

NIH report finds fraud in MIT research

By Andrew L. Fish

After a highly publicized investigation of scientific fraud at an MIT biomedical laboratory, the National Institutes of Health have concluded that a former MIT researcher fabricated crucial data in a 1986 scientific paper.

Thereza Imanishi-Kari co-authored the paper with Nobel laureate and former Whitehead Institute Director David Baltimore '61 and others. The paper, based on work at the MIT Center for Cancer Research, was published in the journal *Cell* in 1986.

Baltimore, who had previously been a staunch defender of the paper and Imanishi-Kari, asked Wednesday that the paper be retracted. While he was unavailable for comment yesterday, Baltimore, who is now president of Rockefeller University, told *The New York Times* that Imanishi-Kari would have to answer the specific allegations of fraud.

The NIH investigators did not accuse Baltimore of fraud, but they called his continued defense of the *Cell* article and Imanishi-Kari "extraordinary" and "difficult to comprehend," according to portions of a draft report obtained by *The Tech*.

The draft report, which has not been made public, accused Imanishi-Kari of "serious scientific misconduct," stating that she "repeatedly presented false and misleading information" to

the investigators and expert scientific panels.

Imanishi-Kari is currently a professor at Tufts University. Her laboratory referred questions to her attorney, Bruce A. Singal, who did not return phone calls. But he told *The Boston Globe* Wednesday that, while he would not comment on the substance of the report, "there is no evidence whatsoever of falsification or fabrication."

Tufts is "reviewing the report and [has] been asked to keep it confidential for 30 days," said Tufts Director of Communications Rosemarie Van Kamp.

NIH spokesman Donald M. Ralbovsky would not discuss the substance of the draft report and pointed out that the period for parties to comment on the draft had not elapsed.

Data was falsified, NIH claim

The *Cell* article reported experiments on laboratory mice that seemed to indicate that the introduction of foreign genes into an animal could lead to the expression of related genes within the animal, a topic which the biological community is still debating. The finding, which has not been confirmed, could have implications for immunological study and gene transplant work.

The NIH investigators said that, based on statistical and forensic analysis, some of the

data produced by Imanishi-Kari for the paper and a subsequent correction were fabricated. Based on analysis by the Secret Service, the report charges that parts of Imanishi-Kari's laboratory notebook were falsified. Also, the report alleges that some supporting computer tapes were made years before the MIT research began.

Baltimore received his sharpest criticism for his defense of the allegedly falsified data. The report indicated that he blamed the NIH for the fraud. The report quoted him as saying, "If those data were not real, then she [Imanishi-Kari] was driven by the process of investigation into an unseemly act. But it does not go to the heart of any scientific issue. . . ." Baltimore was referring to an NIH-mandated correction to the *Cell* paper.

The report also quotes Baltimore as saying that "in my mind you can make up anything you want in your notebooks, but you can't call it fraud if it wasn't published." Baltimore continued to tell investigators, "Now, you managed to trick us into publishing . . . and now you're going to go back and see if you can produce those [numbers] as fraud."

The report called these statements "deeply troubling." The report added that Baltimore's remarks were "all the more startling when one considers that Dr.



Former Whitehead Director David Baltimore '61

Tech file photo

Baltimore, by virtue of his seniority and standing, might have been instrumental in effecting a resolution of the concerns about the *Cell* paper early on, possibly before Dr. Imanishi-Kari fabricated some of the data later found to be fraudulent."

O'Toole praised

The report praised Margot O'Toole, a former postdoctoral fellow at MIT and one of the paper's original challengers. It called her actions "heroic in many respects" and said that she "deserves the approbation and gratitude of the scientific community for her courage and her dedication to the belief that truth in science matters."

After raising her concerns

about the *Cell* paper with faculty members at both MIT and Tufts, O'Toole complained that the resulting institutional reviews of the research were flawed by "false and damaging" statements, misrepresentations, and the investigators' failure to press for the correction of the paper's false claims, which she characterized at the time as error, not fraud.

