



Stephen A. Brobst
Richie Medeiros, age 10, demonstrates freestyle bike tricks in Killian Court. Medeiros is a participant in MIT's Volunteers for Youth program.

Minority group finishes second study Examines support services, aid, and admissions

By Niraj S. Desai

The Minority Student Issues Group has called on the MIT faculty to make a more concerted effort to address the needs of minority students. That recommendation is one of many included in the MSIG report on "The Recruitment and Retention of Minority Students at MIT," which was released yesterday.

Coming nearly two and a half years after the MSIG's controversial study of the racial climate at MIT, the report is the second in a planned series of three reports on minority concerns by the group. The 34-member MSIG is chaired by Dean for Student Affairs Shirley M. McBay and includes academic and administrative officials, and faculty members.

The October 1986 Racial Cli-

mate Report found that under-represented minority students experienced unique feelings of isolation at MIT and concern about financing their educations. They also suffered from the perception that admission standards were lower for minorities and from the perceived contempt of non-minority students and faculty.

The report generated immediate debate both for its findings on the experiences of minority students and for its methodology, which included extensive use of anecdotal information.

McBay said last year that the national attention the Racial Climate Report received after its release delayed progress on the second report substantially. The second study had originally been scheduled for completion about two years ago.

The Minority Recruitment Report, which was distributed to the faculty, contains three major sections dealing with support services, admissions, and financial aid.

Support services

Support services should be "designed to assist, to inform, and to enhance students' experi-

ences as they matriculate," the report notes. In the case of minority students, it is especially important that such services address the problems cited by the 1986 Racial Climate Report, according to the MSIG.

The Minority Recruitment Report documents a number of recent advances in support services for minority students. It notes that minority staff members have been added to several offices, including the Admissions Office, the Financial Aid Office, and the Graduate School. A research position in student affairs was established this academic year to aid in the review of minority student experiences. Also, a group was created representing various support services to monitor the progress of minority freshmen.

But if further progress is to be made in supporting minority students, academic departments and research centers must take up more of the burden, according to the report.

"It is critical that faculty and staff begin to respond more effectively to the needs of minority students who are currently enrolled," the report says. Toward this end, the MSIG recommends

(Please turn to page 2)

MIT computer centers combat several viruses

By Maurice Roman

Almost every MIT laboratory that uses Macintosh computers is infected with viruses, according to Andrew Bennett, a supercomputer consultant at MIT Information Services. Most recently, viruses were found in the Micro-Computer Center, the Condensed Matter Physics Laboratory, and the Laboratory for Architecture and Planning.

A virus is the most common type of pest that affects computers. Viruses need programs in order to cause damage. When a program is run in an infected computer, the virus can install itself in that program. It can then cause irreparable damage, such as erasing files — including its host. The virus is transmitted when the infected program is run in other computers.

The types of viruses that have been found at MIT so far are not deliberately destructive, Bennett said. These types include the viruses "nVIR A," "nVIR B," and

"scores" — so-called because those words appear in printouts of infected programs. These viruses cause the computer to slow down, as well as crash randomly, and give read/write errors and print errors. Specifically, the scores virus damages the system software, and nVIR damages specific programs. However, truly destructive viruses, such as one that wipes the boot blocks of hard disks, could infect Macintosh computers at MIT in the near future, Bennett asserted.

The best way to combat viruses is to practice preventive health care with computers, Bennett said. This could be accomplished by installing vaccines in every Macintosh computer at MIT, he explained. Vaccines are programs that prevent most viruses, including scores, from entering programs run in infected machines. However, vaccines do not detect viruses already present in programs that one copies to a Mac-

(Please turn to page 14)

Interphase marks 20th anniversary

By David P. Hamilton

Project Interphase, an eight-week summer program that provides newly-admitted minorities with academic and social preparation for MIT, celebrated its 20th anniversary last weekend in an event that brought an estimated 120 Interphase alumni, students, administration officials, and faculty to the Julius A. Stratton '23 Student Center.

Founded in 1969, Interphase invites fifty students to MIT each year, where they receive free room and board and a stipend for expenses. The participants divide their time between a fairly rigorous academic schedule, which includes mathematics, physics, chemistry, and writing, and a more leisurely and informal introduction to MIT and the Boston area.

The program had its origins in a set of proposals formulated by the Black Student Union in early 1968. One of the founders of the BSU and the first black woman to receive a doctorate at MIT, Shirley Jackson '68, told a panel discussion at the anniversary that one of the primary concerns of the BSU was the extraordinarily low minority representation among the student body. At the time, each class included only three to six minority students.

As a result of what President Paul E. Gray '54 called "this very concrete set of proposals," then-President Howard W. Johnson formed the Task Force on Educational Opportunity. After a year

of intensive study, the task force proposed a new admissions formula, a concentrated effort to recruit minorities, a minority scholarship program, and a summer program based on an existing program, Project Epsilon. This last proposal became Project Interphase.

These efforts led to a nearly tenfold increase in the number of minorities admitted in 1969. Forty-four students attended Interphase that summer, in what task force chairman Albert Hill called

"an attempt to let out the clutch gently over the summer rather than with a bang in September."

The Interphase alumni attending the anniversary generally agreed on the importance of the program and the increased self-confidence it gave them. Karl Reid '84 remembered an "exhilarating sense of accomplishment" at solving challenging problems. Others, such as Richard Williamson '85, spoke of the closeness they found in the tightly-knit In-

(Please turn to page 15)



Julianne Marie Malveaux, PhD '80

Kyle G. Peltonen/The Tech

MIT professor may publish papers on cold fusion

By Linda D'Angelo

Peter L. Hagelstein '76, an associate professor in the Department of Electrical Engineering and Computer Science, has submitted four papers providing a theoretical explanation for cold fusion to the *Physical Review Letters*, according to a MIT News Office press release.

These papers, described by Hagelstein as a "first look assessment," deal with the quantum, collective, and coherent effects of a deuterium fusion model related to the experiment recently conducted by researchers at the University of Utah. Their extraordinary results, first reported on March 23, have spurred numerous laboratories to attempt the experiment.

DD fusion, which Hagelstein considers an "exotic reaction," involves the fusion of two deuterium nuclei (deuterons) to form a

helium nucleus, which contains two protons and two neutrons. Unlike the energy in normal gaseous plasma reactions, the 23.8 million electron volts produced per reaction of two deuterons are not released as dangerous gamma rays, which in this amount would have killed the Utah researchers. Rather, the energy remains within the palladium lattice in the form of heat.

The quantum mechanical properties of the metallic palladium lattice are also involved in the "considerable enhancement of the fusion rates at low temperature," Hagelstein contended. Quantum tunneling enables deuterium nuclei to overcome strong electrical repulsive forces, thus allowing the nuclei to fuse, according to the paper. Hagelstein also describes a "coherent" fusion rate that depends "linearly

(Please turn to page 15)



Peter L. Hagelstein '76

Tech File Photo

inside

Jee-Hoon Yap '90 demonstrates her considerable interpretive powers in an Advanced Music Performance Recital. **Page 9.**

A superb debut from the MIT Bach Society. **Page 9.**

Children of American communists discuss how their parents' politics affected their lives in Eric Stange's film *Children of the Left*. **Page 8.**



Lisette W.M. Lambregts/The Tech

The MIT Muses serenade Mark Enstrom '92 during their spring concert last Saturday.

Report urges greater minority support

(continued from page 1)

that: the President and chairman of the faculty formulate a policy for the academic community on minority enrollment and retention; a group be designated to monitor the implementation of the policy and any resulting programs; each department review the academic progress of its minority students; and the efforts to increase the number of minority faculty and staff be redoubled.

President Paul E. Gray '54 in a cover letter mailed to faculty along with the report, voiced support for the call for greater faculty and departmental participation. Such a response "must not include reducing academic standards or expectations for these students. . . . Rather, these problems call for greater faculty attention, for more creative and flexible remedies at the beginning of the matriculation process, and for a more affirming and supportive MIT environment overall."

Admissions

The report notes that the number of underrepresented minorities in MIT's entering class has risen from 104 in 1986 to 169 in 1988. It attributes this rise to "intensified recruitment efforts by the admissions office staff and by minority students, and by the public candor with which MIT has discussed its racial climate."

To continue this progress, the MSIG recommends that MIT maintain or improve recruitment and enrollment strategies, and document and refine the efforts

that contributed to the gains of 1987 and 1988. In particular, the report urges an examination of the changes that took place in the applicant pool in those years, and how they relate to the increased minority enrollment. To plan for the future, MIT should also examine the national pool of minority students and how it compares with MIT's pool and those of comparable institutions.

Moreover, the Institute should study the adjustment and performance of enrolled minority students, the report recommends. This will enable the Admissions Office to "refine our sense of what qualities and preparation make for a good 'match' between individual minority students and MIT."

The Admissions Office can increase the attractiveness of MIT to minority students, the report says, by providing them with personal contact with MIT personnel and students, and by ensuring that they are aware of special awards and programs for minority students.

Financial aid

"The goal at MIT is to provide enough [financial] aid, on the basis of measurable need, to enable each admitted student to obtain a bachelor's degree within specified time limits." While this is MIT's stated goal, many minority students and their families may believe that MIT is still not a viable option because they perceive that the financial aid likely to be provided will be inadequate, the report says.

The MSIG calls on the Financial Aid Office to explore new ways to "communicate the strength and breadth of MIT's aid program to the minority community." Among the suggestions the group makes are special brochures aimed at minority and low-income students and more frequent visits by FAO personnel to secondary schools and regional admissions meetings.

The FAO should also begin a research project to determine if student loan levels, the student work burden, or the FAO's pos-

ture on parental support and outside aid resources impacts disproportionately on minority students, according to the report.

The report also recommends that MIT explore ways to facilitate the completion of financial aid applications by minority students. Admissions decisions on minority applicants might be made early in order to provide more time for the aid application process to occur, the report suggests. The FAO could also follow-up on continuing minority students who fail to submit aid-renewal applications.

One newly-created program that the MSIG singles out for praise is the MIT Opportunity Awards Program for students from the neediest families. The experimental program, which began operating this academic year, lowers the "self help" component of selected students' aid packages by \$1500 to \$2500. Of the 128 awards given, 60 went to under-represented minority students.

A literary reading by
NINOTCHKA ROSCA
the internationally acclaimed writer from
THE PHILIPPINES

"There is no doubt that she has developed her own distinctive voice and finally put Filipino writing in English into a literary arena that transcends national boundaries."
-Far Eastern Economic Review

Ninotchka Rosca is a journalist, short story writer and novelist whose stories and articles have appeared in Manila magazines and newspapers and in *Ms.*, *The Nation*, and the *Village Voice*. She was imprisoned for her work as a journalist under Marcos.

Friday, April 28, 7:30PM, 6-120

Sponsored by the Amnesty International MIT Group and the MIT Filipino Students Association; Funded by the Council for the Arts at MIT

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Erratum

The article on the freshman pass/fail debate at Wednesday's faculty meeting ["Vote delayed on CUP P/F proposal," April 21] misidentified William F. McGrath '89. He is student representative on the Faculty Policy Committee.

It's never too late to join

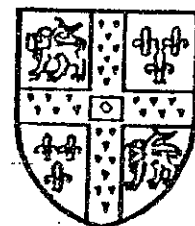
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news roundup

from the associated press wire

World

Japanese prime minister resigns

Japanese Prime Minister Noboru Takeshita has resigned. A government official made the announcement on national television — saying Takeshita wanted to take responsibility for a stock scandal that has forced the resignation of several government ministers. Takeshita has been prime minister since 1987. He's seen his support in public opinion polls sink to single digits due to the stock scandal and an unpopular sales tax.

Soviet poison gas confirmed to have killed demonstrators

A Communist Party official in Soviet Georgia confirmed yesterday that some of the 20 people killed when soldiers broke up a pro-democracy demonstration earlier this month died from gas used by the troops. Many of the 120 people still hospitalized following the protest are asking the Soviet government for an antidote for the unnamed poison. Soviet officials in Moscow deny that troops used poisonous chemicals in the confrontation.

Group calls for abolishment of death penalty

Amnesty International is appealing to 100 countries — including the United States — to abandon the death penalty. The human rights group said use of the death penalty in the United States appears to be arbitrary and racially biased. Amnesty International also said the death penalty has been imposed on the mentally ill and on people who may have been innocent.

Sports

Ohio bookie reports Rose bets

Although nothing in a 13-page federal transcript indicates Pate Rose wagered on baseball games, Ohio bookmaker Ron Peters has told authorities he took upwards of one million dollars in bets from the Cincinnati Reds manager. Meanwhile, a letter from Baseball Commissioner Bart Giamatti to the court states Giamatti believes Peters's testimony. Giamatti is probing Rose's personal conduct, which reportedly includes gambling. It's not known when the commissioner will complete the investigation. His office had no comment on today's developments.

Peters faces 23 years in prison on drug and tax evasion charges.

If Giamatti determines Rose bet on baseball, he could receive a one-year suspension. If he bet on the Reds, he could get banished from the game for life.

Nation

North jury continues deliberations

Reading, but not talking: that's how the foreman describes the jury's activities during its third day of deliberations in Oliver North's Iran-contra trial. In a note to Judge Gerhard Gesell, Denise Anderson said the jurors were studying documents that pertain to the 12 charges facing North. Deliberations continue today.

Speculations on cause of USS Iowa blast continue

About 3000 people, some of whom were wearing black armbands, gathered in Norfolk, VA, to welcome the battleship USS Iowa as it pulled into its home port on Monday. Forty-seven sailors died in an explosion in one of the 16-inch gun turrets of the ship on Wednesday.

The New York Times reported Sunday that Navy teams who entered the turret after the explosion found the gun's breech open and undamaged. The paper's sources say that this finding indicates the blast occurred while bags of powder were being loaded. The Navy, however, has refused to comment on the probable cause of the explosion. Defense Secretary Dick Cheney said that the Navy will continue to use World War II-vintage ships.

Exxon claims progress in cleanup

Exxon said that 70 percent of the Alaskan oil spill has evaporated or been recovered. That, the oil giant says, puts them ahead of the pace set in a federally-approved cleanup plan. But the state's top environmentalist said Exxon's figures could be off by as much as 50 percent.

