birthday, Mary Had Little Lamb, The ing Blue Danube, Happy Bi Chay, Mary Had a Litlle Lamb, The First Noel and Sidewall was partially funded by the MIT Council for the Arts, Sidewalk was partall 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 60 s , 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 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 Depart-
ment 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, coleague, 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 Graduate School in addition to continuing as (continued on page 7)

## Doc Edgerton turns 80: community party today

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 Edrobe 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 colleagues over the years
ander
Refreshm music will be provided by the Electrical Engineering

Alley Cats, specially named for the occasion. Dr. Edgerton, known as the father of electronic flash photography, didn't invent the stroboscope. Buthis 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 $\$ 0,000$ award to a junior faculty meme Mr. In addition, the MrT Sea Grant Program's research vesse is named the Edgerton in recognition of the fame he has gained as a through the opplication of sone tecogist through the application of sonar technology Dr. Edgerton developed an underwater (continued on page 7)
ging goals

Companies and employees will have to find ways of adjusting to conflicts between work and family life-perhaps through a process o "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 a whole new set of assumptions" based on diversity instead of homogeneity. But new adds. "In fact, we may have to wait for a new
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 al workers as thement, defines non-traditional workers as those who, for family or other personal reasons, do not fittraditional organexample example, that they should be totally work t 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 (continued on page 7)

## INSTITUTE NOTICES


ACBL Duplicate Bridge at MIT*-Bridge games every
Sat, Tpm; every Thur, $6: 30 \mathrm{pmm}, 5.50$ entry fee, Rm 473 , Student
 Masters. No partners necesary, all welcon.
Rajan Batta, 253.6185, 494-1968, 2255.9563.
MIT Table Tennis Club"--Meets Sat, 4 .6pm $\&$ Sun, 6.8 pm,
T.Club Lounge. All welcome. For info call Suguru Araki, 494 $1100 \times \times 3.5342$.
MIT Women's Iee Hockey"--Practice Tues \& Thurs, 7 .
9pm, Ice Rink. All welcome. For info call Mary Bowden, 253 . Spm. Ice Renk
2272 or $721-2277$.



The MIT UHF Repeater Association*- offers radio as a public service. If you or your group are interected call Richard D. Thomas, 5548262 for detaile
MIT GO Club*--Play an Oriental game of high strategy.
every Thurs, Spm, Rm 1 -136. Will teach beginera. GO sets $\&$. eveoks available.

MIT Cycling Team-Bicycle racers interested in intercollegiate competition should check the bulletin board
by the Dupont deakk for information. Eric Martinot. $225-6107$.

## Religious Activities

The
daily.
Charismatic Prayer Group*-Mon eves, 6:45, Miller Room 1.114. Potluck supper followed by prayer meeting,
Bible sharing, music \& praise Jim Mahoney,

Islamic Society*-Daily prayers. Ashdown house


Jewish Services"-Friday, April $8,5.30 \mathrm{pm}$, Reform
Shabbat dinner Next House 5.30 pm, Conservative Reform

 iighting, 5.58pm; Fri, April. 15: 5:30pm, Reform Shabbat
dinner, Next House, $5: 30 \mathrm{pm}$, Conservative/ Reform Services,
 dinner, Kosher
Lineoln Laboratory Noon Bible Studies*-Tues \&
Thurs, Kin Brook III,Rm 239. Call Annie Lescard, x 2899 .


Prayer Time:- Fr a atternons, $1-2 \mathrm{pmm}$, weekly bible class,
Rev. Miriam R Eccle, founder \& director of Alpha and Onega Misesionary Society. Guest speakers \& refreenments.
Center for International Studies, Seminar Rm III ( (E38-6th Cent.
fri).

Tech Catholic Community**-Sunday Mass only, 9am, noon, Spm, Chapel; week day mass, Tues, Thurs, 5pmi, Fri,
noon, Chapel. bible stud, Thurs, $7: 30 \mathrm{pm}$, Ashdown, tit flr Lounge. Call $\times 32981$.
The Goopel of John"- Bible study. How Christ came to be
man's life to produce God's dwelling place on earth. Tues, man's life to produce
noon $1 \mathrm{pm}, \mathrm{Rm} 8.119$.
The Church of Christ in Cambridge-Christians meet for
 Sunday eve earch month, 6:30pm. Cail Rebert Rando)
$4861 / 3$-5055 or Claudia Lewis, 4941326 (Ashdown).

The Lutheran Minitry and Epiecopal Ministry-Hold
weekly service of Holy Communion Wed, 5:10pm, Chapel.


 Tues, prayer time, 7 :30.9am, W20-41, Student Center. Call

## Graduate Studies

IREX Developmental Fellowship Program-the
International Research $\&$ Exchanges Board (REX) is International Research \& Exchanges Board (IREX) is
pleased to announce a new program of graduate and
 are eligible and should currently be enrol ted in an least their
 Easter Europe of the USSR Application deadline: April in,
1983. F. For information contact the Graduate School office, Rm
3-136. The Mary Ingram Bunting Institute-announces the
"Peaceful Fellosemi" for women "ativel involved in
finding peaceful holutions to connict or pootential confict mong groups or nations.".".omen working withal a national
international group in the general area of pene
 The recipient is expected to be in residence a the Institute, at
Radclife College, for the period of the fellowahip. vail in the Graduate School Office, Rm 3 3 3 -36. Deadline May 1, 1983 .
New York State Senate Legislative Fellows Programl applications are being accepted dhrough May 20 ,
1983 Fellow spend one year beginning september, 1983, as
 be New York State residents who are currently graduate
students. Students in all disisiclines are invited to apply. Applications and more detailed informat.
the Graduate School Office, Rm 3136 .

The Carl E. Menneken Fellowship to further the progress of engineering and science in areas of importanene to the
Navy is announced for 1983-84. Candidates for the 51,200 fellowship should submit the topic and a brief description of their thesis with a aupporting document from his /her thesis
ndvisor to the President, Naval Pootzraduate School Foundation, Inc., Naval Postrgaduate School (Code 007), 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 firstcome, first berved
basis, so prompt submission is encouraged. We often begin to basis, so prompt submission is encouraged. We often begin to
discourage requests for real dollars after mid-April because of discourage requests for real doiliars after mide-April
the of of mone requests piling up for will be welocome well into May. Summer funding (including
granting of overhead waivers) is contingent upon UROP's granting of overhead waivers) is contingent upon UROPs receiting 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 summer.
As always M\&S requests (including Travel) are welcome at any time. Funding decisions will be announced starting the
week of April I1. Please read the "Participation" section of
The UROP Directory, 11-20.

Joel Matthew Orloff Undergraduate Research Opportunities Program Prize Faculty Nominations Welcome-An arard of $\$ 1,000$ and a certificate will be
presented this spring to the undergraduate felt by the presented this spring to the undergraduate felt by the
selection committee to have demonstrated the most
outstanding ability and creativity in physics-related eesearch. Nominations are invited from faculty in any department. Please submit nominations, with appropriate
documentation, by April 22, 193 to Norma MGGavern,
UROP office, Rm 20B-141. The Committee's decision will be nnounced 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 ndicated by references to relevant articles. Could include
data reduction and analysis. May begin this spring and possibly continue through summ
Curt Priest, E40-241, $\mathbf{x} 3.6469$.
Opportunity in HST-Opening for a junior with ackground and interest in software and/or electronics
hardware. Seek student with interest in medicine or hardware. Seek student with interest in medicine or
biomedical engineering. Project involves use of a computer-
controlled multigas transducer applied to several problems. controlled multigas transducer applied to several problems. Preference given to a student who eventually wants to make
his a thesis. Contact Dr. James C. Weaver. $\mathbf{x} 3-4194,20 \mathrm{~A}-128$.