At the same time, O'Toole claimed that her career began to unravel as the result of hostility on the part of unnamed MIT faculty members and Imanishi-Kari, who, she said, requested that O'Toole not be allowed to return to an appointment at Tufts. The NIH report supported this claim,

(Please turn to page 2)

GSC discusses new status

By Dave Watt

The Graduate Student Council discussed a proposal on Tuesday to offer an "All-But-Dissertation" registration status for graduate students. The GSC also nominated candidates for next fall's officers.

The GSC has been pushing to begin ABD status, which would offer substantially discounted tuition for graduate students who have completed all of their classwork, but have not yet written their dissertations.

But Dean of the Graduate School Frank E. Perkins '55 said he thought it would be difficult

to fund a broad ABD status. He estimated that a broadly applied ABD status, which would apply to roughly 1000 graduate students, would cost the Institute \$12-18 million per year.

Perkins did say that many faculty members support the idea of an ABD status, but for now, only minor reforms in the current non-resident student status would be possible.

Non-resident student status offers students discounts on tuition if they use no laboratory or office space, take no classes, receive no financial support from MIT, use no computing facilities,

and do not live in Institute housing.

Students who remain enrolled at MIT as non-resident students pay 15 percent of normal tuition, or \$1170 per term. In addition, they must pay 50 percent of normal tuition during the semester in which they graduate.

About 150 students are now enrolled as non-resident students. According to Perkins, they come primarily from the most poorly funded departments on campus: political science, architecture, and urban studies and planning. Many of these students work

(Please turn to page 11)

Graduate students debate unionization

By Lakshmana Rao

Graduate students heard arguments in favor of "Labor Unions for Graduate Students" at a colloquium by that name Wednesday.

The colloquium, organized by the Graduate Student Council, explored "ways that graduate students on some other campuses around the country have attempted to deal with the challenges facing graduate students," said Andrew D. Silber G, who chaired the colloquium.

Much of the discussion at the colloquium focused on the best form for a student union. Thomas A. Kochan, professor of management at the Sloan School of Management, said standard labor unions serve as very ineffective models for contract negotiations between students and university administrations.

"The primary concerns of students are different from those of labor unions," Kochan explained. "Students are concerned with issues like educational policy and housing in addition to employment. They are particularly faced with the problem of a rapid turnover rate. The generation of students responsible for the mobilization of a union is normally not present at the time of contract negotiations," he added.

Kochan cited the Harvard Clerical Union (HCU) as an example of a successful union based on an alternate union management model. The HCU focuses on issues like career development, child care, and the union's role in governance at Harvard

University.

The union mobilizes its members by saying that "it is not necessary to be anti-Harvard to be pro-union," Kochan said. "Mobilization based on such non-confrontational stands has a greater chance of surviving the rapid turnover in student unions," he added.

Binding arbitration described as "difficult" without unions

"It is difficult to achieve binding arbitrations with a university administration outside of student unions," said Andrea DeVries, a representative of the Graduate Employees Organization of the University of Massachusetts, Amherst. "The GEO was responsible for the waiver of a \$400 tuition raise that was announced by the administration in the middle of a semester," she added.

"Unions have teeth in their ability to strike," Silber said. "Often just the threat of a strike is sufficient to make gains."

"Student unions give legal leverage to collective bargaining with an administration," said Hank J. Bromley '83, chairman of the Educational Committee of the Teaching Assistant's Association at the University of Wisconsin, Madison.

The TAA was formed in the mid-1960s and was largely responsible for mobilizing support for the introduction of some bills in the state legislature that are favorable for teaching assistants,

(Please turn to page 11)

Professors discuss Mideast

By Alice Gilchrist

Professor of Political Science Lincoln P. Bloomfield compared US involvement in the Middle East to a rocket that was "launched in 1943 and is still cruising over, and sometimes landing in, the Middle East." His comments came as part of the

first meeting of the MIT Community Series on the Middle East.

Bloomfield and Associate Professor of Political Science Charles Stewart III lectured at the meeting, which was held on Monday at 4 pm in Room 10-250. President Charles M. Vest moderated an open discussion after the

speeches.