Atlantis set for Friday launch

The countdown for the launch of the space shuttle Atlantis is scheduled to commence Tuesday morning. Atlantis is due to go up Friday.

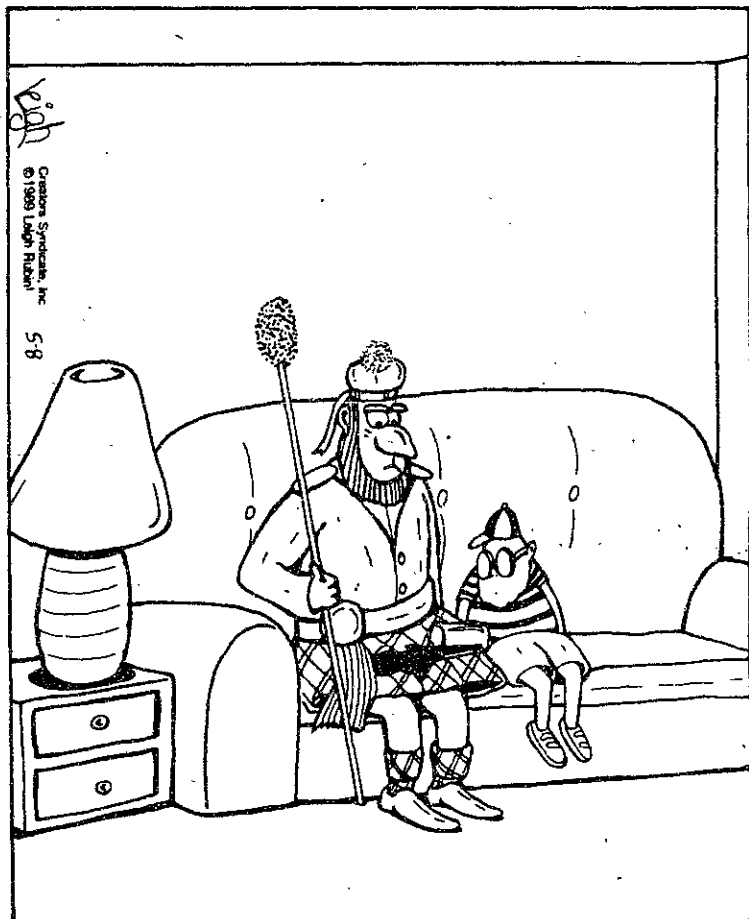
New heart operation successful

A Pittsburgh-area man who underwent experimental heart surgery last month says he feels marvelous, and doctors say up to a third of those needing heart transplants may be candidates for this new type of heart surgery. In the procedure, doctors say they wrap muscle taken from the patient's back around the patient's ailing heart to help it pump.

Wright's ethics investigation moves to Texas

House Speaker Jim Wright's Ethics Committee investigation moves to San Antonio, TX, where members plan to interview Mallick, the businessman involved in an oil-well investment that reaped large profits for a blind trust held for the speaker. Wright continues to deny the 69 violations of House rules with which the ethics panel has recently charged him.

Rubes® By Leigh Rubin



Fortunately, the Scotch guard prevented Billy's grape juice from staining the new sofa.

Local

UMass students protest defense research

Seventy students occupied a University of Massachusetts building in Amherst yesterday. It's the second takeover in a week to protest federal Defense Department-funded research on campus. University spokeswoman Stacey Chase says campus police sealed off Memorial Hall after the protesters entered at 1 pm. Police allowed students out, but did not allow any to enter. The protesters call themselves People for a Socially Responsible University. They gave administrators a list of demands including a halt to all Defense Department research on campus. They also want the withdrawal of charges against seven people arrested in a similar occupation in another building April 19.

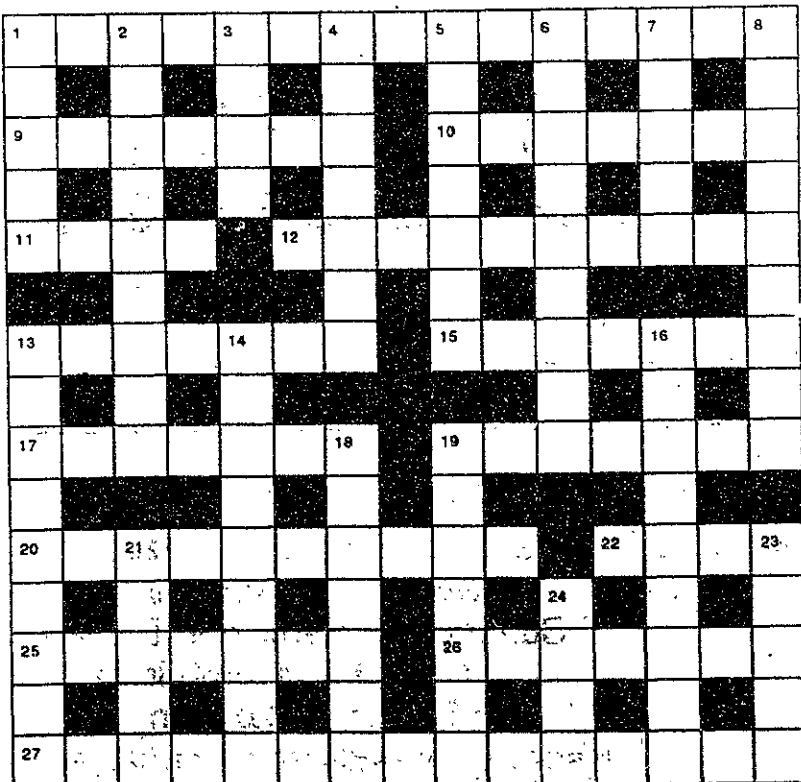
Cryptic Crossword #4

Across

1. Scared nightly, I forked a hard, fat casserole. (6, 2, 3, 4)
9. Brave female insect has 50. (7)
10. His victories were guaranteed by Californian, we hear. (7)
11. Got back a garment. (4)
12. Organic part of the house? (6, 4)
13. Distinctive but incompetent, perhaps? (7)
15. Leaves the room candle-dark? (4, 3)
17. Usage so poor, it becomes cloudy. (7)
20. Enthusiast of a Natick origin. (7)
22. Troubadour, less cynical, or brass instrument. (4)
25. Receding hairline of the sky? (7)
26. Volcano did it, partly to cheer up Teddy. (7)
27. Must dance well — those nine left go crazy! (5, 2, 4, 4)

Down

1. Worry that fine measurement is losing memory. (5)
2. About the French logic units, puts it out of mind. (9)
3. One vehicle for Russian monarch. (4)
4. Shouts ideas around, not indoors (7)
5. Sit worriedly in grad dorm for sampling. (7)
6. Dastardly revenge taken about tree. (9)
7. I'm in a frat, or hope to be! (3, 2)
8. Mike, can't I possibly describe motion? (9)
13. Stumble after destroying thing at dusk. (9)
14. Reject reproduction leaves a mark. (9)
16. Not in, crazy sleuth must work harder. (9)
18. Desire in male child to become a specialist. (7)
19. Sounds like house of swordplay might constrict! (5, 2)
21. Disconnect from sun rigors. (5)
23. Car Tesla might examine. (5)
24. 100 at-bats warrant protective garments. (4)



Solutions
page 15

Weather

Cool and dry on a scale of zero to pi

Sunny mild days and clear cool nights will be the weather phrase for the next several days. A large low pressure center located over southeastern Canada will slowly exit to the northeast over the next few days keeping New England in a northwesterly flow of relatively cool, dry air. On Wednesday, high pressure located over central Canada building southeastward will usher in slightly cooler weather.

As the weather is relatively quiet, let me introduce to you a rather "irrational" scale to rate the weather. "Bad" weather (lots of rain and clouds) rates a zero; while "excellent" weather (sunny, warm, but not too warm) rates a pi. This week's weather I'll rate an "e."

Today: Mostly sunny with a few fair weather cumulus clouds developing in the afternoon. Mild. High 60°F (15°C). Winds northwest at 5-10 mph (8-16 km/h).

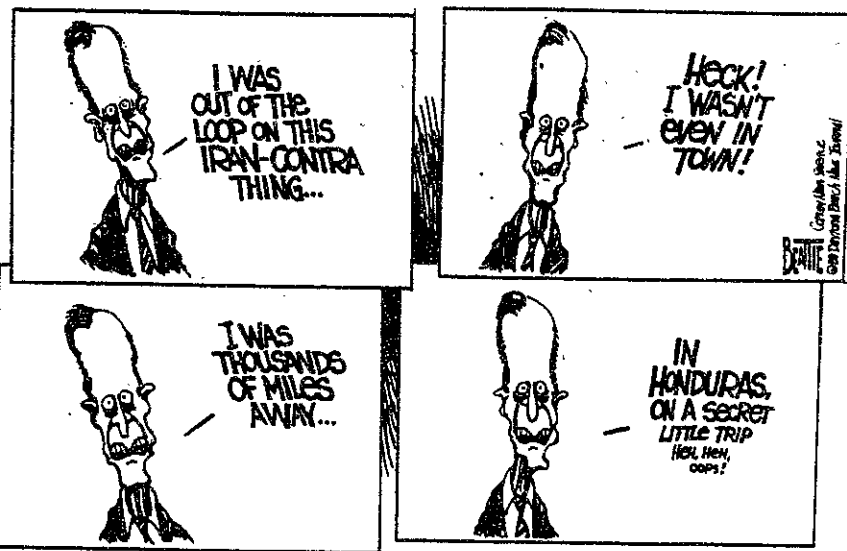
Tonight: Partly cloudy and cool. Low 43°F (6°C). Winds northwest at 10-15 mph (16-24 km/h).

Wednesday: Partly cloudy and turning cooler. Winds onshore early turning to northwest by afternoon. High 55°F (13°C). Low 40°F (4°C). Winds northwest 10-20 mph (16-32 km/h).

Thursday: Mostly sunny with afternoon clouds. Cooler. High 50°F (10°C). Low 35°F (2°C).

Forecast by Michael C. Morgan

opinion



The Tech

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Tuesday, April 25, 1989

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LETTERS TO THE EDITOR

GSC must postpone surveying grads on pledge

This is in response to the letter that Paul Antico '91, Andrew Strehle '91, Ajay Advani '91, and Manuel Rodriguez '89 wrote the Graduate Student Council concerning the commencement pledge on social responsibility ["Graduate Council should assess pledge interest," April 11]. The GSC recently (April 18) took up this issue, and, after long discussion, decided that there was insufficient time remaining in this school year to adequately inform students about this issue as well as conduct a vote. However, the GSC will be very happy to gauge graduate student opinion during the next school year. It is the feeling of the GSC that an ill-informed, hurried vote is of little

value both to students and to the Institute at large.

Commencement is as much an undergraduate as a graduate event, and even though graduate students will not be asked to vote on the pledge this year, I urge all

graduate students to find out for themselves about this issue and make their own decisions about taking the pledge.

Scott Peng
 President,

Graduate Student Council

Letters policy

The Tech welcomes letters from its readers. All letters are subject to editing and are published solely at the editors' discretion. Authors must sign their letters and include their phone number and MIT affiliation, if any, for verification, and should type letters double-spaced for ease of reading. Letters should be kept under 500 words. The Tech publishes letters anonymously only in rare circumstances, at the editors' discretion. Bring letters to The Tech's office on the fourth floor of the MIT Student Center or send them to: Letters to the Editor, The Tech, P.O. Box 29, MIT Branch, Cambridge MA 02139; or to Room W20-483 by interdepartmental mail.

Pass/fail issue concerns more than just grades

Freshman year pass/no-record stands for more than just a grading policy. It demonstrates MIT's faith that students take their education seriously. It is a continuing vote of confidence in MIT's ability to address the needs of a unique and diverse group of students. When initiated, it was a radical idea, conceived in an era when faculty were beginning to accept the idea that a doctrine of *in loco parentis* was inappropriate and counterproductive for students who had demonstrated, by their achievement in high school and promise for the future, that they were capable of ordering their own lives.

Now we face a turning point. Faculty believe students have not been well-served by this system. Their solution is to take back pass/no-record or limit it, and return to a grade-incentive system. This sends several clear messages.

First, the Committee on the First-Year Program proposal says grades are important — more important than anything else. Professor William T. Peake '51 pointed out that pass/no-record sends the opposite message. So what? I thought the whole point was to impress upon students the importance of learning, not to encourage them to judge their self-worth on the basis of grades. The grades a student receives freshman year are not important ten years later. Whether or not that freshman jumps off the Green Building is.

Second, the faculty supporting the proposal are implying that students under the pass/no-record system are lazy, careless, and unmotivated. If this is true, perhaps MIT should revoke the degrees it has been giving away for the last 15 years or so. Has

MIT been graduating incompetent engineers ever since pass/no-record was initiated?

Finally, the Committee on the Undergraduate Program, in supporting this proposal, is suggesting that an MIT degree is nothing special. MIT must conform to the same procedures as most other schools in the country. Without those freshman grades, potential employers and graduate schools really cannot be sure of what they are getting.

The CFYP proposal to restructure pass/no-record attempts to confront valid concerns, but ultimately fails. Students seem to be less prepared in upper-level classes. A few students overload during freshman year. Is this any reason to scrap a system that has basically worked? We would replace it with an unwieldy, ambiguous plan that attempts to satisfy everyone except those with a vision of what an MIT education should be.

The first obvious solution to improving undergraduate education at MIT is to improve the quality of teaching and quantify exactly what standards are expected. MIT has the right and duty to expect students to work hard. But it also has an obligation to be fair. If freshmen do not understand the fundamentals of Physics II (18.02) or any class, fail them. Whether a freshman receives an A, B, or C should make no difference to subsequent professors.

On a deeper level, MIT must address fundamental questions of how it plans to educate students in the years to come. Are we to continue a policy of basic training for the "battlefield of Course VI," or are we going to look to the future, when it will not be enough to be the best trade

school in the United States? Proposals to tinker with the grading system not only fail to solve any problems, they institutionalize the ways of thinking that will shackle us to the past and stifle any vision of the future.