## Internships

 MORAL, the Masaachusets, afflilate of the NationalAbortion Rights Action Jeatue, is offering full time and part
time internahipe to students for June through Aubust, 1883. time intershipp to students for June through August, 1983 . The interns, suided by an experienced staff member, will help
plan, execute, and evaluatea project or projects. Projects may
 banks and direct mail, fundraising, office systems and
others. Some of the recommended skills needed ability to others. Some of the recom mended dkills geeded ability to
work independenty and in a group, ability to organize and carry through projecte, oood writing skilils, pleasant and
relaxed phone manner, initiative and motivation. Preference relaxed phone manner, initiative and motivation. Preference
given to full time internhhipe, June Aug, but part-time hours
 poesible. For more information, please con
Peliman at the MORAL office, (6i7) $720-1880$.


Cable Television Schedule
April 6-April 15

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

Wed, April
$10 \mathrm{am}, 6.343$ Digital Speech Processing
4pm, "Blue Dance" by Gregory
$7: 30 \mathrm{pm}, 8.02$ Help Seasion with
program will be repeated
MIT Tae Kwon-Do Club*-Mets Mon, 6-8pm, Burto
Dining Hall; Wed, 6-8pp, Burton Dining Hall; Fri, 6-8pm Art. For info call Charlie, $253-7764$.

MIT Iee Dance Club* - Membership open to any skatera fo call Beverly, $\times 3-1512$.

MIT Outing Club*-Plan hiking, camping, canoeing, ski
trips, rental equip avail, Mon \& Thurs, 5.6 pm, Student
MIT Women's Rugby*- Be ginners, experienced,
undergrads, grads, etc. For info call Holly Reese, McCormick undergrads, grads, etc. For info call Holly Reese, McCormich
Hall, call $x 5-8607$, Dorm.

MIT European Club* -8 pm , Tang Hall Lounge, 550
Mr

Mon, April 1
4:30pm, "Blue Dance" by Gregory Garvey
Channel 10 4:30 pm. Harvard Department of Biological Chemistry* Tues, April 12
Channel 8
12:15pm, "Blue Dance" by Gregory Garvey
7:30pm, 8.02 Help Seesion with Professor Lewin, This $7: 30 \mathrm{pm}, 8.02 \mathrm{Help}$ Session with
program will be repeated until 3 am .

## program will Channel 10

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


New traffic patterns are scheduled to be implemented this spring in the Kendall Square area. This traffic light at the corner things to and Vassar Streets is a sign 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. The MIT Fellows
The MIT Fellows are: Dr. Eric S. Maskin, professor of economics; Dr. David A. Vogan, associate professor of mathematics, Dr. both associate professors of physics.
The selection committee included Dr. John 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 Mariboro, Vermont. They are all quently with Banchetto Musicale the Civic Syently with Banchetto Musicale, the Civic Symphony, the Pro Arte Chamber Orchestra, Ballet the Boston Popsand the New England Chamber Orchestra.

## Student Jobs

More jobs are availab
B-R Services, Inc. needs student for part-time help in party
serving, party cleaning, household chores (inside and 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
Mrs. Richard Kay for more information; their answering

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
porgram in FORTH (10/h). If you are interested, contact program in FORTH ( $10 / \mathrm{hr)} .\mathrm{If} \mathrm{you} \mathrm{are} \mathrm{interested}$,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 have car and be reliable. Knowledge of library systems
necesary. Flexible hours; $55 / \mathrm{hr}+$ mileage and expenses. Call
David Barnes at $863-7350$.
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TECH TALK


April 6, 1983
April 6, 1983
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Address ne
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Office, Room 5-111, MIT, Cambridge, MA 02139. TeleOfhice, Room $253-2701$.
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mailed to Business Manager, Room 5-113, MIT, Cam-
bridge, MA 02139 .

## Symphony plans NYC concert with 20th century program

By CHINA ALTMAN
The MIT Symphony Orchestra, conducted by David Epstein, will take a program of al York April 24.
In keeping with its commitment to modern位 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 distin guished 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 brillian "usicians" during his 18 years at MIT "Literally 15 to 20 of those students audition ing for the orchestra each September could have been applicants for Juiliara," he said. kesymphony, which was founded atMI Among the students there are 44 from MIT, 14 Among the students there are fur from Mr,
from Wellesley College, two from the Berklee follege of Music, two from Boston University, College of Music, two from Boston University, one from the Boston Conservatory.
one from the Boston Conservatory.
The assistant conductoris E. J. Eleftherakis, 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 professor of technology and policy and director of the Center for Policy Alternatives; and Jan Coppock, associate profes
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 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. Perkin
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 They a life of the Institute, the better They are hoping their words of encouragement may help other faculty members decide 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 last week by the Undergraduate Academic
Support section (UASO) of the Office of the 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 of about nine hours per studen
has found. The chief duties are:

-     - o be present during portions of Residence Orientation Week for briefing sessions and
individual meetings with advisees to help individual meetings with ad
each register for the fall term.
- to get acquainted with advisees and build a basis for continuing communication. 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
ate life.
"They particularly get to know their associate advisors who are very helpful to them,"
says Professor William F Brace, head of the 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. 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 fur ther information.
whonautics. There is one grad Three of the symphony players will appear gram of New York Radio Station WQXR at 9 pm on Wednesday, on April 20. They are iolinist 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.
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

In the week following the Carnegie Hall concert, the Symphony will make a record with the Symphony at MIT in December 1982 To be recorded are Frank Matin's Ballade for Viola, Winds, Harp, Harpsichord and Percussion; Bohuslav Martinu's RhapsodyConcerto 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 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. tos, by Persichetti and Howard Hanson. tos, by Persichetty and Howare Hanson.
Most of the Symphony's recordings have Most of the Symphony's recordings have
concentrated on 20th century American music. Profesor Epstein has said "The notion that 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 These people are living with the music of their 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 150 th year of the $5-8$ in commemoration of the 150 th year of the composer's birth.
His schedule also includes a meeting in
Arezzo, Italy this July with the International Arezzo, Italy this July with the International
Society for the Study of Time, a group includSociety for the Study of Time, a group includ-
ing musicians, scientists, philosophers, sociing musicians, scient
ologists and writers.
ologists 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 quesreconsiderations of the most central ques-
tions of musical explanation and undertions of
standing.
Professor Epstein is now working on a new Professor Epstein is now working on a new
book about rhythm and tempo, its research partially funded by the Deutsche Forschungsgemeinschaft while he was in residence at the Max-Planck Institute and the University of Munich.

## Ives concert planned

Two musicians who have been collaborating since 1975 in the study and performance of the work of Charles Ives will pelay 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 lves 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 antici-

MacVicar, on partial leave, will become Carnegie Inst. VP

By ROBERT C. Di IORIO
Dr. Margaret L.A. MacVicar, Cecil and Ida Green Professor of professor of physical science and director of
UROP, has been appointed vice president of the Carnegie Institution of Washin ffective July 1 During the initial months of what will be a period of dual
association with MIT and Carnegie, Dr. MacVicar will be on partialleavefrom MIT.
 she will work closely with Carnegie's president, Dr. James D. Ebert, on research and education policy, per onnel and financial matters as they relate hese, and the setting of research directionssues which are linked to one of her major professional interests: program and policy nnovation in higher education.
Professor MacVicar will resume her regular eaching and advising responsibilities with the start of the spring term in 1984, and will 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 MacVicar 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
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 impres sive administrative skills. These qualities will be of great value to the
tion as they are to MIT."
Professor Perkins said he is "pleased that Professor Perkins said he is "pleased that
MIT has the kind of administrative flexibility MIT has the kind of administrative flexibility that permits this type of appointment, which
is so important to the professional growth of our faculty."
our faculty."
MIT and the Carnegie Institution have had 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 same time, he became a 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 o 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 sig nificant 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 Obser atories and the Geophysical Laboratory with a faculty of approximately 60 senior 50 grasts, 75 postdoctoral fellows and abou 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 M. Kostant of Somerville, a graduate stude
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 has installed a terminal by the CambridgeData Corporation. Called Connexions, the 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." shedules."
Robert $K$
Robert K. Weatherall, director of the Career Planning and Placement Office, said he welmatching opportunity to use a computer matching system.
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 dents continued, "Approximately 1,800 stuand 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."