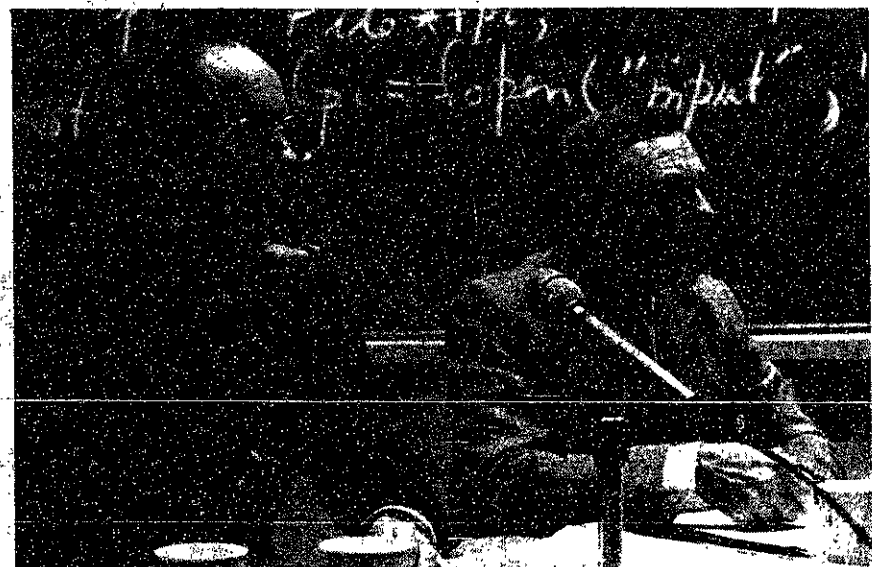
Bloomfield's lecture, titled "An Expanding Involvement," was a historical sketch of US-Middle East relations from 1940 to the present. Stewart's lecture, titled "Through a Glass Darkly," outlined the American attitude toward foreign policy and the reasons for that attitude.

"US involvement in the Middle East [can be limited] to three areas — the Arab-Israeli conflict, oil, and the Cold War," Bloomfield said.

The Arab-Israeli conflict began when Britain put the Palestinian Mandate "in the hands of the United Nations," Bloomfield explained. He said the United States was the first country to recognize Israel, but that the French have also been highly involved with Israel. France kept Israel armed until the Six Day War, Bloomfield said, when the United States began supplying Israel with military equipment.

Bloomfield said the Arab states recognized the United

(Please turn to page 11)



Sang H. Park/The Tech

Professor of Political Science Lincoln P. Bloomfield (left) and Professor Charles Stewart III field questions after lecturing on US involvement in the Middle East.

NIH report critical of David Baltimore

(Continued from page 1)

position in Dr. Imanishi-Kari's laboratory is only the most visible symbol of the price exacted of her after she raised the challenges to the paper."

O'Toole said she was "very relieved that the truth has finally come out." She called the report "an act of courage on the part of the people that wrote it." She noted that while an investigation into MIT's handling of the matter is continuing, "the scientific issues have been settled."

O'Toole said she was happy with her current position with Genetics Institute, a Cambridge biotechnology company, and has no plans to return to a university setting.

Deutch: MIT scrupulous

Former Provost John M. Deutch '61, who has supported Baltimore, had not seen the NIH report. "I'm certainly not prepared to make a comment about academic misconduct without having studied the report," he said.

"The reports from NIH since this matter began have been frequent and not always consistent," Deutch said. "I think it's very careful to wait until one looks at the particulars of this report."

An earlier MIT investigation of O'Toole's claims found no evidence of misconduct. Professor of Immunology Emeritus Herman N. Eisen, who led that investigation, told *The New York Times* he did not believe he should have acted differently, given the information presented at the time. Yesterday, he referred all questions to Deutch.

Deutch was "firmly of the view that MIT's conduct in this matter was scrupulously correct at every step of the way."

Yet, President Charles M. Vest, who also had not seen the NIH report, issued a statement which said he has "asked a small group of faculty and administrators to look into our procedures for dealing with allegations of academic misconduct."

The statement, which was addressed to MIT faculty and researchers, asked for help in

designing "an Institute-wide program to ensure that all junior colleagues are appropriately mentored in [objective] methodologies and attitudes."