A lack of vision drives this debate. The amendment that Professors Marc A. Kastner and Robert J. Birgeneau have proposed to the pass/no-record motion now before the faculty attempts to pacify students and restore a safety net for "those who need pass/no-record." But everyone needs pass/no-record. Pass/no-record's purpose is not to shield poor performance, it is to reward exceptional performance and give students an opportunity to achieve their educational goals without the distracting pressure of grades. Pass/no-record boldly asserts a vision of MIT as the best educational institution in the country. What we do here, others cannot. Do not turn pass/no-record into a badge of dishonor that must be selected by the lowest half of the class who cannot deal with grades.

When faculty members vote, they face a clear choice. One path surrenders to the proposition that we cannot educate without grades. The other, in this case the status quo, reaffirms the greatness of MIT, its faculty, and its students. There are problems with the MIT education, but the solution is not retrenchment. It is to move forward again, to perfect a good system, to recommit to the ideals that have elevated this institute in the past and which will carry it forward in the future. Strangely, the most ambitious and visionary choice is the conservative one. Pass/no-record is good. Let it be.

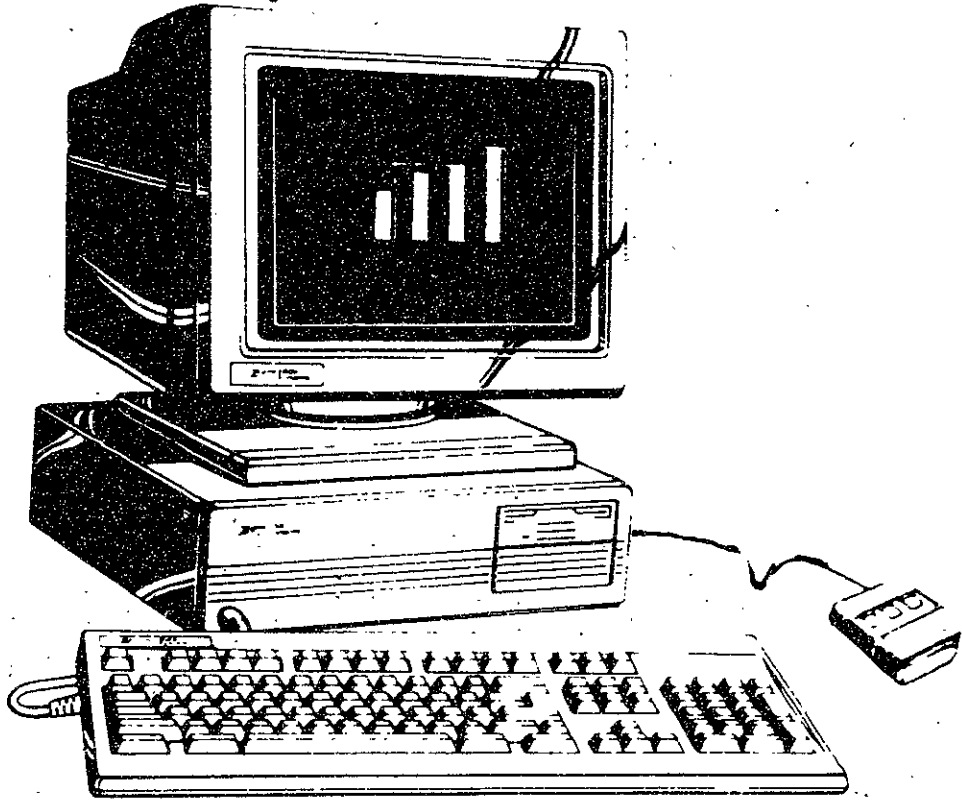
Dave Atkins '90





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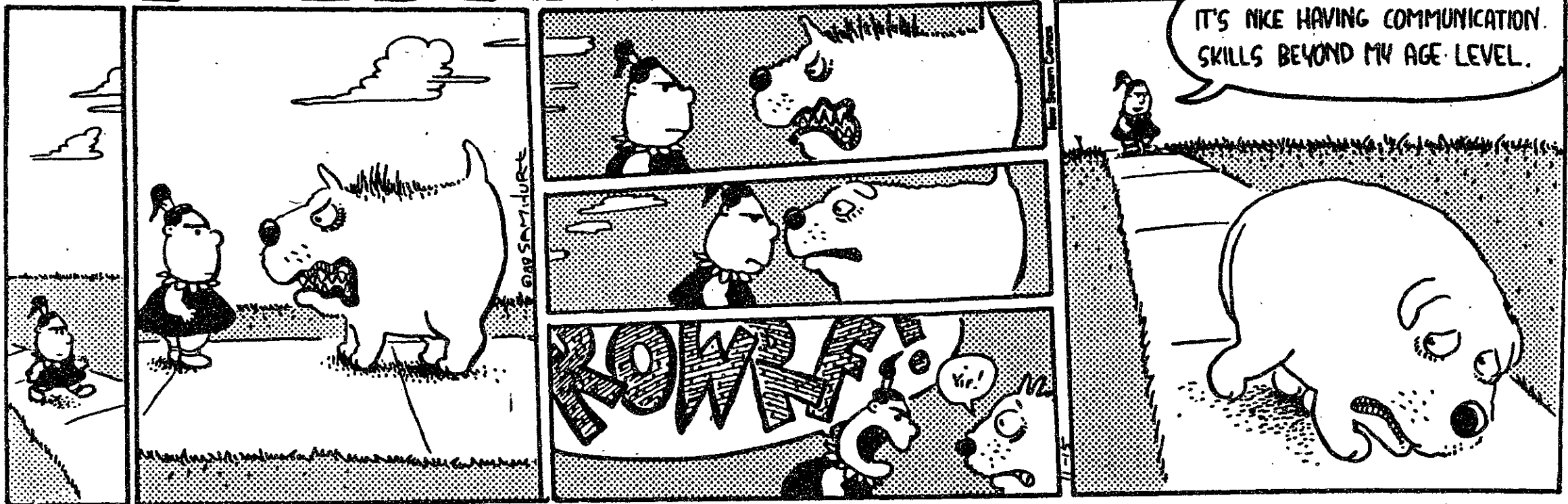
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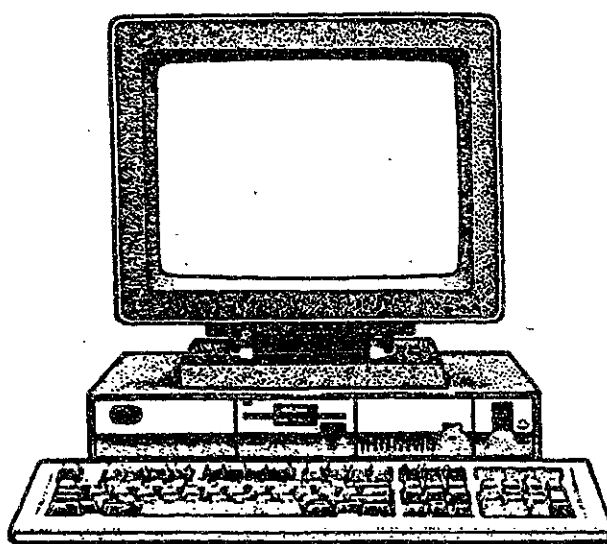
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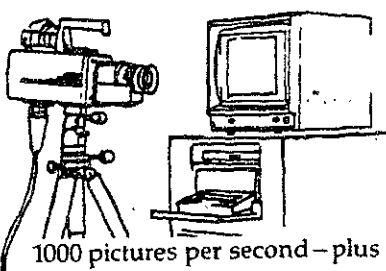
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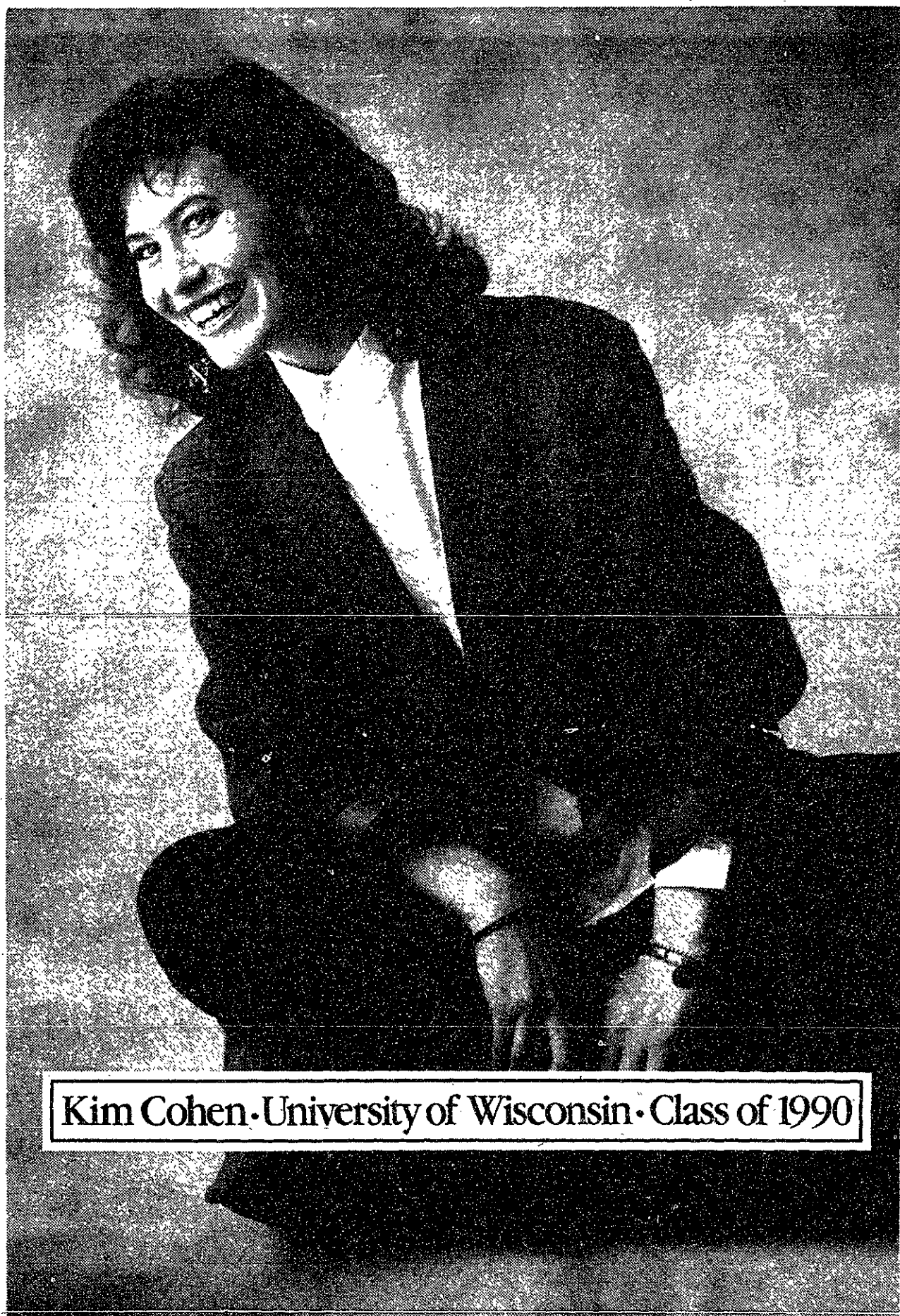
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Documentary studies children of American radicals



Eugene Dennis Jr., a "red diaper" baby from Eric Stange's film *Children of the Left*.

CHILDREN OF THE LEFT

Directed by Eric Stange.

With Eugene Dennis Jr., David Horowitz, Richard Healey, Country Joe McDonald, and Joan Sokoloff.

Narrated by Don Wescott.

World premiere tomorrow in the Bartos Theater (Wiesner Building) at 8 pm.

Free admission.

By MANAVENDRA K. THAKUR

"THIS IS THE STORY ABOUT the personal side of that legacy, about the children who inherited the vision of American Communists of the 1930s, children known as 'red diaper babies.' " So says the narrator at the beginning of *Children of the Left*, a new documentary by Cambridge-based filmmaker Eric Stange.

Working within the limitations of television, the 56-minute production interviews five red diaper babies (who are, of course, middle-aged adults by now) and focuses on the memories and scars left by their parents' radical politics. The documentary doesn't break any ground in the hallowed traditions of documentary filmmaking, but its subject matter is still fascinating. Stange realizes that people often recoil irrationally at the first mention of communism, and he handles his subject matter with astute sensitivity. Stange also provides

an overview of the history of the American Communist Party with large amounts of archival footage and photographs.

All of the five red diaper babies in the film look back toward their parents with respect and pride. Despite communism's foreign roots, Eugene Dennis Jr., one of the five red diaper babies interviewed, says that he grew up with communism as a way of life, and so it was "very American" to him. Other interviewees talk about their "fond memories" and describe their upbringing as "a very rich way of life." One says "My father did what he did because" he felt change was necessary, and another observes that communism gave us "a world view."

At the same time, however, their parents' ideological commitment often took a severe toll on their personal and family life. For example, the children were trained early on in techniques to circumvent surveillance, such as writing messages down instead of openly talking in a bugged room. Constant vigilance and the awareness that their parents were different from other parents took their toll as well.

For example, Joan Sokoloff, another interviewee, remembers a bitter moment in childhood when she kept thinking "Why can't [my mother] be like everyone else's mother. . . and bake brownies?" Dennis' father was secretary general of the American Communist Party, and he appeared as the first witness before hearings held by the House Committee on Un-American Activities. Dennis says he quickly noticed "a new tension" among adults around him who "closed ranks against an outside threat." The film does not elaborate on what effect these childhood perceptions might have had on Dennis and Sokoloff, nor does it need to. The film is at its best when it allows its interviewees to express themselves in this manner.

Dennis, it seems, is the star interviewee of the film. Stange relies on Dennis more than the others in the film, and shots of Dennis both open and close the film (with the exception of a brief prologue before the opening titles). Ideally, Stange should have found a better balance between his interviewees. In addition, the film shows only one woman and no minorities, who most likely would have been able to provide a different perspective on the whole era.