## 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 2 pm .
Representatives from MIT's other tax deferred annuity company, Teachers Insurance workshops on campus later this month.


Thursday, April 7
Building Ecology* Professor Harvey Bry
Department of Arechitecture, MIT, Joint Program for Energy
 Archinecture and Haning, 031300.
When User Hits, Machine--John Seely Brown,
Principal Scientist Distinguished Leeturer Series.
Trint Appropriate Teehnolosy To Alleviate Women's World
Loadd The Case of the Palm oil Preas in Sierra

 Development Group, 4pm, HIID, Coolidge Hall, Rm 2,1737
Cambride St Facility Location in a Competitive Environment*-
Prof Jacques Thise, Univerity of Lovvian, Belgium. Biophy yical Aspects of Monoclonal Antibody
Technicues for Cell Surface Analysione-Peter Hensen, PhD, Cambridge Reeserch LLab, Harrard MIT Divivion of
Health Sciences \& Technology. HST. 590 Biomedical

 Preest and Future of Concrete Gravity Platforme*-
Mr. O.T. Grudnestad, Statoil, Norway. Structural Engineering Seminar, 4pm, Rm 1350 .
 Colloguium, $4 \mathrm{pm}, \mathrm{Rm} 26-100$. Refreahments at $3: 30 \mathrm{pm}, \mathrm{Rm}$
$26-110$.
The Membrane Paradigm For Black Holes*-Profesor
Kip S . Thorne, California
Institute of of Technology.

 Harvard Uiv, 60 Garden
Black, 253-7078 no later than April 5 .
Towarde ar Critical Regionaliom ${ }^{\circ}-$ Ken neth
Frampton, Architecture Lecture Series, $5: 30 \mathrm{pm}, \mathrm{Rm} 9 \cdot 150$.

## Special Interest

Teehnology Wives Organization is accepting
applications through April 11 from those wishing to eell at


Tenth International Optical Computing
Conference*-April $6-8$. Sponeored by Coniery and International Comminession for optices. Mapor
contibutors contributors from four continents will present their work.
Associate Professor Cardinal Warde, Department of Electrical Encinerering and Computer Sceience, local


The Student Aosietance Services section of the office of the Dean for student ffrairs will hold an oppen
House - to introduce sudents to the services available.

 Lobby 7. Spongored by Lambda Upsilon Chapter or the
Alpha Kapp Alpha sororty. Inc.in oonjuntion with MrT
Health Edacation Service. Al materials provided by American Cancer Societ
The 1983 Ralph E. Cross, Sr. Leetures in
Manufacturing Seiences ${ }^{2}-$ Prof. Onyind Bjorke, Univeraity of Trondheim, Norway. Lab for Manufacturing $\&$
Productivity 10 am Technical Seminar Manufacturing Cells and Their Subyystems; 2 2pm General Lecture: Towarde
Humanities Open House*-Wed, April $6,2 \mathrm{pm}$, Bush Rm
10.250.
Holocaust Memorial Commemoration"- including
Bertolt Brecht's one act play "The Jewieh Wife". MIT


## Seminars and Lectures

## Wednesday, April 6

Nonlinear Flow over Complicated Terrain*-Dr.
Larry Pratt, University of Rhode tiland. Oceanography
Laty Sack Luneh Seminar, $12: 10$ pm, Rm 544425 .
 Analysi. Department. of Nuclei
Seminar Series, noon, Rm 66 -110.
 Conference Rm $36-428$.
Agreement (Subject/Verb and Noun/Pronoun)*-The
The Application of Nodal Methodo to the Tranaport
Equation - Moon Hee Chang. Nuclear Engineering

 Conatruction. Ensineering and Management 1983 Seminar
$3.30 \mathrm{Pm} \cdot \mathrm{Pm} 3270.0$. Adhesion at the Fiber-Matrix Interphase in
Composite Materialso
Dr. Lawrence 7 T. Drzal, Air



Thermodynamics of Electrical Noise--Professor
John Wyatt, Department of Electrical Engineering and
 has been postponed; further information will be announced
at a later date. Atomic Motions during Melting and Vaporization
Proceases-Computer Simulation Films
 Clobal Digital Network: The Seismologist's
 ${ }_{\mathrm{Rm}}^{\mathrm{D}} 5 \mathrm{~m} 915$.
On Learning, Teaching, and Electrodynamica*-,
Proteseor Hermann A. Haus. Killian Award Lecture, 4:30pm, Rm 10.250.

The Dynamice of the European Arms Race**-Dr.
Georse Rathens. Disarmament Study Group, 5 pm, Rm 4
16.

## Friday, April 8

 Intermodal Transportation: Problema and
 Company, Inc. noon, Center for Transporta
Effrects of Immobilization Parameters on Macrosoopie
and Molecular Properties of Immobilized Enyyme and Molecular Propertiee of Immobilized Enzyme
Cataly yoto Engineering, California Inst of Technology. Chemical Engineering Seminar, 2pm, Rm 66-110.
 Disual Stimulation**-Dr. Yuli Toshev, Head of
 Career Development Mini-Symposium*-Dr. A. Obermeyer, Moleculon Corp, Dr. B. Greer, Manager of
Atmospheric Sciences, Dr. . K. Kolb, Dr. C. Frederick, MIT Chemist Club, $3: 30 \mathrm{pm}$, Rm 6.321 .
Research in an Industrial Environment-John P. Appleton, EElecteon Corpp. Mechanical Engineering Seminar,
3pm, Rm 3-13.

Instability of Displacement Processes in Porous
Mediae- ${ }^{2}$ Profeseor George M. Homy, Department of Chemiacal Erotasor George M. Homery, Department of
Entanford Univering Seminar, 3pm, Rm $66-110$. Exeiting New Results from Phaedrus* ${ }^{*}$ Noah
Herohkowitz, University of Wisconsin. Plasma Fusion Center Semin, $4 \mathrm{pm}, \mathrm{Rm}$ NW4-2209.
Prospects for the Development of a National
Materials Policy in the $88 t h$ Congreess ${ }^{-}$-Prof. R.M. atanision, Department Materials Science and Engineering, MIT. Science Advisor, House Conmittee on
Science and Technolog, Center for Materials science and

Wittgenstein on Identity*-Profeasor Hide Ishiguro,
 Vision in Action*-Dr. David Lee, Department of
Paychology, Univeraity of Edinburgh. Psychology Colloquium, $4: 30 \mathrm{pm}$, Rm E25-111.