Dingell pleased with system

A spokesman for the House Subcommittee on Oversight and Investigation, chaired by John D. Dingell (D-MI), said the committee might hold further hearings on the matter after the NIH completes its investigation. Dingell's committee has also been investigating O'Toole's fraud allegations.

In a statement, Dingell said, "The system seems to be working as we had hoped. There is still more work to be done. I trust that NIH will look at the way certain institutions and individuals responded — or failed to respond — to some very serious allegations and evidence of misconduct."

Baltimore and his supporters have been upset by Dingell's involvement in the investigation. In a 1988 letter to colleagues, Baltimore called Dingell's probe "totally unnecessary" and warned that "what we are undergoing is a harbinger of threats to scientific communication and scientific freedom."

Deutch also expressed concern that the Baltimore investigation — like the congressional investigation of Stanford's overhead policy and the Justice Department antitrust probe into university admissions and financial aid policies — was indicative of "a lack of public confidence and appreciation of the nation's great research universities."

Deutch, who is currently on a National Academy of Sciences committee writing a report on scientific misconduct in the academic community, said "the proper response to that is not to turn away from the controversy, but for universities to forthrightly meet these questions and attempt to restore confidence in these terrific assets of the nation."

(Editor's note: Andrea D. Lamberti and Jeremy Hylton contributed to the reporting of this story.)

SOFTWARE ENGINEER

Keithley Instruments, Inc., a leading manufacturer of test and measurement equipment for researchers and engineers in the electronics industry has a career opportunity for an entry level Software Engineer.

We are looking for the best and brightest people with a BSCS or MSCS having knowledge and interest in engineering firmware and software in the following areas:

- distributed systems
- user interfaces
- instrumentation control
- programmed control of instruments

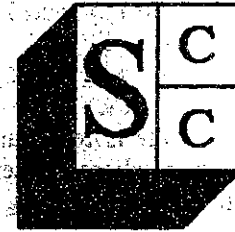
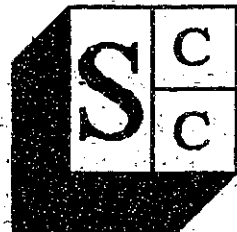
MECHANICAL ENGINEER

Requirements for this position include a BS or MS in Mechanical Engineering with related coursework in design for manufacturability, thermal analysis techniques of electronic enclosures, and finite element analysis. A working knowledge of mechanical drafting, geometric dimensioning, and tolerancing is preferred. Co-op experience is a plus.

This position will be responsible for the design of packaging for new instruments in development and the redesign/modification of existing product line instruments and accessories. Duties will include analysis of proposed instrument specifications, performance requirements, and project goals to conceive practical mechanical design which can be economically manufactured.

Keithley offers a competitive salary plus an attractive benefit package in a challenging growth oriented environment. **Interviews will be held on Wednesday, April 3, 1991 from 9:00 A.M. - 5:00 P.M.** Interested parties should schedule an interview through the recruiting office, Room 12-170.

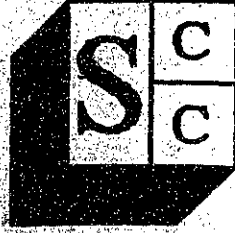
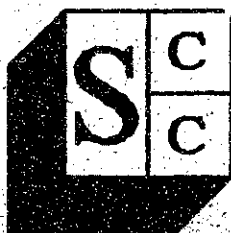
KEITHLEY



**SCC
PARTYLINE
IS
BACK!**

CALL 253-3942

IF YOU WOULD LIKE YOUR SOCIAL EVENT PUT ON THE PARTYLINE, CALL 253-3942 AND LEAVE A MESSAGE.



The Tech

Hotline: 253-1541

Attention Graduating Seniors!

Searching for *interesting work*? We have an immediate opening for a **Product Specialist** in our Laser Scanning Confocal Microscopy Group. Job involves travel, and deals primarily in biology, image processing, biochemistry, optics, electronics, and computers. Experience with IBM PC hardware & software. Competitive pay/benefits package. Send resume to: Bio-Rad Microscience Division, 19 Blackstone Street, Cambridge, MA 02139, Attn: Ken Goodwill (MIT '88).