(Please turn to page 10)

"Art and politics" — an interview with Eric Stange

ERIC STANGE

An interview with Eric Stange, producer and director of *Children of the Left*.

By MANAVENDRA K. THAKUR

ERIC STANGE IS A SOFT-SPOKEN MAN who began his filmmaking career only recently. He is 35 years old, a Cambridge resident, and he has written for *The Boston Herald*. He also has worked as a freelance writer and published articles, usually about "the intersection of art and politics," in *The Boston Globe*, *The New York Times*, and *The Independent* (London). He attended the University of Massachusetts at Amherst, and went to graduate school in journalism at Boston University.

The following are condensed excerpts

from an telephone interview with him on a recent Sunday morning.

Q. What were your reasons for making this documentary film, and what led you to filmmaking in general and documentary films in particular?

A. *I wanted to make a film, a documentary, about leftist American politics. I wanted to find a new way of looking at leftist American politics [to make it more accessible] and get around the reactions you get [when you mention communism].*

I'm a . . . newcomer to the documentary world, and it's very expensive to make documentary films, even on video. I have been a print journalist for 10 years, but about four years ago, I decided to try this other medium, which is much more powerful. It has more powerful, more potent im-

ages. I find documentaries an intriguing way to do journalism. [As for feature filmmaking,] documentaries are obviously cheaper.

Q. What are your previous film projects? *The Pitch of Grief is a 30 minute film I made in 1985. [The film looks at how four people deal with the death of a close relative.] I've done additional projects for hire.*

Q. In *Children of the Left*, your film only touches on how political views can flip-flop or remain the same after two decades.

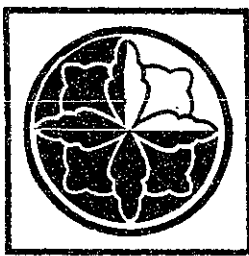
A. *I wish I had more time to talk about these people now. I am now writing a six-part series about the 1960s for PBS.*

Q. Your film stresses the personal and human side of the red diaper babies. Do you

(Please turn to page 10)



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ARTS

Potent, intense performance from Jee-Hoon Yap '90

JEE-HOON YAP

Works by Bach, Beethoven, and Brahms.
Killian Hall, Friday, April 21.
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Recital Series.

By DAVID M. J. SASLAV

JEE-HOON YAP '90 WIELDS A NUMBER of potent pianistic tools that elicit art from her instrument; chief among them are a keen mind, a precise ear, and forearms of steel. In delivering up a selection by each of classical music's "Three B's," Yap brought out the architecture of a Bach dance suite, the playfulness of a middle-period Beethoven sonata, and the fiery poignancy in a set of Brahms variations. Having chosen as demanding a program as this, Yap proceeded to display remarkable versatility.

J. S. Bach's *Partita No. 6 in E* opened the recital, and Yap's depth of musical understanding carried her through some rough areas. It is in structure and symmetry that one finds deepest appreciation of Bach's works, and this performance paid respect to both. Within sections as well as between, Yap gave each line and each voice its proper formalistic dues. Particularly lively was the third movement, entitled *Courant*. Yap's scrutiny of the inner voices was well-focused, intense, and extraordinarily musical. Two miscues failed to rattle her.

Opening the spritely *Sonata in F, Op. 54* of Beethoven, Yap's technique failed her at times, particularly when reaching for octave leaps in the right hand. Her strong left never faltered, though, and the first movement, labeled *In Tempo d'un Menuetto*, was a strong one in all important respects. The closing *Allegretto* (the sonata is in two movements) was the high point of the entire recital; Yap's thunderous fortes seemed utterly effortless, and her sudden pianissimos were intense. More importantly, Yap's treatment of the gradu-



Pianist Jee-Hoon Yap '90 in recital in Killian Hall.

al *crescendo* and *decrescendo* was subtle and magical. A grand performance, both timely and fun.

Following the short intermission, Yap played Brahms' *Variations on a Theme by Paganini*. A fantastic work which combines the *Sturm und Drang* of Brahms' youth with the tender bliss he came to know, this work, more than most, taxes a pianist's expressive range, technique, and concentration. While Yap was more than up to the first two challenges, her concentration faltered at a couple of critical junctures; at these times, her musical momentum was all but eradicated. Fortunately, though, these moments were rare, and the overwhelming impression from this *Paganini* was one of power and youthful vitality.

The seeds of three tremendously important interpretations were evident in this afternoon of music; another year's study and development under new Music Section acquisition David Deveau cannot help but produce a polished, confident pianist of professional proportions. I await Yap's senior recital with great anticipation — an exploration of music outside the high German repertoire may even better demonstrate her budding but considerable interpretive powers.

MIT Bach Society delivers dramatic St. John Passion

THE MIT BACH SOCIETY

Directed by John Oliver.

Work by Bach.

Kenneth Goodson '89, Tom Jones, Rockland Osgood, Jayne West, Mary Westbrook-Geha, Mark Evans, and Richard Morrison as soloists.
Kresge Auditorium, Sunday, April 23.

By DAVID STERN

SUNDAY NIGHT MARKED THE DEBUT of MIT's new all-student chorus, the MIT Bach Society. For their first performance, director John

Oliver chose Bach's *St. John Passion*, a massive and ambitious piece, to be sure. Oliver and the chorus must be congratulated on a remarkable achievement.

What else can one say about the piece of music itself? *St. John Passion* is one of the great masterpieces by Johann Sebastian Bach. Powerful choruses, exquisite-always instrumental counterpoint, and tortured drama — everything is here, and all were brought out in the performance.

The chorus sang confidently and was always in tune. Also featured were a group of superb professional soloists, foremost of whom was Rockland Osgood as the

Evangelist. Kenneth Goodson '89 was the only non-professional soloist, but held his own as Pilate. The orchestra accompaniment was also very good, especially the cellos and basses, whose backing of the soloists served well to intensify the drama.

Overall, the performance was inspired. From the opening cry of "Herr!" by the chorus to the dramatic recitatives of Osgood, the performance lived up to the title *Passion*. Bravo to John Oliver and the MIT Bach Society. Hopefully, the all-student chorus will continue in the future to perform more works of such grand scope.

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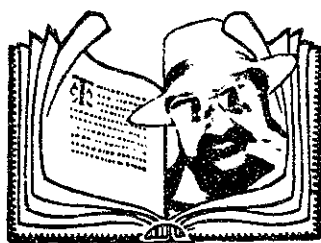
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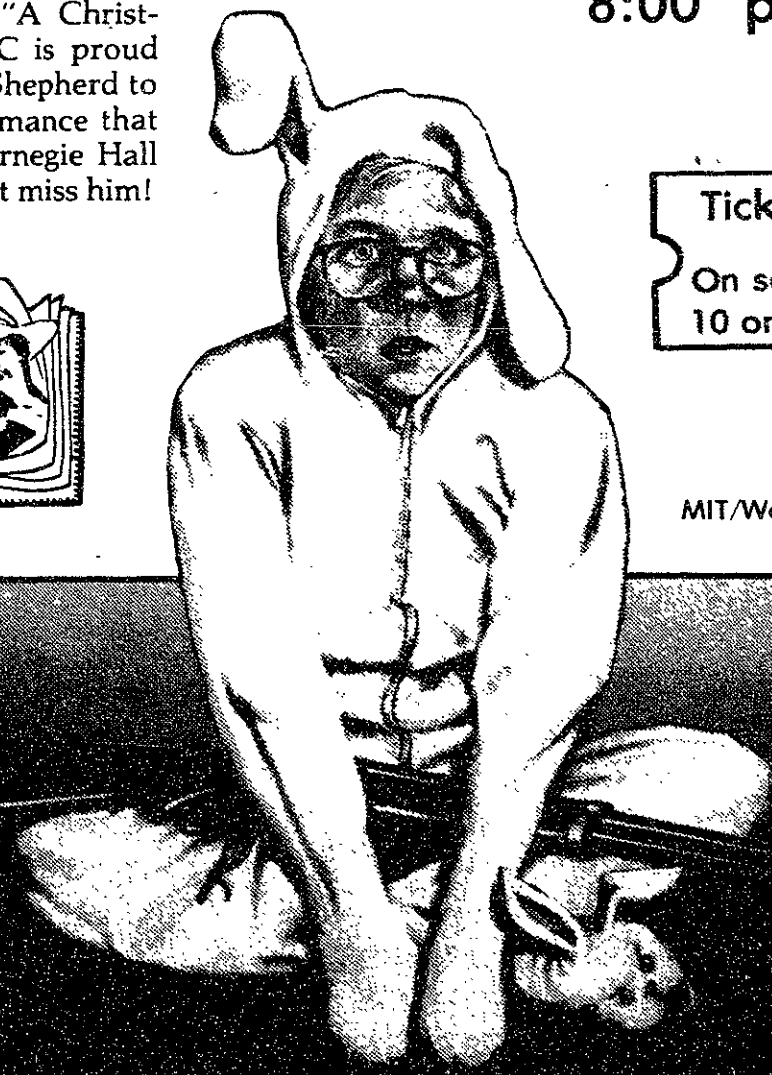
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Legacy of American Communists examined in Children of the Left

(Continued from page 8)

The film also touches on several issues that would be highly fascinating if explored further. The film points out, for example, the many of the red diaper babies joined the New Left movement of the 1960s "determined not to repeat the mistakes" of their parents. David Horowitz, who grew up in New York City, was an editor of *Ramparts* magazine in the 1960s. Today, he is a member of the Republican Party and works as "a neo-conservative political activist." On the other side of the spectrum is Country Joe McDonald, a singer who is just as leftist today as he was in the 1960s.

This raises a fascinating question of how people maintain or totally reverse

their political ideology and how that ideology is affected by childhood memories. The film unfortunately does not have enough time to speak to these and many other interesting questions.

All of these limitations arise because the documentary was made for television. Undeniably hampered by his chosen medium, Stange has nonetheless managed to make a touchy issue the subject of a tightly edited, informative, and accessible documentary film. *Children of the Left* is a worthy beginning for any inquiry into the adult lives of red diaper babies.

(Editor's note: *Children of the Left* will also be shown at the Museum of Fine Arts as part of The New England Film and Video Festival on May 18 at 7:30 pm.)



Director Eric Stange in production of *Children of the Left*.

Eric Stange, director of *Children of the Left*, discusses the issues of making a documentary

(Continued from page 8)

think this approach might limit the type of topics you can tackle?

A. I think you could do something about abortion in the same way. I would be interested in doing a long interview with anti-abortion people to show where these strong feelings come from. I'm not really interested in issues that don't have an emotional component. It's how emotions connect with those issues that interests me.

Q. What limitations do you find in making documentaries for television?

A. You have to make things that will fit their [PBS'] parameters. I wish I could have made it [*Children of the Left*] an hour and 40 minutes. It would be a more thoughtful and enlightening documentary. But where would I show it? I think most stories can be told in an hour. I don't feel horribly crippled. This film is a television documentary, a genre to itself.

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By DAVID STERN

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of imaginative and enjoyable music.

The second piece was *Klänge* (German for "sound"), based on the Dadaist poem of the same name by painter Wassily Kandinsky, and it featured the talented soprano Donna Hewitt-Didham. The ethereal music effectively conveyed the mood and feeling of the poem.

The highlight of the program was perhaps *Scamarama*, a tone parallel to the events of the Iran-contra affair. It was the first piece with the entire 18-piece orchestra playing. In addition to some rocking tutti, the piece featured some amazing soloists, especially the awe-inspiring Harry

Wellott, whose extended drum solo was one of the few enjoyable drum solos I have heard in my life. Political overtones became slightly more apparent for the last movement, *Scam Dance*. Over a quirky ostinato, Hewitt-Didham returned to the stage reading the Constitution; the other musicians engaged into instrumental dog-fights with one other, while Mark Harvey went around shredding scores left on the players' stands.

After the intermission came *Passages*, a work with a variety of moods and sections, some of which seemed to work better than others but kept interest overall.

The program closed with an entertaining Aardvark "standard," *Zippy Manifesto*, based on the comic strip character.

All of Aardvark's music is written by music director Mark Harvey (who is also an MIT lecturer in music). Styles of his compositions range from atonal Ellington to Webern to "*Gleichorn*," as in the case of the first piece. All, however, are quite original, although some may be "difficult" to listen to. Overall, the concert was quite entertaining, intriguing, as well as satisfying. The MIT community is fortunate to have such talents as Aardvark playing here.

R.E.M. retains its musical idiosyncrasies despite commercial pressure

R.E.M.

Boston Garden, Sunday, April 16.

By ALFRED ARMENDARIZ
and DANNY LUEVANO

WITH THE MULTI-PLATINUM success of their latest album *Green* and a sold-out American tour, the members of R.E.M. are finally the rock megastars that critics have been predicting they would become for the past six years. Their last two albums have gone platinum, their latest hit "Stand" has found its way onto the singles chart, and this tour is selling out in the largest venues in the country short of football stadiums. All this new success has brought them a slew of new fans, many of whom were in the fourth grade when "Radio Free Europe" hit the airwaves. Yet the group has done this without selling out to the commercial pressures of being "popular." Last Sunday's show at the Garden showed that R.E.M. is more than able to handle stardom and keep the musical integrity that has given them their large, loyal following.

R.E.M. has had a lot to prove to a lot of people this time around. First came the new record contract with giant Warner Brothers Records. After the release of *Green*, the band announced that its American tour would have to wait more than

four months as it toured Europe, Japan, and Australia. Many were quick to label the band sellouts and predicted their years of making music for music's sake, not for acceptance, were coming to an end. But as anyone in the Garden that Sunday would tell you, R.E.M. is as great and original a band as they have ever been. They played 26 of their own songs and five great covers of other groups' songs in a 2½ hour show that was definitely the best Boston has seen in a long time.

The band had specially choreographed visual footage shown on a giant screen which served as the back wall for the stage. Scenes from amusement parks, aquariums, and their extended music video "Left of Reckoning" were among the images shown. In what came across as a spoof of the rapport many rock groups have with their audiences, a series of short phrases which the audience read aloud were flashed onto the large screen. "Hello (your city here)" read the first message — "It's great to be back in (your city here)" read another. They then set down the ground rules for the show with phrases which included "Do not crowd up and rush the stage, as Peter [the guitarist] does not like this."