Monday, April 11
Overcoming Writer's Block and Getting Started on a
Paper, Part I-A Mini teesion, The Writing Center, Paper, Part
2:15pm,
Rm $14 \mathrm{~N} \cdot 317$

Multi-Joint Impedance Control- - Neville Hogan, La boratory for Biomemenanics and Human Rehabilitation.
Department of Mechanical Engineering Seminar, 4pm, Rm

Pilot Proficiency as a Factor in General Aviation
 Filight Transportation Laboratory, MIT Aviation Safety Shafting Systems Alignment*-Marine Engineering
Technology and Policy: The Case of National of Technology Asseasment, U.S. Congreese. Water Reesurrees and Environmental Engineering Seminar, 4 pm , Rm 48.316 . Solitons and the Inverse Scattering Transform in
Multidimensions
--Prof. A.S. Fokas, Clarkson College, ${ }_{\text {Potedam, N. Y. Applied Mathematic Colloquium, } 4 \mathrm{pm}, \mathrm{Rm} 2 .}$ 338.

Academic Freedom and the Integrity of the
University: The Innuence of Funding-Impact of Funding Sourcess of MIT: Education, Research and
 Seminar, $4 \mathrm{pm}, \mathrm{Rm} 9-150$.
Solitione and the Inverse Scattering Transform in
multidimensionso-Profesoor A.s. Fokas, Clarkeon
 ${ }_{4 \mathrm{pm} \text {, }}^{\text {coll }}$
Everything You Wanted To K Kow About
Contraception ${ }^{*}-$ Dr. Lois Eichler, Paychologist, and Contraceptionn--Dr. Lois Eichler. Peychologist, and
Ma Karen Haloron RN. MMCormick Housematera,

## Tuesday, April 12

Fuaion Diagnostic syoteme: Experiments to
Reactore ${ }^{\text {and }}$ James P. Baur, General Atomic Company


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: $\mathbf{\$ 6 . 5 0}$ or $\mathbf{\$ 2}$ 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 he world for studying music, but for living there is scarely any time at all.... Wises has a chance to turn immediately and hear a sound suddenly before onen a composer takes himself seriously and wishes to be considered great, he thereby diminishes his love and increases his fear."

Total Fault Coverage by Digital Circui Computer Science Department, Princeton Univ. VLSI eminar, $4 \mathrm{pm}, \mathrm{Rm} 9-150$.
Migration of Soviet Jews to Israel: Economic Aspects ${ }^{\circ}$-Gur Ofer, Hebrew University and Harvard University. MIT/Harvard Research Seminar on Migration
and Development, Harvard Center for Population Studies, 9
MM 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, $4 \mathrm{pm}, \mathrm{Rm}$ 1-114.
Total Fault Coverage by Digital Circuit Transformation ${ }^{*}$-Richard Lipton, Princeton
University, Princeton, N.J., $4 \mathrm{pm}, \mathrm{Rm} 9150$.

Two-Dimensional Design Method for Highly-Loaded Aempressor Blades ${ }^{\circ}-$ Mr. T.Q. Dang, Department of Dynamics Laboratory Department of Aeronautics and

Star Formation in our Galaxy*-Dr. Bart Bok, Steward
Observatory, Univ of Arizona. Astrophysics Colloquia, bservatory, Univ of Arizona. Astrophysics Cono

## Wednesday, April 13

 Nuclear Power-Is it Worth Saving?*-S. DavidFreeman, Director, Tennessee Valley Authority.
Department of Nuclear Engineering Special Seminar, noon, Department
Rm 66-110. The 1983 Ralph E. Cross, Sr. Lectures in
Manufacturing Sciences*-Prof.
University of Trondheim, Norway. Lab for Mand Bjorketuring \& Unoductivity. 10am 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 Guif Stream Warm Core
Weods Hole Oceanographic.
Seminar, $12: 10 \mathrm{pm}, \mathrm{Rm} 54-915$.
Overcoming Writer's Block and Getting Started on a
Paper, Part ${ }^{\circ}-$ A Mini-session, The Writing Center, Paper, Part $11^{\circ}-\mathrm{A}$
2: $15 \mathrm{pm}, \operatorname{Rm}{ }^{14 \mathrm{~N}} 317$.
Multifrequency Laser Gyros*-T.A. Dorschner, Raytheon. Optics and Quant

Infrastructure: The Opportunities and Challenges*-
Arthur J. Fox, Jr., Editor, Engineering News Record, Arthur J. Fox, Jr., Editor, Engineering Neww Record,
Construction Engineering and Management 1983 Seminar
Series, $3: 30$ pm, $\mathrm{Rm} 32-270$. Overlapping Spreading Centers and the Teetonics of
Fast-spreading Ridges
Department of Geological Sciences. Ken MacDonald, Univ. of Calif., Santa Department of Geological Sciences, Univ. of Calif, Santa
Barbara. Earth and Planetary Sciences Seminar, $4 \mathrm{pm}, \mathrm{Rm}$

The Politics of Indebted Economic Growth*Professor John Freeman, Assistant Professor, MIT
Political Science Department. CIS Latin America Energy Political Science Department. CIS
Policy Seminar, 4pm, Rm E $38-615$.
Pronunciation: B/V and P/F-A Minisession for those
or whom English is a second language, The Writing or whom Engish is a second language, The Wring
Program, $4: 15 \mathrm{pm}, \mathrm{Rm} 14 \mathrm{~N} .317$.
Open House*-The Chemical Engineering
Department, $4 \mathrm{pm}, \mathrm{Rm} 66-110$.
A Thermodynamic Analysis of a Continuous Reheat
Gas Turbine Cycle* Department of Mechanical Engineering, MIT. Thermodynamics Seminar. This seminar has been
postponed; further information will be announced at a later

Noise, the Uncertainty Principle, and Picosecond Optice ${ }^{\circ}$-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, 8 pm , 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 Automatix, Inc., USA. Lab for Manupacturing and
Productivity. 10am Technical Seminar. Technolg Robotics and Artificial Vision Syatems; 2pm General
Lecture. Robotics and Artificial Vision: Their Role in
Industrialization of America and Its Social Significance, Rm

Militarization of the Philippine Government: Post Marcos Scenario
CIS Visiting Fellow, enator Benigno S. Aquino, Jr., Secretary General of the Liberal Party. Center for Experimental-Theoretical Studies of a Lizard Ear*-
Tom Weiss, PhD. Harvard/MIT Division of Health Sciences \& Technology. HST 590: Biomedical Engineering The Core of a Convex Game and Its Extremal Properties*-Dr. Donald Topkis, Bell Labs. Operatione
Research Center Seminar, 4pm, Rm E40-298. Coffee \&
cookies served.

The Evolution of the Mexican Political System*The Evolution of the Mexican Political System Soceal Science, MIT. Mexican Revolution to the present, with
projections for the future. AMEX MIT, $4: 30 \mathrm{pm}, \mathrm{Rm} 54-100$.

Friday, April 15
Applications of Holography to High Energy
Physics ${ }^{*}$-Irwin Pless, MT. Modern Optics and
The State of Transportation in the States*-Francis B. rancois, Highway, Transportation officials, Center for
Transportation Studies Seminar, noon, Mezzanine Lounge.
The Electrodynamic Themogravimetric Analyzer*-
R. Erik Spjut, Chemical Engineering Seminar, 2pm, Rm 66 -
Frontiers of Chemical Engineering in the Oil Industry*-Warren K. Lewis Lecturer, George M.
Keller, Chairman of the Board, Standard Oil Company of
Celifornia. Chemical Engineering Seminar, 3pm, Rm $66-110$.