UNIX



Associates, Inc.

Has openings for UNIX Programmers experienced in:

- INTERNALS
- NFS
- TCP/IP

- APPLICATION DEVELOPMENT

If you are interested in a high paying assignment and can work full time or a minimum of 20 hours per week:

RESUME:

CLAM ASSOCIATES

P.O. Box 1439

Cambridge, MA 02142

OR

CLAM@CLAM.COM

news roundup

from the associated press wire

World

Saudi Arabia, Japan to help pay for war

Saudi Arabia said that it is not behind in paying its share of the costs of the Persian Gulf war to the United States. The official Saudi news agency said that the kingdom will come through with the money. Each house of Congress has passed measures aimed at pressuring allies to pay their contributions. Negotiators from the House and Senate discussed differences in their bills yesterday.

According to the White House, Japan will give the United States \$5.7 million today. Spokesman Marlin Fitzwater said that the money is an initial contribution toward Japan's share of the war's costs for 1991. He added that more money is expected soon.

Japanese media have said that Japan was not consulted enough on the Persian Gulf crisis. But Secretary of State James A. Baker III said that US relations with Japan are fine, and he also said that he and Japan's visiting foreign minister intend to keep them that way.

1100 Kuwaitis freed by Iraq

A Red Cross spokeswoman said that more than 1100 more Kuwaitis were freed by Iraq yesterday. She said that they are being bused to Saudi Arabia and then will be flown to Kuwait. It is not known how many are civilians and how many are military. The release came as delegates from Iraq held talks in Saudi Arabia on repatriating Iraqi prisoners of war. But the Red Cross said that was coincidental.

Great Britain to abolish poll tax

The British government said that due to popular demand, it is "dumping" the poll tax. One official said that citizens did not think it was fair to just tax everyone over 18. He said that the government will go back to some form of property tax to fund local governments. Critics had said that the poll tax did not take into account people's ability to pay. Opposition to the tax helped push British Prime Minister John Major's predecessor, Margaret Thatcher, out of office.

Nation

Los Angeles beating victim found to be drunk

Los Angeles police said that there is evidence to suggest that Rodney King, the victim in a now notorious Mar. 3 videotaped beating by officers, may have been legally drunk at the time he was stopped.

Lt. Fred Nixon said that blood and urine samples taken after King's beating showed that he had alcohol and marijuana in his system. Nixon added that the level of alcohol found was sufficient that King would have been well above the 0.08-percent legal limit when he was stopped.

The tests contradict earlier statements by a King lawyer that his client is a devoted Jehovah's Witness who does not drink or take drugs. The lawyer for one of the passengers in King's car said that his client also told authorities that he and the others in the car had each drunk 40 ounces of malt liquor.

NASA to build smaller space station

The National Aeronautics and Space Administration said that it plans to build a simpler and cheaper space station, and that the station will take longer than expected to complete. NASA Administrator Richard P. Truly said that this is what Congress wants. He added that the changes, including \$8 billion in cost cuts, will still allow important research to be done. But critics in the scientific community said that the scaled-down space station will not meet basic requirements.

Local

Physical abuse complaints against Boston police officers increase

Boston police said that complaints of physical abuse by Boston officers have increased over the past five years. But John Meade, chief of the Bureau of Professional Standards, contends there are not more physical abuse cases. He said that the increase is because the citizens of Boston are less reluctant to come forward with a complaint.

Meade said that last year there were 472 citizen complaints, including 167 of physical abuse. As a result, 13 officers were terminated, 37 officers were suspended without pay and three received punishment duty. The city currently has 1500 men and women in uniform. In 1989, 419 complaints were filed against the police force, of which 133 were for physical abuse.

Meade declined to give any details on the number of charges that claimed excessive force. He said that the legal department advised him not to report on that specific area. He noted that neutral reporting sites were set up last year where citizens could make complaints against police without having to go to the police station.