However, the messages took a serious tone as the group gave the audience a little political philosophy to think about. "Do



Members of R.E.M.: (from left) Peter Buck, Mike Mills, Bill Berry, and Michael Stipe.

not underestimate the power of individual action" was among a series of messages the band used to show its belief that young people must realize the importance of political awareness. Having booths in the lobby from both Greenpeace and The Natural Conservancy was the group's way of awakening Reagan-era teens to the importance of things like the Green political movement. During "Orange Crush," a song about the use of the Agent Orange, Michael Stipe mockingly executed a series

of exaggerated salutes towards the audience to show his contempt for US militarism. The group's polemicism seemed especially significant considering the relatively young ages of some in the audience. Yet R.E.M. never lost sight of the fact that this was a rock concert and made sure that its political messages never blurred the music.

The show opened with a great version of "Pop Song '89," the first track on *Green* (Please turn to page 12)

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Absurdities of romance and relationships sink See You in the Morning

SEE YOU IN THE MORNING

Written and directed by Alan J. Pakula.
Starring Jeff Bridges, Alice Krige,
Farrah Fawcett, and Lukas Haas.
At the Copley Place Theater.

By MANAVENDRA K. THAKUR

THE BIG HOOPLA ABOUT Alan J. Pakula's new film, *See You in the Morning*, is that Hollywood is supposed to have finally realized that a lot of married couples these days break up and that many children grow up in divorced families. As usual, Hollywood's version of reality is behind the times by a pathetic 15 or 20 years. Because the script is hollow and timid, the film ends up hokey and silly, at times becoming patently absurd. It is plain that Pakula was far more in command of his filmmaking abilities when he adapted *Sophie's Choice* to the screen in 1982.

This isn't to say that the film is totally worthless. It does have some believably human characters, decent acting, and an ambitious flashback structure. The film is a romantic comedy about the efforts of two white upper-middle-class families, the Livingstons and the Goodwins, to get on with their lives after divorce and remarriage. Soon after the families break up, Mr. Livingston (Jeff Bridges) meets Beth Goodwin (Alice Krige) at a party organized by a mutual friend named Sydney (Linda Lavin). Larry and Beth discover they both suffer from migraine headaches and decide to get married, and the rest of the film tells their story as they explore their new relationships with each other and their children.

Larry's job as a psychiatrist doesn't help him with his inability to adjust to his new role as stepfather to Beth's children. In the grand scheme of things, this isn't terribly significant, but Larry's persona is believable and basically understandable. Meanwhile, Beth faces her own personal feelings of inadequacy and penchant for self-deprecation. Her psychological state of affairs requires slightly more suspension

of belief but it, too, is acceptable.

Hordes of problems arise, however, when Larry and Beth have to face the conflicts that their respective handicaps create between them. What happens is that Larry goes to visit his ex-wife Jo (Farrah Fawcett) and her dying mother (Frances Sternhagen), who was particularly close to Larry. Jo works as a model, and she is particularly seductive now. As might be expected, Larry comes close to having an affair with Jo. Understandably, Beth gets upset at Larry when he tells her about it. The film, which really hasn't accomplished much in this whole sequence, now begins to fall apart at the seams.

Beth decides that their marriage was a mistake, and the couple agrees to separate. Incredibly, sudden twin migraine headaches affect them, renewing their relationship. The kids miraculously accept Larry as their stepfather, and the family soon moves out of their house to begin a new life.

R.E.M. finally masters the art of stage presence

(Continued from page 11)

and one that is bound to make its way on to any fan's "best-of" list. Stipe wielded a pair of drum sticks with which he beat a pair of bongos during "Welcome to the Occupation," a song off of *Document* about US intervention in Central America. Six others songs from *Document* were performed, including "Exhuming McCarthy," "Disturbance at the Heron House," and "Finest Worksong." They projected scenes of the top of what looked like a roller coaster at a carnival for the up-tempo "It's the End of the World As We Know It (and I Feel Fine)."

Strangely, the band didn't play songs which have become almost synonymous with the term R.E.M.: "Fall On Me," "Driver 8," "Can't Get There From Here," "The One I Love," or "Southern Central Rain." The band did supplement its repertoire with some great cover versions. Television's song "I See Evil" saw resurrection at the show, as did Mission of

Burma's "Academy Fight Song." Stipe encored with an *a cappella* version of a Hugo Largo ballad sung standing on a chair at the edge of the stage. The other band members joined him for an electrifying rendition of Pylon's "Crazy," an outtake from the *Fables of the Reconstruction* sessions.

The band performed "Get Up" and "Turn You Inside Out" from *Green* and used their latest single "Stand" as the opener to their first encore. Former member of the dBs Peter Holsapple played keyboard and guitar during the show, and his tight playing helped the band deliver its sound to such a large crowd. The band played four songs from 1986's *Life's Rich Pageant*, including "Cuyahoga," a song about the pollution of the Cuyahoga River which fit in well with the political feel of the show. Drummer Bill Berry picked up a bass guitar, bassist Mike Mills played an accordion, and guitarist Peter Buck played an unusual steel guitar for "You Are The

Amish boy in Peter Weir's *Witness*, and he does manage to portray Beth's troubled son Petey effectively. The film's technical construction is solid and professional, but like the acting, is not terribly inspired. A decade ago, *Kramer vs. Kramer* was much more successful at bolstering its problematic ending with top-notch performances and a simple but effective cinematic style.

The most that *See You in the Morning* offers today is an opportunity for audiences to sigh "Awwwwwwww!" when young Petey says "I love you" to his new stepdad. It also allows audiences to squeal in delight when Bridges, dressed like Eros in a loincloth, proposes to Beth. Otherwise, the film doesn't accomplish much since it has only a tenuous grasp on reality, and it throws even that away. Pakula spends a lot of effort to look as though he's getting somewhere. In reality, however, the film is just plodding along — a decade and half too late.

Everything," a song which may be their next single and could easily crack the Top 10. Rockers "Begin the Begin" and "Life and How to Live It" were highlights from the first part of the show and showed off the band's ability to fire up an audience. They closed the show with what Michael Stipe told the crowd was their 35th performance of the gentle "Perfect Circle," a track off their debut album *Murmur*.

Nearing the end of this North American tour, R.E.M. has many reasons to be proud. They have found a large audience without changing their style to become overtly commercial. Michael Stipe has mastered the art of stage presence and the band can now connect live to an audience of any size. Those of us lucky enough to be in the front row felt something truly intense — an incredible band trying to connect with 16,000 people. R.E.M. didn't have to change anything intrinsic to achieve their success; they just had to start doing everything on a much larger scale.

Emile Bustani Middle East Seminar "The Origins, Dynamics, and Implications of the Intifadah"

by

Emile Sahliyah

Professor of Political Science,
University of North Texas

Author of two recent books on
the Palestinians and the PLO

and

Nadim Rouhana

Social Psychologist

Visiting Scholar, MIT Center
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Marijuana cultivation explained in Mel Frank's Guide

MARIJUANA GROWER'S INSIDER'S GUIDE

By Mel Frank.

Red Eye Press, 354 pp., \$19.95.

By ADAM BRAFF

IN THE PREFACE TO HIS *Marijuana Grower's Insider's Guide*, Mel Frank addresses the amateur farmer and hazards a guess as to the reader's first feeble attempts at cultivating *cannabis sativa*. "Very likely you buried some seeds in a flower pot... [and] watered them faithfully every day," he writes, "and harvested four disappointing joints. It need not have been this way."

Frank then launches into a treatise on, among other things, how to grow plants that are anything but the pitiful saplings produced by the novice marijuana grower. It is possible, he writes, for even the most inexperienced gardener to produce a potent crop provided he culls the necessary "foresight and insight" from the *Guide*. His black-and-white photographs of ten-foot high plants provide ample testimony to his techniques.

Most of the extremely large plants, however, are the result of outdoor cultivation, a subject which Frank does not address in great detail in his book. The "Insider's Guide" which he promises in the title is just that: a guide aimed primarily at the indoor grower, leading one to wonder whether the sheer quantity of marijuana smoked by Frank has caused the words "indoors" and "insider" to become hopelessly jumbled somewhere in his left hemisphere. Indoor cultivation requires, in most cases, the purchase of lighting systems of varying complexity and expense, so readers who wish to opt for sunlight-powered gardens are advised by Frank to read his previous work, *Marijuana Grower's Guide—Deluxe Edition*.

At several points in the book, the author pulls out a soap box and gives his opinion of marijuana legislation and the laws which make marijuana growing, even for personal consumption, illegal everywhere in the country but in Alaska. The



literature accompanying the review copy of his book included, in addition to reviews of his previous *oeuvre* in such "reputable" publications as *High Times Magazine*, an article in *Scientific American* and a letter to the *Oakland Tribune* refuting allegations that marijuana is a harmful drug. Frank makes no apologies for writing a book about how to grow an illegal plant, rationalizing his efforts by saying that the book's purpose "is not to encourage you to grow illegally, [but how cultivation] may be done when growing is legalized." This attitude, like that of radar detector manufacturers who insist that their product does not encourage law-breaking, is circumspect but nonetheless amusing.

Politics aside, Frank's book does an outstanding job of describing the history, bi-

ology, and cultivation of marijuana. Frank gives a very thorough treatment of indoor lighting systems, offering 65 pages filled with diagrams, charts, and photographs concerning this subject alone. When he strays from very technical matters, however, his writing tends to wander, at times bordering on dream-like tributes to the inherent beauty of growing marijuana. He writes, "Any experienced grower will probably say, 'There's no place I'd rather be... than sitting among my plants giving them a little TLC' (Tender, Loving, Care)," leading the reader to believe that Frank was busy enjoying the fruits of his labor while writing the *Guide*.

Frank's book is more practical than poetic, handling sensitive issues such as security with straightforward solutions. His discussions of security, although in them-

selves highly useful, were puzzling in light of his previous statement that the *Guide* was intended for use only after marijuana's decriminalization. His vast experience in cultivation is evident as he gives consideration to such details as concealing the odor of growing plants, muffling the noise caused by light-rotation devices, and convincing the power company that one is using 3,300 watts of power for more wholesome endeavors.

Another sizeable chunk of the book is devoted to potting, soil, and hydroponic systems. The section on hydroponics contains a great deal of technical discussion on the chemical components of nutrient solutions, which brings up the near-schizophrenic writing style Frank employs in his book; his writing is scientific and precise, then slangy, then technical again, and so on. For readers with the sufficient biological and chemical backgrounds, this poses little problem and makes the reading even enjoyable.

A comparison of the various strains and species of marijuana follows, with Frank comparing the strengths of active ingredient tetrahydrocannabinol (THC) in each variety. His troubleshooting section deals with the difficult task of proper watering and is quite thorough. The remainder of the book takes the farmer step-by-step through flowering, breeding of plants, harvesting, and preparation of the marijuana, stopping just short of giving charts and diagrams on how to roll a joint. Finally, Frank opines patriotically for one page on the virtues of growing American, concluding with the exhortation, "Let's save and build a stock of prized seeds for future generations."

On the whole, the book is very well written and diagrammed and would serve as an excellent starting point for anyone from the beginning grower to a seasoned outdoors professional looking into moving his crop indoors. Frank writes about his subject with obvious care and respect, and this compassion makes for a precise and very readable text that is a must for any present or future marijuana grower.



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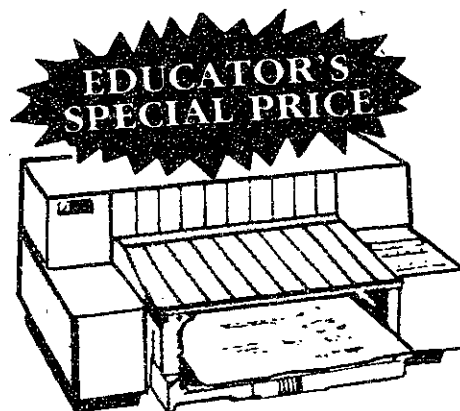
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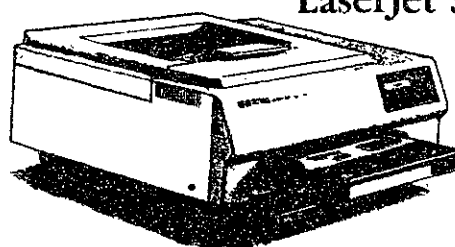
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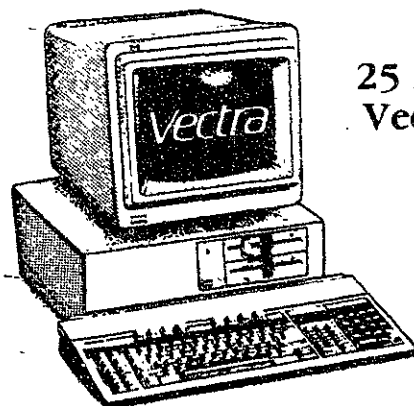
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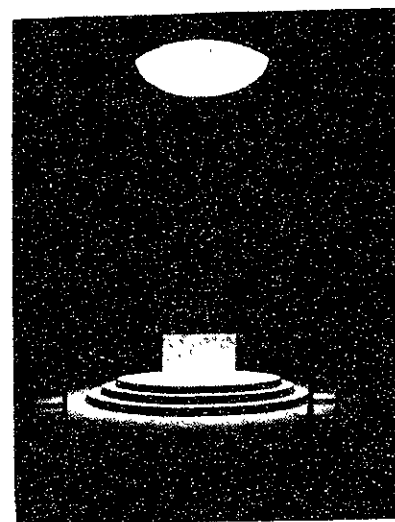
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Viruses affecting MIT computer laboratories

(continued from page 1)

intosh, and thus do not prevent machines from getting infected by such programs.