Laser Produced Polarized Sources-Possible Fusion Applications*-Michael Feld, Director of the Spectroscopy
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, Harvar 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, $4: 30 \mathrm{pm}, \mathrm{Rm}$

## Community Meetings

Alcohol Support Groupp*-Meets Weds, 7:30am,
sponsored by MIT Social Work Service. Call Ruth, $\mathbf{x}^{3}-4911$. Overeaters Anonymous**- Will meet weekly in $\mathrm{Rm} 4-149$
on Sunday morning, $9: 30 \mathrm{am}-11 \mathrm{am}$. All welcome. Al-Anon*-Meetings held every Tues, noon- 1 pm, Moore Rm 23-297. The only requirement for membership is that there ee a problem of alcoholism in a relative or friend. Call Ruth or MIT Faculty Club"*-The Club is open Mon. Fri. Luncheon ours: noon- 2 pm ; dinner hours: $5: 30-8 \mathrm{pm}$. For reservation

Nightline ${ }^{*}$-We're a student run hotline from $7 \mathrm{pm}-7 \mathrm{am}$ on
the MIT campus. For information or just to talk, give us a call at $\times 37840$. MIT Women's Forum ${ }^{\text {"* }}$ - Part of a lectures
by women professionals in the Boston area.

Weekly Exercise Classes**-Patricia Murray, one of Magge Lettvin' ${ }^{\text {Thy }}$ teachers. Technology Wives Organization. Thurs, thru May $12,7: 30-8: 30 \mathrm{pm}$, Exercise Room, 2nd fir,
DuPont Gym, $\$ 2 /$ TWO members; $\$ 2.50 /$ non-TWO members per clas.
Maggie Lettvin's Exercise Class**-For less capable
women, Thurs, 1lam, Rm 8-219. Wear loose, comfortable women, Thurs,
clothing. Athletic card, req.
Maggie Lettvin's Self-Designed Fitness Satellite 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, Wresting Rm, DuPont Gym, 5pm class, T Club Lounge, gyn

DeJeuner Francais*-Dominique Rabate, V instructor from the Ecole. Normale Superieure. Forieign 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 . Wives' Group*-Wed, April 6: Japanese flower arranging,
Mrs. Fumiko Masubuchi, 3.5pm, Rm 491, Student Center, April 13: Canada, presented by Betty Kotels, 3.5 pm ,
Mezzanine Lounge. Student Center. All women in MMT
Community welcome. Babysitting available during Technology Wives Organization-is accepting applications through Aprill Volunteers*-to help organize May 1, Walk for Hunger,
assist in registering, driving, etc. For information call Jackie, 3-1957/or 58 to achedule organizing meeting

Reflexology and Health*-Bettina Richichi, every Tues,
noon-1:30pm, $\mathrm{Rm} 1-134$. Seesions demonstrate benefits of Activities Committee MITAC, the MIT Activities Committee offers 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 admisesion is $\$ 4$ so you can save $\$ 1.50$ per he Museum of Science which are good any time through Dec郎 regular $\$ 4.50$ adult admission.

Bus Tour to Newport, Rhode 1sland Mansions*-
Leaves MIT West garage at 9 am , returnat 6 pm . Trip includes rivate tour of the Breaker's Mansion; drop-off for nch/shopping (lunch not included) at the newly renovated

## Movies

Lection, April 6, 7 pm, $\mathrm{Rm} 54-100$.
N:ai, The Story of a IKung Woman*-Joh
Film/Video Section, April $11,7 \mathrm{pm}, \operatorname{Rm} 54-100$.
Sunset Boulevard ${ }^{\bullet-L S C ~ C l a s s i c ~ M o v i e, ~ A p r i l ~ 8, ~} 7: 30 \mathrm{pm}$,
Rm 10-250. Admission: $\$ 1 \mathrm{w} / \mathrm{MIT}$ or Wellesley ID.
Deathtrap*-LSC Movie, April 8, 7 \& 10pm, Rm 26-100.
Admission: $\$ 1$ w/MIT or Wellesley ID.
Diva*-LSC Movie, April 9,7 , $\&^{\&} 10 \mathrm{pm}, \operatorname{Rm} 26-100$.
Lolita ${ }^{\circ}$ LSC Movie, April 10, $6 \& 9: 30 \mathrm{pm}, \mathrm{Rm} 26-100$.
Admision: $\$ 1 \mathrm{w} /$ MIT or Wellesiey ID.
Das Boot*-LSC Movie, April 15, 6:30 \& 10pm, Kresge
Admission: $\$ 1 \mathrm{w} /$ MIT or Wellesley ID.
The Secret of NIMH - LSC Movie, April 16, 7 \&
Rm $26-100$. Admission: $\$ 1$ w/MIT or Wellesley ID.
Shane ${ }^{*}$-LSC Classic Movie, April 15, 7:30pm, Rm 10-250.
Admission: $\$ 1 \mathrm{w} /$ MIT or Wellesley ID.

## Music

Thuraday 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 Stravinaky; April 21: Margare Daniels, baroque dance, Mitzi Myerson, harpsichord; Sara
Cunningham, gamba, Monica Hugett, violin; April 28
Spen Spectrum Concert, a performance of West African music by
the Tufts Univeristy West African Drum Ensemble, David LOG JAM'-The Logarhythms, MIT's men's close harmony singing group, will be hosting groups or a a concer
Saturday, April 9 , at 7.3 pmp, Rm 10.250 . Among the visiting ensembles will be Yal
Computer Music at MIT-April 12: Perceptually-based Algorithms for Computer Music, Seminar, John P. Stautner,
MIT Experimental Music Studio, $4 \mathrm{pm}, \mathrm{Rm} 110,25$ 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 8 pm,
Remis Auditorium, Museum of Fine Ars. Hunt Boston, West Wing, Museum of Fintance. Tickets fort, Auntington Ave.
Bale in Lobby 10
Bnd and The Writing Program Office
$\$ 2 /$ students and Senior Citizens.
MIT Symphony Orchestra Concert*-April 14. David Epstein, conductor. Eugene List, pianist. John Harbison'
"Incidental Music for Shakespeare's Merchant of Venice" also Stravinsky and Persichetti. Hountton Chapel
Wellesley College, $8: 30 \mathrm{pm}$, Admission: $\$ 1$. Free to MIT and
Wel Wellesley College, $8: 30 \mathrm{pm}$, Admi
Wellesley College Communities.

## Wellesley Events

Wellesley College Exhibition Gallery Talks*-Sundays
at 3 pm for general public, by special request for groups of at pm for general public, by special request for groups of
more than 10. Interpreter for the hearing impaired available
second Sunday each month. Accesa for the second Sunday each month. Access for the handicapped
available. Admission: Free. Hours: Mon-Sat, 10am-5pm Sundays, 2.5 pm .
Special Collection Exhibition*-Exhibit of autographs
first editions and association first editions and association copies illustrating Robert
Frost's literary career, Margaret Clapp Library, April 1-June

Julian Bonde-April 7. Spokesman for the New Politics
since the late $1960^{\prime}$ 's and first Black in history to be nominated for Vice President of the U.S., speaker for Black Quintessence Week, Wellesley College, 8pm, Houghton
Memorial Chapel.

Springtime '83 Fashion Show*-April 8. Sponsored by
Ethos, Alianza and Slater International organizations at 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 $\mathrm{Rm}, 2 \mathrm{pm}$.
Special Chapel Service*-April 10 . Conducted by Ministe
Keith Darlington, 11 am, Houghton Memorial Chapel.
L'Amfiparnaso-April 8. Madrigal, opera by Orazio
Vecchi, 8pm, Jewett Auditorium. ,
Brass Concert*-April 10. Worcester Tech Brass Ensemble,
Douglas Weeks, conductor, members of the Wellesley College Chamber Music Society, $7: 30 \mathrm{pm}$, Science Center.

MIT Symphony Orchestra Concert*
Epstein, 8pm, Houghton Memorial Chapel.

Masterpieces of the French Calotype ${ }^{*}$-April 15- June
12. A Still Liff Instinet, lecture by Eugenia Parry Janis,
Professor of Art History, Wellealey College, Wellesley College 12. A
Profeso
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 $24,10 \mathrm{am}-4 \mathrm{pm}$.