Cellucci urges approval of wage exemption law

Massachusetts Lt. Gov. Paul Cellucci has urged a legislative committee to approve a plan that would exempt cities and towns from paying union-scale wages on small construction projects. But opponents question whether it would save money. The plan would exempt projects of \$250,000 or less from the prevailing wage law. Cellucci appeared before the legislature's Commerce and Labor Committee yesterday. He conceded that the \$50 million a year savings projected by the Weld administration is probably high.

Weld meets with Walpole, Norfolk citizens to discuss landfill

Gov. William F. Weld met with officials and citizens from Walpole and Norfolk yesterday. But they reached no conclusions on whether a sewage debris landfill will have to be built in Walpole. During his campaign for governor, Weld opposed the location of a dump in Walpole. But the US Environmental Protection Agency is continuing to insist that the state have a backup site.

Environmental Affairs Secretary Susan Tierney has proposed a plan whereby sticks, stones and other debris would be sent to commercial landfills. Sludge would be sold as fertilizer. Under that plan, the Walpole site would be a backup only. But Walpole anti-dump activists said that even that plan is not appealing. They claim it still would require endorsement of the EPA and the Massachusetts Water Resources Authority.

Weld to announce decision on deficit-reduction package

Gov. William F. Weld said he will announce his decision today on which sections of a deficit-reduction package he will sign and which he will veto. Weld aides have said he will reject a legislative plan that would force him to slash salaries of cabinet secretaries. But the House and Senate may have the votes to make the provision stick. Another likely veto is a provision that would allow the governor to sell surplus state land. Weld had asked the legislature for that power. But he said the provision that was passed does not give him the latitude he needs to raise \$90 million this fiscal year.

Weld raised all cabinet salaries to \$85,000 a year when he took office in January. The current proposal would drop salaries to a range that would force some of the nine officials to take pay cuts of \$20,000 or more.

Weather

Bonjour, printemps!

Between a large surface high over southeastern Canada and a substantial cyclone over the center of the United States, a blocking pattern will develop. A stationary front will remain to the south of our area right through Saturday. The result: A cool, raw weekend is in store, with hope of fairer skies early next week.

Friday: Mostly cloudy with a few breaks well to the northeast. Some light sprinkles possible. High around 40-45°F (4-7°C), with winds from the northeast 10-15 mph (16-24 kph).

Friday night: Clouds thickening and precipitation slowly rolling in. Cold rain with a few pockets of wet snow inland, caused by trapping of colder air near the surface. Lows in the mid-30s (0-2°C), winds continue northeast.

Saturday: Rainy, windy and raw, with temperatures ranging in the high 30s to about 40°F (3-4°C).

Sunday: More rain likely, with temperatures in the 40s (6-9°C).

Forecast by Marek Zebrowski

Compiled by Joey Marquez

ACADEMY AWARD NOMINEE BEST FOREIGN LANGUAGE FILM

"PASSIONATE..."

A love triangle in the classic tradition
... of 'The Postman Always Rings Twice'

—THE NEW YORK TIMES

"SEXY AND SOPHISTICATED"

—Phillip Lopate, INTERVIEW

"VISUALLY
SPECTACULAR
and dramatically
beguiling"

—Richard Corliss, TIME MAGAZINE

JU·DOU
A FILM BY ZHANG YI-MOU



A NIRMAL FILM RELEASE © 1991 ALL RIGHTS RESERVED

STARTS TODAY,
FRIDAY, MARCH 22nd!

CHECK DIRECTORIES, OR CALL THEATER FOR SHOWTIMES

LOUIS
NICKELODEON
424-1500

LOUIS
HARVARD SQ.
424-6500

The Writing Prizes

Deadline:
April 11, 1991

The Writing Prizes

Fiction Short Story Poetry Drama Essay Scientific and Engineering Writing Science Writing for the Public

Cash prizes awarded in each category

For applications and guidelines contact The Writing Program Room 11E-303

Massachusetts Institute of Technology

opinion

Philosophy: an easy guide

Column by Jason Merkoski



The Tech

Volume 111, Number 15 Friday, March 22, 1991

Chairman Lois E. Eaton '92
Editor in Chief Andrea Lamberti '91
Business Manager Mark E. Haseltine '92
Managing Editor David A. Maltz '93
Executive Editor Joanna E. Stone '92