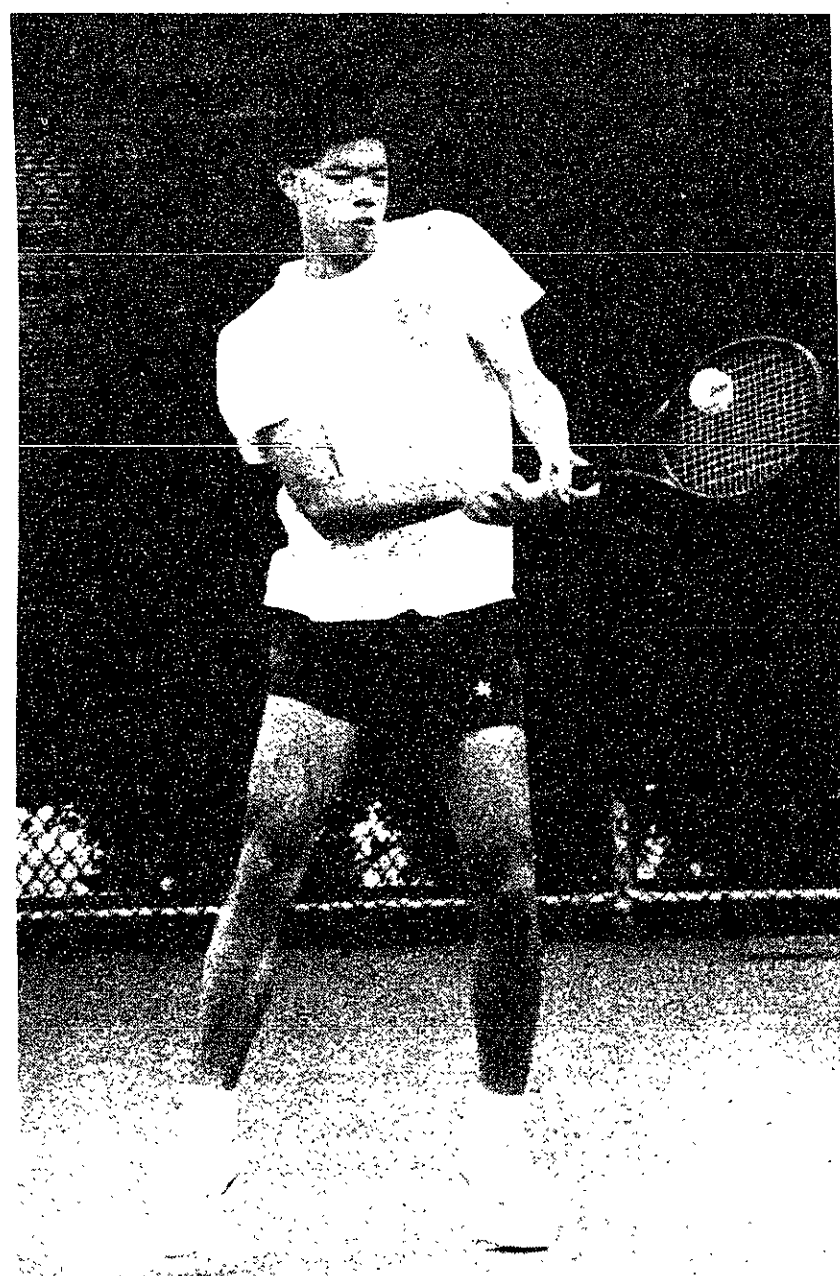
A new program called "Disinfectant" detects and removes viruses from machines. A good preventive measure is to run this program periodically in every computer in a lab, according to Bennett. The MicroComputer Center, for example, disinfects its machines every day, "but labs that are less exposed could do it every month," he said. Both vaccines and Disinfectant are available free of cost at the Microcomputer Center at MIT, Bennett added.

Two other common computer plagues are worms and Trojan horses. Worms do not need pro-

grams to propagate for they are programs in themselves. They propagate through networks, as was the case last November when a worm — mistakenly labeled a virus in the national press — propagated through Arpanet and caused severe damage at MIT and in labs throughout the United States.

Trojan horses appear to be real programs, but they actually are destructive agents. When they are run they can delete all of one's files.

Neither worms nor Trojan horses have been found in Macintosh computers at MIT so far, according to Bennett. "In fact," he said, "worms that propagate through AppleTalk [the communications network for Macintosh computers] do not exist — yet."



Michael Franklin/The Tech
Kai-ye Ho '89 returns the ball with a backhand. Ho won the match against his Connecticut College rival. The MIT team lost 5-4, making their record 7-5 this season.

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Interphase celebrates anniversary

(continued from page 1)

terphase community. "These people became part of my life," he said.

On the other hand, some felt that the closeness came at a price. Beverly Herbert '75 said the Interphase academics were "rougher than any regular MIT class" and that the session felt "like boot camp — we were thrust into this position and just had to survive."

Two guest speakers provided context for the event, extending the scope of their remarks to the racial climate of the nation and the classroom. First was Julianne Marie Malveaux PhD '80, an economics graduate and a visiting scholar at Berkeley. Malveaux spoke on the economic difficulties faced by minorities after the civil rights reversals of the Reagan years.

The current bout of economic prosperity is only an illusion, Malveaux suggested, pointing out that a time when one-third of blacks and 28 percent of Hispanics live in poverty can scarcely be called "prosperous."

These conditions are the result of "deliberate" policy decisions

made by governmental and business leaders, she continued. "These political decisions are slamming doors on our opportunities," she said.

Innovative programs like Interphase are the key to reversing these trends, Malveaux said. The necessity of bringing minorities into the workforce must lead to other innovations, she continued.

Gayle Pemberton, a professor of English at Bowdoin College and author of a book on teaching minority students, discussed the "image-driven assumptions" that affect classroom dynamics. She argued that professors often make one or more of the follow-

ing common assumptions regarding minority students in their classrooms:

- that a student lacking opportunity or skill lacks ability;
- that ethnic students are authorities on ethnic matters, even if they are attending class in order to learn this subject matter themselves;

• and the corollary, that ethnic students have nothing to contribute on topics other than race and ethnicity.

Only continuous dialogue among faculty members and students can expose these assumptions and correct them, Pemberton said.



Kyle G. Peltonen/The Tech
Anthony Canchola-Flores, current director of Project Interphase, honors Alan Davison with an award for coordinating faculty for the program.

Professor tries to explain cold fusion

(continued from page 1)

on the number of deuterons present" in the lattice.

The purpose of the first paper, as stated in its introduction, was "to provide a very simple model for exploring nuclear reactions at low temperature in the presence of a lattice." The paper elaborates on the DD fusion equation, which yields "much higher transition rates at low temperatures." But the calculated reaction rates, although containing a "very different dependence on temperature and density than that of conventional rates," do not account for the effects reported by Utah

researchers.

The second paper attempts "to build up a theory" to explain the reported cold fusion experiments in terms of a reaction-driving non-thermal distribution of excited many-particle states. This paper also contains Hagelstein's speculation on how cold fusion is initiated. "Natural background radiation and cosmic ray background appear to be... promising as sources of initiation" because they involve "charged components with masses matched approximately to the deuteron mass," he writes.

Hagelstein addresses the obser-

vance of substantially reduced levels of both neutrons and tritium in the fusion reaction in his third paper. An understanding of this effect is important in order "to minimize radioactive waste in fusion reactors," Hagelstein explains. He concludes that if his model is correct, then "relatively clean energy generation is possible at low fusion rates."

The final paper brings all the pieces together to describe "the overall mechanism for coherent fusion." Hagelstein contends that cosmic rays can start the process. Electrical current, like the battery that fueled the Utah experiment, "plays a similar role in enabling the fusion," Hagelstein speculates. A "very large number of fusions" can then follow this initial fusion event, according to Hagelstein.

Solutions to Cryptic Crossword #4

ACROSS

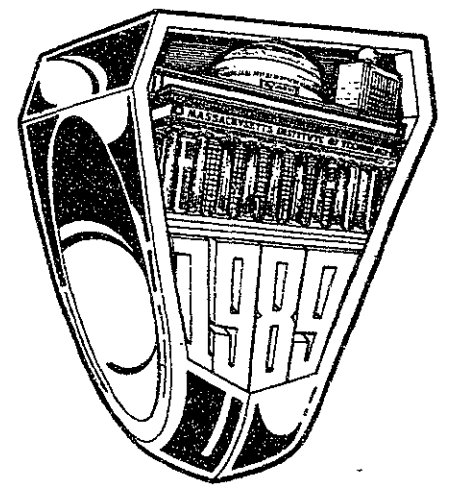
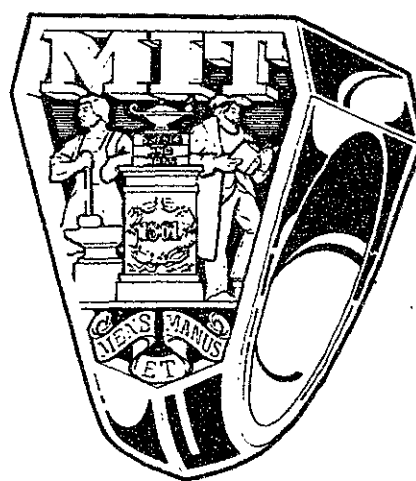
1. AFRAID OF THE DARK Anagram:
I + FORKED + A + HARD + FAT
Construction/Insertion: GAL(L)ANT
Regional homophone: "Sure, man!"
Reversal/construction: TOG + A
Double meaning
Construction: NOT + ABLE
Double meaning
Anagram: USAGE + SO
Containment: "...of a Natick..."
Anagram: TRUANT + PEER
Double subtraction:
TROUBADOUR — DOUR — OR
Beheadment: HAIRLINE — H
Containment: "...cheer up Teddy."
Anagram:
THOSE + NINE + LEFT + GO
9. GALLANT
10. SHERMAN
11. TOGA
12. LIVING ROOM
13. NOTABLE
15. GOES OUT
17. GASEOUS
19. FANATIC
20. TRUE PARENT
22. TUBA
25. AIRLINE
26. ERUPTED
27. LIGHT ON ONE'S FEET

DOWN

1. ANGST
2. RELEGATES
3. IVAN
4. OUTSIDE
5. TASTING
6. EVERGREEN
7. AIM TO
8. KINEMATIC
13. NIGHTFALL
14. BOOTPRINT
16. OUTHUSTLE
18. SURGEON
19. FENCE IN
21. UNRIG
23. AUDIT
24. CUPS
- Subtraction: ANGSTROM — ROM
Construction: RE + LE + GATES
Construction: I + VAN
Containment: "Shouts ideas..."
Anagram/containment: TA(ST)ING
Anagram/containment:
(EVERG(RE)EN)
Containment: A(IM)TO
Anagram: MIKE + CANT + I
Anagram/construction:
(THING) + FALL
Construction: BOOT + PRINT
Construction/anagram:
OUT + (SLEUTH)
Embedding: S(URGE)ON
Double meaning/homophone ("inn")
Containment: "...sun rigors"
Construction: AUDI + T
Construction: C + UPS

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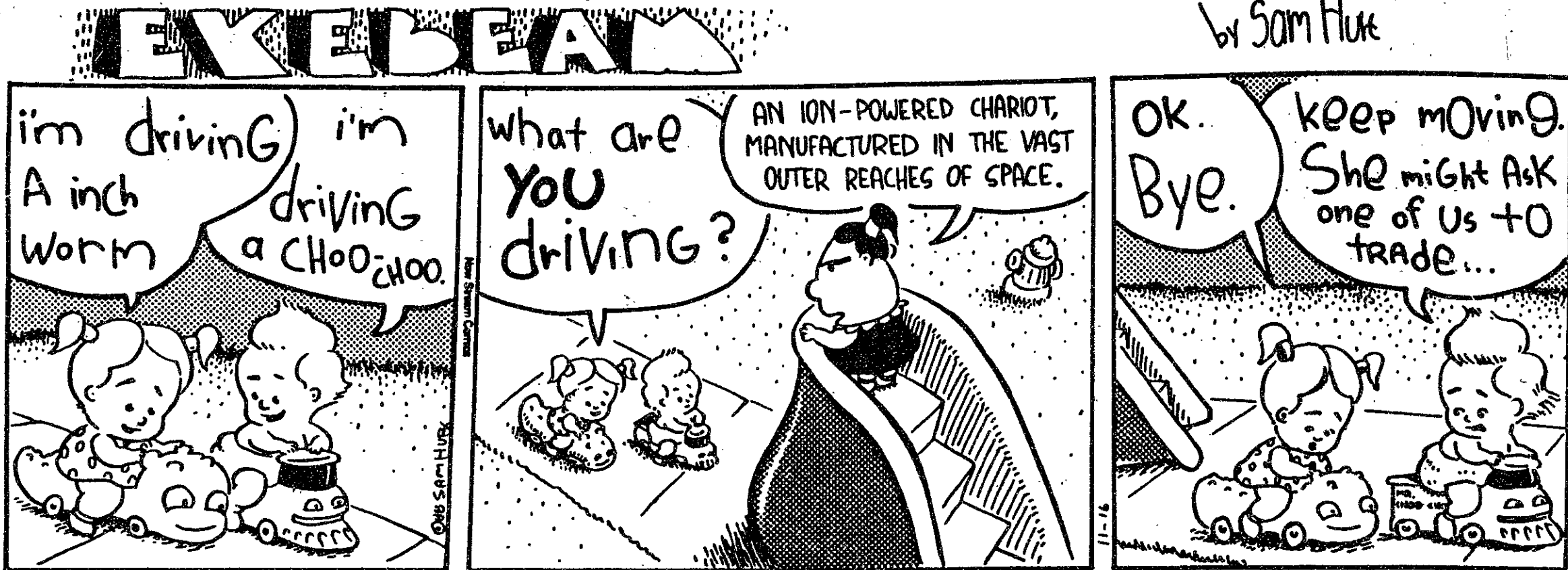


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by Sam Hux



"HOW I MADE \$18,000 FOR COLLEGE BY WORKING WEEKENDS."



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They're the people who help our state during emergencies like hurricanes and floods. They're also an important part of our country's military defense.

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As soon as I finished Advanced Training, the Guard gave me a cash bonus of \$2,000. I'm also getting another \$5,000 for tuition and books, thanks to the New GI Bill.