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 Bradiey's richly colored geometric sculptures revolve in
space to evoke Plato's thought: "Perfect beauty is geometric beauty." 9am 5 pm; April 11 . June. Free.
Zen Zuh Li '22: Painter and Poet Landscape paintings in Opening May 17 through September. chalk dra wings by the Dutch landscape master; Mechanical Computings slide rules, slide rules, and more slide rules;
George Owen ' 94 Yacht Designer': Drawings, half George Owen '94 Yacht Designer*: Drawings, hal
models and photographs of sailing vessels by a master ship
builder and designer (MIT '94); A Bunch of Electricals: An Mil 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 Engineering Wizard oing, artifacts of the legendar naval architect and marine engineer Nat Herreshoff (MIT $1870)$ of Bristol, R.L. In his 79 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
steam engines. April 21-Sept. 24. Opening Reception:
April 21. His grandson Halsey Herreeshoff will attend.
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 A. Baker $\mathbf{y}$ 3: A Tribute. A memorial exhibition of hi
watercolors, drawings, plans of historic vessels, etchings and watercolors, drawings, plans of historic vessels, etchings an
models. Through June. Daily 9am-10pm Rm 5 F F 126 . Free.
Ongoing exhibits: MIT Seagrant-A review of MIT ocea research, Entrish Harborgrant-A Seeves 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 the beginning of the Industrial Revolution; Collection of
Ship Models-Half-models and drawings. Historical view Ship Models-Half-models and drawing
of the design and construction of ships.
Corridor exhibits: Building $1 \& 5$, 2nd floor: John Ripley Rogers. Building, Norbert Wiener, Karl Taylo
Compton. Community Service Fund, Ellen Swallow Compton. Community
Richards. Builing 6: Laboratory for Physica
Chemistry. Building 8: Solar Enery, Society of the Chemistry. Building 8: Solar Eneryy, Bociety 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 3 D formats, from stereoscopes
olograms. Through holograms. Through ApDir 13. Gatlilery Hourra: Monday.
Thursday 9 am-11pm; Friday 9 9am 6 pm ; Saturday 10 am 6 pm ; Thursday 9 am- 11 pm; Friday 9 9m- $-\mathrm{pm} ;$;
Sunday noon- 8 pm . Rm W31-310. Free.
Stroboscopic Light Laboratory Corridor**-Permanent
exhibit of high speed photographs. Main corridor, near Rm 4 . Rotch Visual Coltections*-Changing exhibitions pertinent to the School of Architecture and Planning.
Weekdays $8: 30 \mathrm{am} 6 \mathrm{pm} . \mathrm{Rm} 7.304$. Free.

## Theater

Wither Thou Ghost*-Musical comedy written and
produced by MIT students in the Musical Theatre Guild. April 8 , 9 at 8 pm; April 7 at 7 pm, Kreage Auditorium.
Admission: $\$ 5$, $\$ 3$ for students, senior citizens. Admission: 85 , 83 for students, senior citizens. For
information and reservations call $\mathbf{x} 3.6294$.

The Two Gentlemen of Verons*-by William Shakespeare, The MIT Shakespeare Ener. April 14-19,

## Dance

Ongoing Yoga Claases*- Begin now. Intermediates, Mon, 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 2.3 m and Sat $10: 30.11 .30 \mathrm{ma}$. Crative
Movement/Modern Dance Clases for children ages $5-12$ Movement/Modern Dance Clases for children ages $5-12$
meet Sat $9: 30-10: 30 \mathrm{am}$. West Campus location. For info and meet Sat $9: 30-10: 30 \mathrm{am}$. Weet
registration call Pamela $\times 3.5758$.
 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 $\times 3$.

## Sports

## HOME EVENTS: April 6: M V tennis, Bowdoin, 3pm; J V

 lacroses, Bentley, $3: 30 \mathrm{pm}$. April 7: baseball, Babson, 3pm; Apri1 8: V golf, WPI \& Babson, 1pm; M V tennis, Colb,3pm; M F tennis, Belmont Hail, 3 pm. April 9 : W crew
Brown, Northeastern \& Radeliffe, M V sailing, MI Invitational, II Iam; softball, Western Conn \& Wheaton,
lam; $\mathrm{M} ~ \& ~$ tennis, Williams, 2pm; track, Bowdoin,
12.30p .
$\qquad$ lasalle, 3 pm . A
Naval Academ
Northeasatern
and 3pm; M M tennis, Tuft
Verment
Trinity, 2pm; Wpril 16: golf, Colby, 1pm; M V \& F tennis, April 16 \& \& 17; W W sailing, Emily Wick Trophy, 11 am .
*Open to the public
**Open to the MIT community only
Send 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 8 pm as the 22 nd 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 from Mr. Glass collaboration with American stage director/designer Robert Wilson and whin has beend opera legend. Other selections wil come from Motion.
Motion.
Program notes for the occasion have been Program notes for the occasiosic John Har-
written by MIT Professor of Music a composer whose work has received increasing critical acclaim. Professor Harbiincreasing critical acclaim. Professor HithrbiPittsburgh 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 norm
Writing in the New Musical Express last Writing in the New Musical Express last
April, Felix Jay said: "As a (Nadia) BouApril, Felix Jay said: "As a (Nadia) Bou-
langer pupil with all the conventional degrees langer pupil with all the conventional degrees traditional stuff before he evolved the style he's now exclusively known by, Glass is no
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
say."

A musical prodigy, Mr. Glass played flute at 8, entered the University of Chicago at 15 majoring in philosophy, studied at the Juil liard School and also in Paris with the late Ms. Boulanger.
The Abramowitz Lecture Series was estab ished at MIT by William L. Abramowitz, ' 35 as a memorial to his father. It has been sus tained 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 LewisLecture in Chemewis Lecturein Chem 15 in $\mathrm{Rm} 66-110$ at


His lecture, "Fron gineering in the Oil Industry," will make the point that the country needs bright, innovative chemical engineers to lead it out
of the economic dolof the economic dol
 drums, especially now 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 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.


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. Dr. William G. Thilly, right, associate professor in the Department of Nurtition and Food Science.

## Cross Lectures to be given April 13, 14

Professor Oyvind Bjorke, head of the Pro duction Engineering Laboratory at the Uni versity of Trondheim, Norway, and Philippe Villers, founder, president and director o Automatix, Inc., of Billerica, Mass., wil deliver the 1983 Ralph E. Cross Sr. Lectures in Manufacturing Sciences on April 13 and 14 n Rm 9-150.
The lectures, given under the aegis of the Laboratory for Manufacturing and Produc ivity, were established to honor Ralph E. ross, Sr., chairman of the board of Cross and recker Corp., whose generosity to the labo atory has allowed it to launch many new esearch efforts in productivity analys laser micro-machining cs. Mr. Cross is member of the MIT Class cs. Mr. Cross is a member of the MIT Class o
$\qquad$ Each year leading figures in the manufac turing world are invited to lecture and to give workshops at MIT on pivotal issues in the manufacturing sciences.
Professor Bjorke, an international author ity on many facets of manufacturing engi$10 a m$ on April 13. Its subject: Manufacturin 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 Manufacturing Systems." He will present an overview of the philosophy and the approach of partly unmanned manufacturing systems, emphasizing the integration of CAD and 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 2 pm 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

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'80 Mustang, hatchback, drk red, 10
mileage, 16 K, manual tranam, 6 cy
tape deck, gd cond. Call 566.5599 .
81 Datsun 210 wagon, many extras,
13 K , exc cond, $\$ 4,500 /$ best. Call $\times 3$ 3
81 Yahama, Chappy moped, auto
transm, locking ign, kick starter,
luggage baskets, wind mirgage arivers, winly 1700 mi, vy econ, 75
mpg, $\$ 495 /$ firm. Call $646-4484$.
Animals