News Editors Reuven M. Lerner '92
 Karen Kaplan '93
 Brian Rosenberg '93
 Katherine Shim '93

Night Editor Daniel A. Sidney G
Opinion Editors Prabhat Mehta '91
 Bill Jackson '93

Arts Editor Deborah A. Levinson '91
Photography Editors Sean Dougherty '93
 Douglas D. Keller '93

Contributing Editors Peter Dunn G
 Dave Watt G
 Michael J. Franklin '88
 Russell Wilcox '91

Advertising Manager Ben A. Tao '93
Production Manager Marie E. V. Coppola '90
Senior Editor Jonathan Richmond G

NEWS STAFF

Associate News Editors: Jeremy Hylton '94, Joey Marquez '94;
Staff: Lakshmana Rao G, Andrew L. Fish '89, Miguel Cantillo '91, Shannon Mohr '93, Alice Gilchrist '94, Chris Schechter '94, Kai-Teh Tao '94; **Meteorologists:** Robert X. Black G, Robert J. Conzemius G, Michael C. Morgan G, Greg Bettinger '91, Yeh-Kai Tung '93, Marek Zebrowski.

PRODUCTION STAFF

Associate Night Editor: Kristine J. Cordella '91; **Staff:** Josh Hartmann '92, Tzu-Jun Yen '92, Jonathon Weiss '93, Aaron M. Woolsey '93, Chris Council '94, Alex Dong '94, Jeff Galvin '94, Christopher Lee '94, Rebecca J. Soble; **TEN Director:** Andrew J. Kass '94.

OPINION STAFF

Associate Opinion Editor: Matthew H. Hersch '94; **Staff:** Gregory T. Huang G, Pawan Sinha G, Jason Merkoski '94.

SPORTS STAFF

Jordan J. Ditchek '91, Mohammed Eissa '91, Shawn Mastrian '91, David Rothstein '91, Jennifer M. Moore '94.

ARTS STAFF

Mark Webster G, Manavendra K. Thakur '87, Christina Boyle '91, Emil Dabora '91, Robin Kullberg '91, Michelle P. Perry '91, Sande Chen '92, David Hogg '92, Kevin Frisch '93, Nic-Kelman '94, David Zapol '94, Chris Wanjek.

PHOTOGRAPHY STAFF

Associate Photography Editor: Vipul Bhushan G; **Staff:** William Chu G, Morgan Conn G, Christian S. Marx G, Dan McCarthy G, Andy Silber G, Lisette W. M. Lambregts '90, Sarath Krishnaswamy '91, Mauricio Roman '91, Anne Sammis '91, Chip Buchanan '92, Jonathan Kossuth '92, Lerothodi-Lapula Leeuw '92, Chris Blanc '93, Paulo Corriea '93, Michelle Greene '93, Sang H. Park '93, Matthew Warren '93, Jeremy Yung '93, Hugh B. Morgenbesser '94, Lawrence S. Schwartz '94. **Darkroom Manager:** Kristine AuYeung '91.

FEATURES STAFF

Taro Ohkawa '91, Mark Hurst '94.

BUSINESS STAFF

Associate Advertising Manager: Shanwei Chen '92; **Accounts Manager:** Jadene Burgess '93; **Staff:** Haider Hamoudi '93.

ADVISORY BOARD

V. Michael Bove '83, Harold A. Stern '87.

PRODUCTION STAFF FOR THIS ISSUE

Night Editors: Daniel A. Sidney G
 Deborah A. Levinson '91
Staff: Peter E. Dunn G, Marie E. V. Coppola '90, Kristine AuYeung '91, Brian Rosenberg '93.

The Tech (ISSN 0148-9807) is published on Tuesdays and Fridays during the academic year (except during MIT vacations), Wednesdays during January, and monthly during the summer for \$20.00 per year Third Class by The Tech, Room W20-483, 84 Massachusetts Avenue, Cambridge, MA 02139-0901. Third Class postage paid at Boston, MA. Non-Profit Org. Permit No. 59720. POSTMASTER: Please send all address changes to our mailing address: The Tech, PO Box 29, MIT Branch, Cambridge, MA 02139-0901. Telephone: (617) 253-1541. FAX: (617) 258-8226. Advertising, subscription, and typesetting rates available. Entire contents © 1991 The Tech. The Tech is a member of the Associated Press. Printed by Charles River Publishing, Inc.