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sports

Travel plans send frisbee team packing despite early wins

By Ali Azar

The frisbee club traveled to New York this weekend to compete in the Purchase Cup Tournament at the State University of New York at Purchase. Although MIT planned to attend only the first day of the tourney, they went undefeated in pool play on Saturday and qualified for the playoff rounds slated for Sunday. Unfortunately for the team, their travel plans were set, and they were unable to compete in the playoffs.

MIT stumbled past SUNY-Albany, 10-9, in its first match. The 40° temperature and gusting wind set the stage for sloppy offensive and loose defensive play from both teams. Each team scored only one goal in the upwind direction. The choice by captain Mark Griffith G to start the game defending the upwind goal proved to be a crucial decision, providing the one point differential in MIT's favor.

MIT changed uniforms from white to black to challenge the other opponent in its three-team pool, Keene State. MIT easily marched to a 8-1 halftime lead and a 14-2 second-half lead before spending nearly 20 minutes scoring the final point. Over 10 turnovers were committed by

both teams during that span. The 15-2 victory earned MIT a 2-0 record in pool play and first place in the pool.

In a game to determine seeding for the tournament playoff, MIT chalked up its third victory of the day, defeating Dartmouth, 15-11. In another wind dominated match, Dartmouth selected to start downwind, but MIT quickly stole the advantage by scoring the first goal upwind. They closed the half, leading 8-5, with their second upwind goal.

A third upwind goal by MIT in the second-half widened the gap to 13-7, but Dartmouth marched one into the wind themselves to close the gap. They could not complete the comeback, however, and MIT closed the door at 15-11.

MIT's undefeated effort earned it a high seed in the playoff, but the team could not stay for Sunday's elimination rounds. Next weekend the team will play with area teams at one of two local tournaments. They will begin their quest for the national championship the following weekend in the Ultimate Players' Association sectional tournament at Keene State.

(Ali Azar G is a member of the frisbee club.)

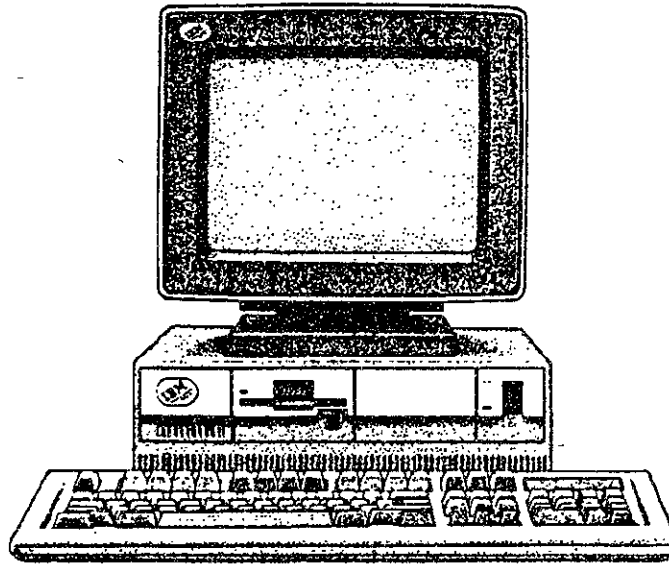


photo courtesy of Ali Azar

Jim Johnston G catches the disc in mid-air.

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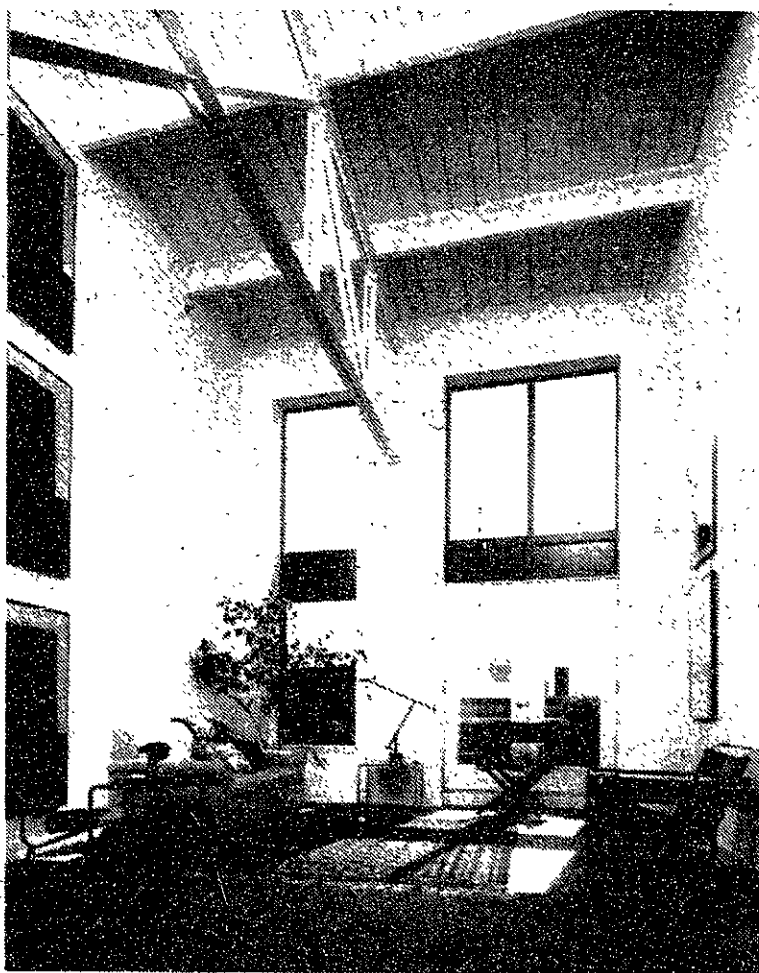
1. Change in bowel or bladder habits.
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sports



Mark Rigoglioso/The Tech
Diana Velez '92 charges downfield against her BU defender in the women's lacrosse game last Thursday.

Softball to meet Brandeis in conference tournament

Sports Update

Lose coin toss to open on the road

The MIT softball team defeated the group from Smith College yesterday 7-6, to close the New England Women's Eight regular season. The Engineers came from behind to score the winning runs in the bottom of the fifth. Smith threatened to tie the game in the top of the seventh, but an unassisted double play by shortstop Diane DiMassa '88 ended the game.

In a non-league doubleheader held Saturday against Nichols College, the Engineers lost twice. MIT dropped the first game 8-6, and lost the second 6-1, after trailing by only one point for most of the game.

The team will begin NEW8 tournament play on Thursday. Three teams ended up tied for third place in the conference, and a coin toss was held to break the deadlock. The Engineers lost the toss, ended up fifth, and will play fourth-seeded Brandeis University at Waltham. The semifinals and finals of the tournament will be played Saturday on Briggs Field, regardless of whether the Engineers advance.

Tennis currently second in New England

The men's tennis team is ranked second in New England Division III play thus far this season. The Engineers trail only

Brandeis University in the rankings, and will have an opportunity to show the voters they deserve the number one position when they face the Judges in the continuation of a rain-postponed match later this week. MIT's number one singles player, Kai-Yee Ho '89, is ranked fourth in New England, and the doubles team of Ho and Brian Brown '89 is ranked third.

Jeff Hamilton, the team's coach, is currently ranked second in New England in the men's 35-and-over singles group.

Track star garners NSF recognition

Weight man Scott Deering '89 has recently been cited by the National Science Foundation as one of three examples of outstanding recipients of the Foundation's minority fellowship program. Deering is the reigning NCAA Division III champion in the 35-pound weight throw. He also competes in the hammer throw and shot put.

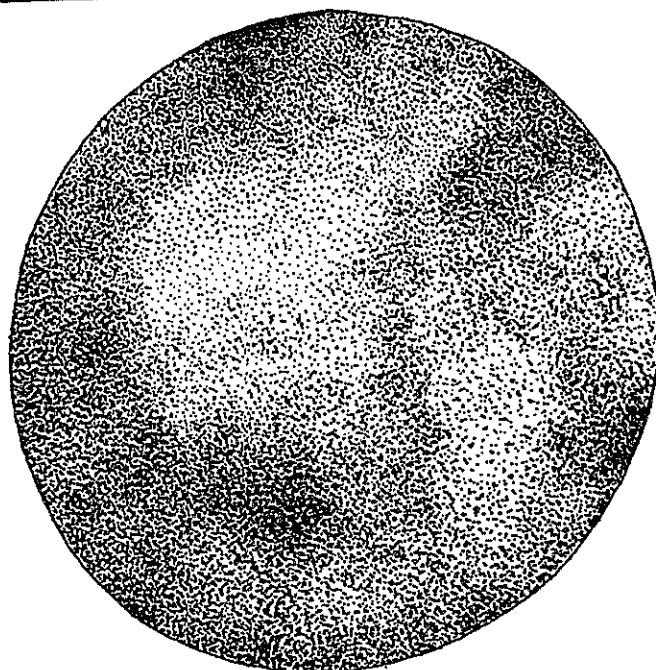
Awards keep rolling in to basketball team

Doug Cornwall '89, captain of the basketball team, has been named second alternate for an NCAA post-graduate scholarship for basketball. Cornwall is also captain of the outdoor track team. Ten winners and four alternates were selected for the award.

Compiled by Harold A. Stern
Michael J. Garrison
and the Sports Information Office



photo courtesy of Ali Azar
Mark Griffith G looks to pass around his opponent.
See story, page 17.



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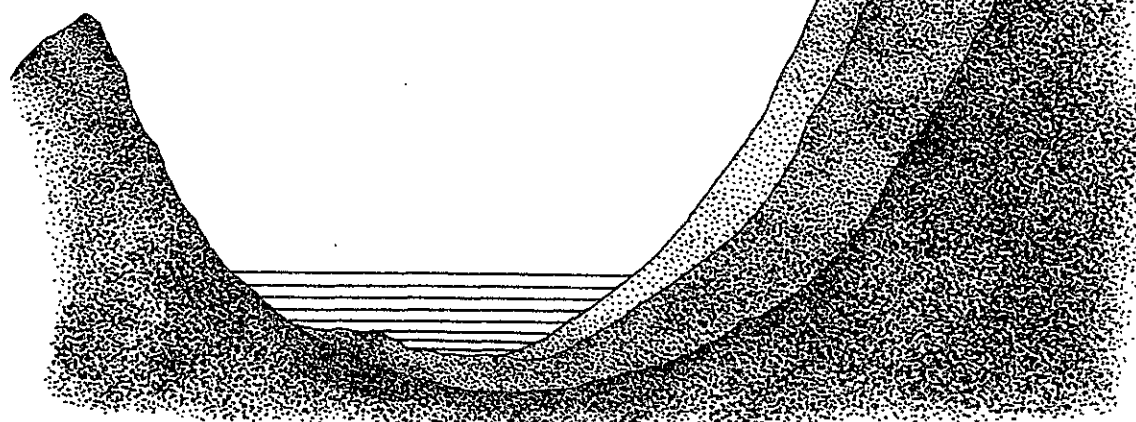
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If you are interested in serving on any one of these committees, please stop by the Graduate Student Council office 50-222 between 1:30 and 5:00 weekdays to get a nominations form. If you are currently on one of these committees, you must re-apply. Interviews will be held from 5:30 to 8:30 PM on Monday, May 1 and Tuesday, May 2. If you have any questions, please call the GSC at 253-2195.

sports

Women's crew takes Brunelle Cup

By Karen Chenausky

The women's varsity crew team won the Brunelle Cup Saturday despite a strong headwind over the Charles River. MIT beat three other crews to sweep the regatta, its second sweep of the season.

Since the wind was so strong, the officials decided not to use the stakeboats moored on the starting line and had a floating start instead. Originally, the race was supposed to be between MIT, Simmons College, and Mount Holyoke College. Wellesley College, however, was in town for two lightweight races, so they entered boats in all the races at the last minute.

MIT was behind until almost the 1500-meter mark. Coming past the boathouse, MIT was behind Mount Holyoke and ahead of Simmons and Wellesley. MIT then turned up the power and simply cruised past Mount Holyoke in a smooth, fast, and

unmatched feeling of the boat, which lost to both crews with a time of 9:03. Radcliffe, whose lightweight program is very strong, won with a time of 8:34, and Wellesley came in second at 8:50. According to junior varsity coxswain Paula Han '90, who saw the race from the official's launch, "[MIT] looked a lot smoother than Wellesley."

The lightweight lineup this week included Ellen Dotson '91 (coxswain), Laura Beecroft '91 (stroke), Karen Chenausky '89, Lola Matysiak '91, and Debora Chen '89 (bow).

The JV eights race was also frustrating for MIT, which came in behind Wellesley and Mount Holyoke with a time of 8:42. Wellesley won with a time of 8:24, and Mount Holyoke was second at 8:32. The JV lineup this weekend was Paula Han '89 (cox), Carol Waldmann '89 (stroke), Anne Khaminwa '89,

week. If it hadn't been for Wellesley, we would've done it."

MIT's second novice eight lost to all three other crews in its race, with a time of 9:03 to winner Mount Holyoke's 7:53. Wellesley was second at 8:12, and Simmons third with 8:57. The MIT lineup included: Karla Morrow '92 (cox), Cynthia Holcroft '92 (stroke), Rebecca Redding '92, Barb Sigmund '92, Rachel Huggins '92, Gassia Salibian '92, Jen Hill '92, Nancy Koay '92, and Elizabeth Yap '92 (bow).

MIT next races Northeastern and Boston University on the Charles in the Smith Cup Regatta on Saturday. The last time MIT won the Smith Cup was in 1983, when Elizabeth Bradley '83 — who competed in the 1988 Seoul Olympics — rowed stroke for the Engineers.

(Karen Chenausky '89 is a member of the women's crew team.)



Anh Thu Vo/The Tech

The MIT women's varsity lightweight four enters the boathouse stretch during the race against Simmons and Mt. Holyoke.

exciting last 500 meters. MIT won with a time of 7:29, followed by Mount Holyoke at 7:31, Simmons at 7:34, and Wellesley in last at 7:37.

The varsity lineup for this race was: Trish Roxas '89 (cox), Laura Opsasnick '90 (stroke), Becky Dumas '90, Sue Perrin '91, Belle Young '89, Lynore Abbott '91, Gwenn Shelton '91, Wendy Rowell '90, and Magda Nour '89 (bow).