## Housing










Agentef forigu exololisin looking for
 Weton, summer rental 23 montha, 20


## Wanted <br>  MIT Working mother nedidexexprienced  Job Huntere Training \& Suppor Day yare nedede for 5 mold infant $M$ $F$, in M Cambr area, pret surronding    

Lost and Found


## Roommates

Arlington professional male, 28 , seeks
professional female/male non smoker,
for roomy 2 BR apt, in hse nr center. T , or roomy 2 BR apt, in hee nr center,
no pets, $\$ 262.50 / \mathrm{mo}+$ util. Nick, x 271
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
$\$ 225 / \mathrm{mo}^{2} \mathrm{inc} 22 \mathrm{rms}$, all util. Sabrina, x 3 $\$ 225 / \mathrm{mo} \mathrm{incl} 2$ r
7385 after 4 pm .
Watertown, F, 29, looking for non
smoking Frmmte to shr 2 BR apt, nr
River \& busges, avail $4 / 1, \$ 238 / \mathrm{mo}$ incl $\mathrm{M} / \mathrm{F}$ wanted to shr lge 4 BR hse in
Brighton, nr T, Ige attic, basement
yard, wshr/dryr, $\$ 237 / \mathrm{mo}$ + util. Call yard, wshr
$783-2675$.

## Miscellaneous

Job avail for typist, nd 20 cassette tapes
transercibed during month of April. Roz, Person who bought BSO tickets for $4 / 27$ Will type theses, term papers, etc. French lessons, grammar, literature,
conversation, can be tailored to your
needs French native, master of art from conversation, can be tailored
needd, French native, master of
the Sorbonne. Call $646-7369$.




It is Institute policy not to uals on the basis of race, colo gion, handicap, age, ornation al or ethnic origin in the
administration of its programs and activities.
This list includes all nonacademic
jobs currently available on the MIT campus. Duplicate lists are posted
on the Women's Kiosk in Building 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 onficerre to apply for positions fo
which they feel they qualify. Pat Williams
Ann Perkins Ann Perkins
Dick Higham
Appointments:
Deborah Reat

## Virginia Bishop

 Ken HewittAppointments

Sally Hansen
Vera Ballard
Kera Bath W. C
Appointments:
Kate Young C

Administrative and

## Academic Staff <br> Administrative Officer of the Cen ter for Trangortation Studies, take Tenceribity

## agement as well as personnel and space administration in this interdicsiplinary research and educational body. Will

## and preparation, submission of propo sal packages. Involves working closely with MIT faculty and staff, numerous

sal packages. Involves working closely
with MIT faculty and staff, numerous
Mr deparments.and profesionals
from outside agencoies. Requires mini-
mum of3 years related experiencealong
with excellent interpersonal and orga-

## nizational skills. Bachelor's degre preferred. A220

Dental Hygienist for the Dental
Service of the MITMMedical Department
Will 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. Reommen-
dations important. NON-SMOKING
Sponsored Research satr

## 

Computer Manager for the Re-
search Laboratory of Electronic-
who will manage the computer facility


Library Support
Staff


## \section*{into use of lasers and fiber optics in specialized surgical techniques. In aaddition, will assist other researchers MIT Regional Laser Center, working

 <br> }

## Katz drawing added to MIT collection

A drawing by the widely known American
rtist, Alex Katz, has been given to MIT by artist, Alex Katz, has been given to MIT by
the American Academy and Institute of Arts and Letters.
Entitled "Study for Ada and Flowers," pen by Mr. Katz in 1980. MIT was one of 16 insti Institute's Hassam and Speicher Purchas Fund Program. The drawing will become part of the MIT permanent collection, admin istered by the Committee on the Visual Arts This is the first year that MIT, through th 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 wor they wish to acquire. The Academy-Institut 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 Institute has a membership limited to 250
Americans selected for their achievement in Americans selected for

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 and the Skowhegan School of Painting and
represented in the museums and art centers of many American cities as well as in Mexico,
Israel and Europe. An exhibition of his paint ings is currently on view at the Marlborough

## Panel to discuss

institutional funding
The third of four discussions at MIT on the 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 ProHerbert Hollomon, Japan Steel Industry Professor of Engineering and former director of Kindleberger, Ford International Professor of Economics, Emeritus; Jonathan A. King, professor of biology; David F. Noble, asso ciate 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.


Technical Support

## Staff



## Office Assistant

Administrative Assistant to the
Associate Director of the Resource
Development Office. Will compose


## Service Staff


 may direct and train technicians of
lower grade; has undertanding of the
theoretical aspects of experiments; has
demonstrated outstanding skill and theoretical aspects of experiments; has
demonstrated outstanding skill and
performance in this field; requires little
or no supervision; will construct and or no supervision; will construct and
teast complex electronic equipment for
laboratory reesearch under direction of
scientific personnel (equipment to
consist of consist of pers annd VHF (equipment transmitter
and receivers, both computer controlled
which are components of nule magnetic resonance imaging systems).
This individual will design and lay out printed circtuil board artwork, as well as
construct the apparatus and perform
final tests . Requires construct the apparatus and perform
final tests. Requires graduation from 2
year day technical school or its equivalent plus minimum of 5 yeerars 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 prepare detail drawings, assembly
drawings and material lists. Includes
some layout and graphic art work of ink
illustrations and graphs for publica. some layout and graphic art work of ink
illustrations and graphs for publica.
tions. Will work from Engineer's layouts, sketches and verbal instruc-
tions. This individual must have a high
school diploma and working knowledge
of tolerancing, symbols for machined
surface quality, welding, parallelism, surface quality, welding, parallelism,
perpendicularity and concentricity.
Five years experience and two years of
day technical school, or some formal
drafting courses, preferred. H 797 Shop Helper B, Chemical Engineering,
who will assist a proect machinit,
technician, other skilled employee or
staff member in the performance of 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 miscellaneus work
neceseary to the shop or laboratory
which may not require the esrrive of a
project machinist, technician or other
skilided employee. Vocational or cooper-
ative school training preferred. H791 The following positions were still
available at Teeh Tak deadline.
Complete descriptions of all available
positions are posted in the Personnel
Office E1-929.and at location sisted
at the beginning of Positions Available


한큰National Magnet Laboratory
R105, Reesarch Specialist, Earth \&
Planetary Sciences
R1001, Sponsored Research Staff,
Haystackental Physicist, Center
associate provost. In his new role, he will 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 gradpared with 4,500 undergraduate 4,400 , co
pared with 4,500 undergraduate students.
As vice president, Professor Wadleigh has had administrative responsibility for the Medical Department, which will in the future onides; 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

## Doc Edgerton's birthday

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 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

## Computer Science R926, Research Staff, Laboratory for Computer Science, R925, Magnet Design Engineer, Na. in the field "it is a

R926, Research Staff, Laboratory for
Computer Science
R925, Magnet Design Engineer, Na-
tional Magnet Laboratory
R923, Research Scientist-Experimen-
tal, Plasma Fusion Center
Ran2, Research Scientist-Experimen-
tal,
Rlasma Fusion Center
R917, Research Scientist-Experimen-
tel/
theoretical, Plasma Fusion Cen-
R913, Research Specialist, Artificial
ticularly 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 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 Managers.
Managers also must guard against overreacting to new trends and adopting proce-
dures "based on the exact reverse of tradidures based on the exact reverse of tradi-
tional assumptions. Rather, Professor Bailyn says, it is the underlying assumption of homogeneity "that needs rethinking.
As unwarranted extreme, she mentions to an unwarranted extreme, she mentions an requiring a transfer because his manager assumes mistakenly that he does not want to assumes mistakenly that he does not want to
move-he has a son in high school-and therefore doesn't want to puthim in the position of turning down a promotion.
Professor Bailyn believes the answer to the overall problem of career-family conflicts may lie in a system that provides for "negotiating careers."
"For example," she writes, "a technician can be assigned routine tasks or more compliappropriate for an employee with high occupational investment, the former for one whose investment is low.
She continues:
obs, 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 of complexity and responsibility they demand. But this requires a continuous increase in the performance and individual satisfaction to be merformance and individual satisfaction to be formance will result.

In summary, Professor Bailyn suggests a bility for assessing their own priorities and translate this into the level of commitment they are willing and able to give to work. And
ecause so-called "occupational investment" varies over a lifetime, as work and family to be periodically renewed.

## Obituaries

## Professor L.J. Heidt

Dr. Lawrence J. Heidt of Arlington,
associate professor of physical chemistry 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 9 am 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 Wisconsin. He did postdoctoral research at
Harvard University from 1930 to 1935 when Harvard University from 1930 to 1935 , when
he joined the faculty at MIT. He remained at he joined the faculty at MIT. He remained at
the Institute until his retirement in 1969, the Institute until his retirement in 1969,
teaching courses in general and physical teaching 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 stertherapy, as well as patents on procedures therapy, as well as patents on procedures
used in the electrical insulation of power cables
He leaves his wife, Agnes (Kiley) Heidt; two 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, Mrs. Oliver was a senior clerk in Physical Plant from 1946 until her retirement in 1977. She is survived by her husband, Joseph A. Burlington, and Daniel G. Casey of Lexington.

## Access to president is available to all

The people who study, teach and work a MIT are a diverse lot, but all have one thing asy access to the person Gray
The mechanism for this low-barrier acces is. the open office time that Dr. Gray sched ules from 3:30 to $5: 30 \mathrm{pm}$ every other week The specific day is announced in advance in Tech Talk and a 15 -minute appointmen can be arranged by calling $\times 3-4665$ 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, adminis trative and academic staff member
earch staff members and librarians.
That diversity surprised Dr. Gray, who had thought that nearly all of his visitor would be students. Most are, but 20 per cen of those taking advantage of the open hour have come from other segments of the MIT community. In a couple of cases his visitor had an indirect tie to MIT-they were mar faculty members also have chosen the open ffice hours route to the president during the last 18 months, Dr. Gray said.
The president says he is extremely pleased t how well the open hours have succeede n bringing him together with many peopl he would not ordinarily have an opportun ty to meet. He has also found the meetings seful in dealing with the occasional unsub stantiated rumor that is accepted as reality because erroneous reports sometime
develop a kind of currency and validity of Who co
pen hours and why? D noon's schedul
-Eight members of the Association of Puerto Rican Students came in to tell Dr Gray about their group, to explain its objec tives 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 tion 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 an 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 well developed problem about a grade, a bil 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 griev ance 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 th appropriate person to see about the problem phone call or a note to the person winh phone call or a note to that pe Occasionally had to say
ern to a visitor a matter of con cern to a visitor receives direct presidentia dent last fall when he was speaking at the 100th anniversary banquet of the Depart ment of Electrical Engineering and Com puter Science. Dr. Gray had mentioned the unflagging enthusiasm of Institute Profes sor 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 resident during open hours, distressed a what the student characterized as glorifica tion of war by virtue of a "missile" bein displayed outside Building 20. The studen told Dr. Gray that he understood the neces sity for ROTC training, but could find no
excuse for the brandishing of weapons. "On my way home that night I took a He found a naval shell bearing thray said inscription "Property of Harold E Edger ton, MIT " Dr Gray guessed it turned out-that Professor Edgerton use 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 th opportunity to meet face to face with studeigh, erio high prity with Dr Gray. He like people to pay him a visit.

## "I the part abisit

ments appoint Gray said "but in the president," Dr did nothing for several months," Then came a visit from Barry S, Surman, at the time a reporter for The Tech, now its editor-in chief. "He suggested I have open hours,"Dr. Gray said, "and that nudge led to the prac tice now in place.
MIT's president doesn't know whethe university presidents elsewhere have the same practice. I know Don Kennedy Stanford jogs every morning and several people are in the habit of running with him, but I don't know how much talking can $g$ 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 Croton-on-Hudson, N.Y., is directing as well as play ing 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 parti cipating: Thomas Garvey of Houston, Texas, set designer; cast members Geoffrey ingree of Cambridge; and from Wellesley Fege, Daria Lisa Martel of Los Angeles. Maldem the junior clas. David Seranni of are Barbara Moore of Park Forest, III.; 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, N.Y.

From the freshman class: Lighting wa designed by Jonathan D. Wyss of Luxem bourg. Cast members are Stephen Genn of Vienna, Austria; Charlotte Kemp of Glouces ter, Va.; Michael Levine of Newton, and Scot 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 majo productions annually, maintains an active repertory of some 80 scenes, brings many scene productions to Bosto area schools an goes on an annual tour. The group toure England in 1980.

The ensemble is under the professional direction of Robert L. Lane who taught acting and directing in the Department of Drama a Stanford Its concentration Shake Mi 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 10 am . The four-mile run, open all members of the MIT and Wellesley communities, and Draper and Lincoln Labs, begins at the Walter C. Wood Sailing Pavil ion, proceeds along both sides of the Chers.

The entry fee is $\$ 4$ ( $\$ 5$ for post-entry). Tro phies will be awarded to the overall male and emale winners and the masters champion male and female over 40). All runners wil eceive an official CSF road race T-shirt
Registration forms along with the signed
release are available in $\mathrm{Rm} 5-208$ and at th Athletic Department Equipment Desk. Preentry closes Thursday, April 21. Diane McLaughlin, administrative officer of the

Proceeds from the race will go to the Com munity Service Fund, an organization formed in 1968 to encourage MIT volunteer involve ment in various projects in the CambridgeBoston area. CSF is presently halfway through its annual Institute-wide fundrais

## ing effort.

Among race sponsors this year are Bay
acting 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 extraor inary in support from the MIT Council for the Arts to at Naw York's Circle in the Square Thearse at New wright 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 becam .
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 assistan in the Office of the Chairman of the MIT Cor poration and secretary of CSF. "We're expect ing another large turnout this year," he added. Suduiko also noted that April 24 is the first
day of Daylight Savings Time. "All runners day of Daylight Savings Time. "All runners
should remember the fact that clocks will be should remember the fact th
Steve Bratt won the inaugural race in 1981, while former MIT track standout Colin Ker win was the overall winner last year.

## REGISTRATION FORM <br> 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:

If under 18, signature of legal guardian is required.


## Bike ride planned to help charities

Marc Simmons is a young man with a Later this month, possibly as late as th first of May, he plans to embark on what h calls his "Freedom/Charity Ride" in which he proposes to ride his bicycle from 77 Massa chusetts Avenue to his home in Dix Hills, N.Y.

The "Freedom" in the title denotes his completion of requirements for the SB degre he expects to receive in engineering and "Chropology at Commencementin May. Th "Charity" indicates his hopes that various charities may use the 180

The MIT Cor group
The MIT Community Service Fund has expressed an interest in his ride and so has the Massachusetts Association of Retarded Citizens, pal Bike thon May
How it works is that the charity seeks ride sponsors who will donate a given amount pe mile ridden to the charity. Usually there are checkpoints where witnesses verify that the rider has completed that particular leg of the system, although he promises to drop a post card 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.

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