The second-priority boat last weekend was the lightweight four, which raced against Wellesley and Radcliffe. This race went much less well for MIT. Whereas the varsity boat has had basically the same rowers in it since the beginning of the season, the lightweight on the women's teams have been shuffled around between various lineups. This accounted for the rough, slightly

Kristine AuYeung '91, Kia Freeman '89, Debbie Bein '91, Kris Newton '91, Caroline Lee '91, and Joanna Bacon '89 (bow).

Wellesley's crashing the regularly scheduled open races (open to people of any weight class) caused some consternation to the first novice eight, which beat Simmons and Mount Holyoke decisively, but lost to Wellesley. Wellesley's winning time was 7:39, MIT finished in 7:51, Mount Holyoke in 8:00 flat, and Simmons in 8:04.

The MIT lineup was Lena Hwang '92 (cox), Becky Zavitoski '91 (stroke), Zibi Turtle '92, Lindi Emoungu '92, Holly Simpson '92, Paula Ferguson '90, Kris Clark '92, Amy Bowen '92, and Maresi Berry '92 (bow). Ferguson said that coach Tim Tiffany worked his novices hard this week. "He wanted us to win this

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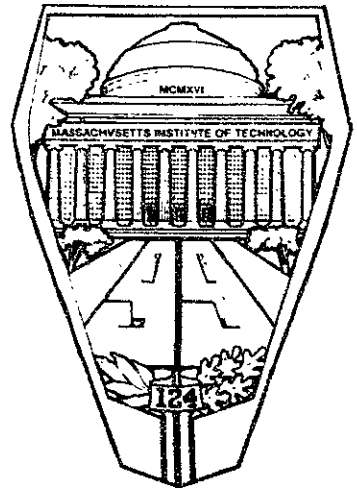
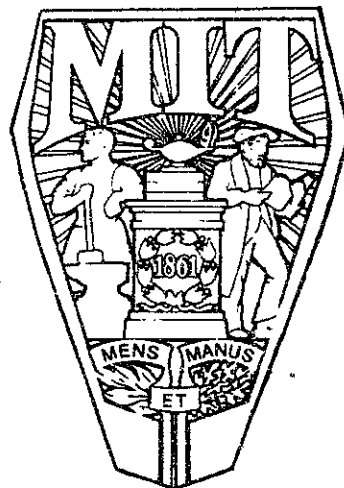
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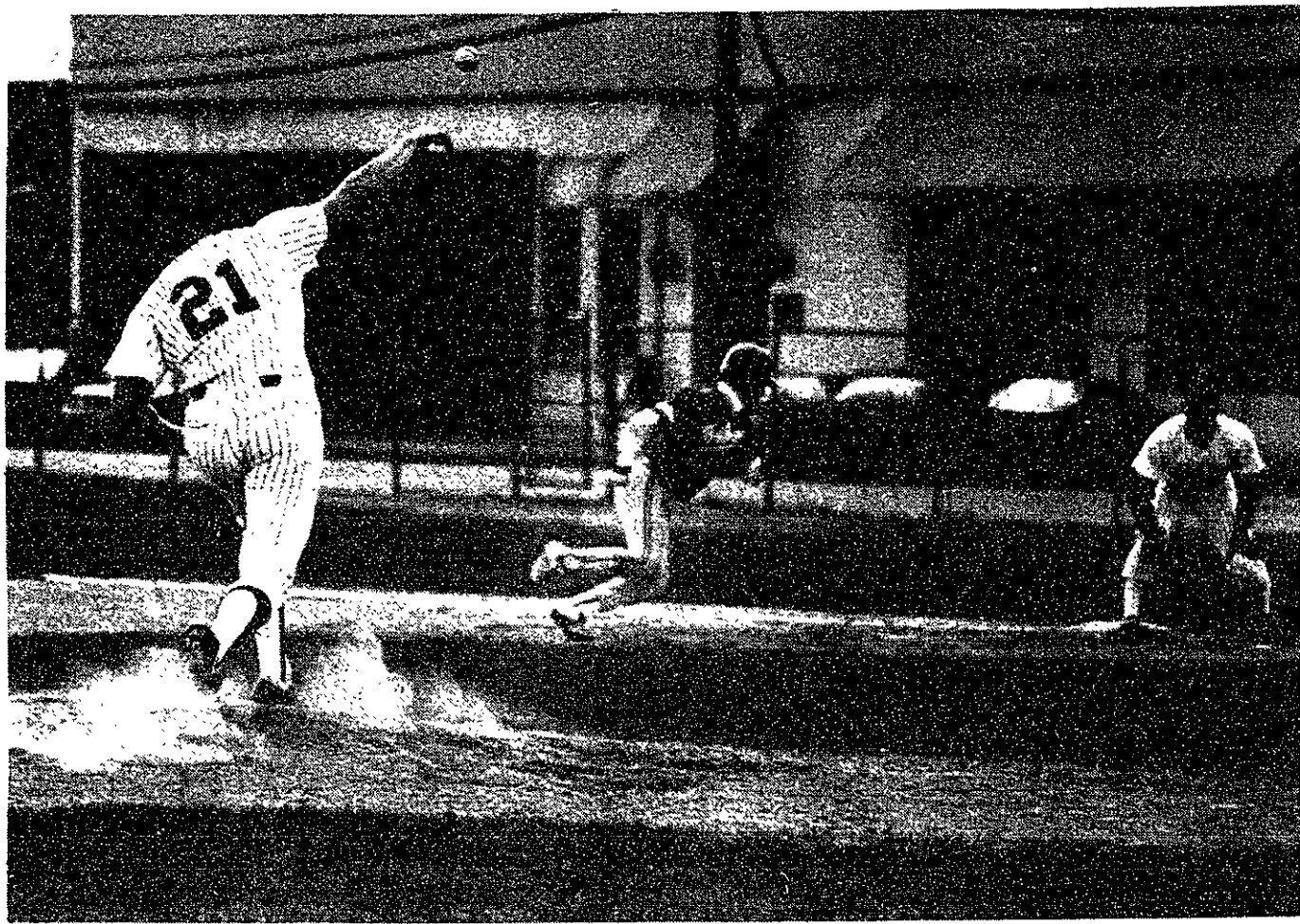


Tuesday, April 25 - Friday, April 28
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sports

Baseball team wins fourth consecutive game



Pitcher Jim Gort '89 wings the ball to first baseman Mike Griffin '89 in an attempt to tag a Babson runner in yesterday's game. The Engineer's pounded Babson 14-1.

Ken Church/The Tech

Track ready for real season after third straight lopsided victory

By David Rothstein

The short regular outdoor season is over for the men's track and field team — let the games begin.

After laughably lopsided wins over three teams in two meets earlier this month, the Engineers traveled to Worcester on Saturday for the Holy Cross Classic, which served as the final tuneup for MIT before it participates in next week's Greater Boston Championships, to be held at Northeastern University.

With memories of a disappointing performance in the indoor version of the championships in February, the team will be looking to vault over the fifth place that is MIT's best-ever finish at the outdoor GBC.

At the Holy Cross Classic, which head coach Gordon Kelly called a "good preparation for the Greater Boston [Championships]," the Engineers earned four first-place finishes and five thirds.

Freshman Kelly Davis extended his strong early-season performances in the triple jump with a 46-foot jump, good for first place. MIT, in fact, took three of the top four places in the triple, with Kwaku Prakah-Asante '90 placing third at 45'-5½", and Bill Singhose '90 placing fourth at 45'-1¾".

Kevin Scannell '92 made MIT perfect in the distance jumping events with a 22'-5" leap to win the long jump.

The Engineers' other first places came in the dash event, with Boniface Makatiani '90 winning the 100 meters in 11.28 sec-

onds, and sophomore Mark Dunzo taking the 400 meters in 50.8.

Makatiani and Dunzo teamed with David Wright '89 and Douglas Cornwall '89 for a third-place finish in the 400-meter relay, in 43.6.

Senior Scott Deering, who dominated the 35-pound weight throw during the indoor season, winning the national Division III title, was third in the hammer throw, with a 183'-2" effort, while Chris Masalsky '91 placed third in the javelin at 189'-8". Deering also placed fifth in the shot put, at 45'-2¾".

Rounding out Saturday's place-earning performers were Dan Rubenstein '92, who placed third in the 200 meters at 23.7, and Paul McKenzie '90, who took fourth in the 400-meter intermediate hurdles at 55.5.

Back in February, MIT placed fifth at the outdoor GBC, losing out the fourth spot to Boston University by half a point. The Engineers lost Singhose, the team's leading scorer, to an injury on the first evening of competition.

The outdoor season is, admittedly, much different than the indoor one, which some teams use as a tune-up to the spring. But Kelly is confident that his team will improve on its indoor performance.

With the addition of sprinter Makatiani and hurdler Sean Garrett G, the emergence of a strong triple-jumping contingent, and a healthy Bill Singhose, who will

reportedly compete in five events Sunday, the outdoor team is certainly stronger than the already-strong team that competed indoors. That should be reflected in Sunday's performance.



Laura McDonald G drives the ball toward the Amherst goal during the water polo tournament this Saturday. MIT beat Amherst 12-6.

Michael Franklin/The Tech

Engineers rally from behind to overcome Clark and Bates

By Shawn Mastrian

The varsity baseball team extended its winning streak to four games with victories over Clark University and Bates College last weekend. The wins improved the Engineers' record to 12-5, 6-1 over their last seven games.

The victory over Clark was primarily a defensive struggle, as the 3-2 score would indicate. Fran Patterson '89 pitched the first eight innings for MIT, allowing only two unearned runs while striking out eight. Ed Eisner '91 came on to pitch the ninth and held Clark scoreless to pick up the save.

The game was scoreless through the first five innings, thanks to clutch pitching by Patterson and his Clark counterpart. In the second inning, Clark had runners on second and third with nobody out, but Patterson forced the next batter to ground-out. He then struck out the next two men to end the threat. In the fifth, Clark loaded the bases with two outs, but once again, Patterson came through and forced another weak groundout.

The Engineers squandered some quality scoring opportunities of their own during this time. They put runners in scoring position in three of these five innings, yet failed to score each time. The best opportunity came in the

fourth, when a Scott Williams '91 double to left put runners on second and third with two outs. A strikeout ended this rally.

Clark broke the ice in the top of the sixth when they scored two tainted runs. The first run was scored by a Clark batter aboard on an error, and the second trotted home on a wild pitch. This lead would not stand up for long, as MIT responded in the bottom half of the inning with two runs of its own to knot the score.

Mike Griffin '90 pulled a single into right field to start out the inning for the Engineers. Tim Day '89 drove home Griffin with a double down the left field line, and after Mike Murray '90 singled up the middle, MIT had runners on the corners with no outs. This obviously unnerved the Clark pitcher as he balked, forcing home Day. With the pressure of preserving the lead off, the Clark pitcher settled down to retire the next three batters in order and squelch the uprising.

The Engineers grabbed the lead in the next inning, courtesy of the Clark pitcher. Dave Cote '89 led off the inning by walking. After a sacrifice, the next two batters also walked, to load the bases. Day then drove in Cote by, yes, you guessed it, walking. The Clark manager at this point decided that the Engineers were well enough exercised and changed pitchers. The new pitcher retired the two batters he faced and saved some measure of respect for Clark.

Meanwhile, Patterson went through the Clark lineup without any trouble in the seventh and eighth. The minimum six men came to the plate, with not one of them ever seeing first base. Three of them struck out.

As Patterson had thrown 126 pitches, manager Fran O'Brien brought in Eisner to close out the game. Eisner responded to the call by shutting out Clark in the ninth to preserve the victory for MIT.

The next day, the Engineers used their big bats in the eighth inning to defeat Bates, 5-3.

True to form, MIT staked their opponent to an early lead, falling behind 2-0 after five innings. The Engineers came back in the sixth to knot the score, and pounded out three key runs in the eighth. Griffin was the winning pitcher, going the distance, as MIT continued its dominance on its home field.

Crew can't hold on after fast start

By Anh Thu Vo

The MIT men's lightweight crew team lost their races to crews from Cornell and Columbia Universities on the Charles River last Saturday, April 22.

The lightweights were eager to improve their record of 4-3, having defeated Connecticut College, University of Rhode Island, State University New York at Albany, and US Coast Guard Academy while losing to Harvard University, Dartmouth College, and Yale University.

"Our strategy was to be aggressive, get in front, and row long and clean to keep our lead," Coach Peter Holland said.

Despite its fast start and early lead, the varsity eight simply could not hold its own against the "power" moves made by Cornell and Columbia during the second 500 meters. MIT was first

off the starting line, and they maintained this lead until the 600-meter mark when Columbia and Cornell pulled past to take first and second places, respectively.

Columbia won the race in 6:48.6, followed by Cornell (6:52.6) and MIT (6:58.3).

The JV eight also lost to their opponents from Cornell and Columbia. MIT was four seats behind as they left the starting line. The Engineers then lost contact with their opponents near the 500-meter mark and were left to row their own race. Cornell finished first (7:00.3), followed by Columbia (7:03.3) and MIT (7:35.4).

The JV eight simply did not row anywhere near their capabilities last Saturday, according to Holland. He added that there were some non-racing rowers

who "are really close to making the JV," and JV rowers with potential to make varsity, implying that more changes in the lineup can be expected in the next three weeks. The men's Eastern Sprints, the racing season final, is in three weeks.

The first and second freshman lightweight eights also lost their races last Saturday. Cornell won the first freshman lightweight eight race (7:01.3), followed by MIT (7:12.1) and Columbia (7:23.9). Cornell also won the second freshmen lightweight eight race (7:20.0), followed by Columbia (7:32.1) and MIT (7:55.9).

The men's lightweight teams will compete against Rutgers University next Saturday. Afterwards they will travel to Worcester to compete in the Eastern Sprints on May 14.

Upcoming Home Events

Wednesday, April 26

3:30 Lacrosse v. Mass. Maritime Academy
7:30 Women's Tennis v. Salem St. College

Friday, April 28

3:00 Baseball v. Gordon College