Philosophy is bunk.

Out of all the arts, philosophy has the least practical value. Music is necessary for keeping us amused. Drawing is necessary for designing cereal boxes and record albums. Writing is of paramount performance. (After all, your lives would be empty without the Earth-shattering opinions expressed in *The Tech*, right?) But what of philosophy?

Consider: A friend of my father's majored in philosophy, and had hoped to put his degree to good use. He wanted to start a national chain of philosophy stores, in which philosophy majors would be available for discussion. For example, a customer would say "I'd like 10 dollars worth of realistic pragmatism, OK?" To which the philosophy major would reply "Well, have you ever wondered about being alone in a Godless universe? A universe that expands without bounds, in which you are just a bunch of chemicals slopped together. . . ." Ideally, the stores would be located next to funeral parlors.

The point of that anecdote was that there is simply no practical use for philosophy! Yet in universities all over the world, there are thousands of students majoring in philosophy. Why? In the off chance that one of them, out of the hundreds of thousands of living and dead philosophers, would solve the question of the Ultimate Meaning of Life, as if it were a simple algebra equation? No! In a hundred years, nobody will ever remember the names or accomplishments of those thousands of current philosophy majors. I offer as proof the following question: Name all the philosophers who ever lived. I would be surprised if you can name over a dozen.

But nonetheless, people still want to major in philosophy, whether it be a genuine curiosity over the nature of existence, or simply wanting to quote some "bad-to-the-bone" Nietzsche to liven up a party. However, in the belief that anybody can become a philosopher, the Merkoski Institute of Theology (MIT) has provided (free of cost!) a simple

Jason Merkoski is a freshman who has already forgotten what a priori means.

checklist that will put you on the path to philosophy. Enjoy!

(1): Learn French, German, Latin, and Greek. Most philosophers believe that they have to prove they have really learned something after years of college. They prove this by peppering their philosophy with lots of nasty-sounding foreign words. Take for example "a priori." It means "characterizing the kind of reasoning involving deducing consequences from definitions or principles regarded as self-evident." What a mouthful, huh? I can guarantee that you will have forgotten what it means in a matter of seconds.

(2): Publish, publish, publish! The key word here is "prolific." Just write as many pearls of wisdom as you can, preferably containing the aforementioned foreign words. You may want to ask odd questions like "is despair the ultimate bridge between man and God?" This way, your books, pamphlets, etc., will give other philosophers something to beat to death in bloody debate.

(3): Discuss the works of other philosophers. Not only will you convince others that you know what you are talking about, but the more you prattle on about famous philosophers, the more you will become convinced they are mere peons in your mighty presence. Just remember: You are a philosopher! You are supposed to believe that you are the apex in human intellectual development. It is acceptable to say "I was the first person to ever think of this," and "Everyone else in the universe is very stupid, dense, and a bad dresser to boot."

(4): Enroll at Harvard. With these simple guidelines under your belt, you will soon find yourself philosophizing with the pros! You will decide which philosophy is best for you. What will it be? Existentialism? Logical positivism? Nihilism? As for me, well I think Monty Python said it best: "The meaning of life? Well it's nothing very special. Try to be nice to people, avoid eating fat, read a good book every now and then, get some walking in, and try and live together in peace and harmony with people of all creeds and nations."

LETTERS TO THE EDITOR

Pro-Life also subject to vandalism

I am writing this letter to bring to the attention of the MIT community that GAMIT is not the only recipient of hatred and intolerance.

Last week was Respect Life Week, sponsored by MIT Pro-Life. Many of our event posters

were ripped down, sometimes found on the floor crumpled up, stepped on, or torn to bits. Our drop poster in the Julius A. Stratton '23 Student Center was also the focus of repeated attacks, I assume by persons who consider themselves "pro-choice."

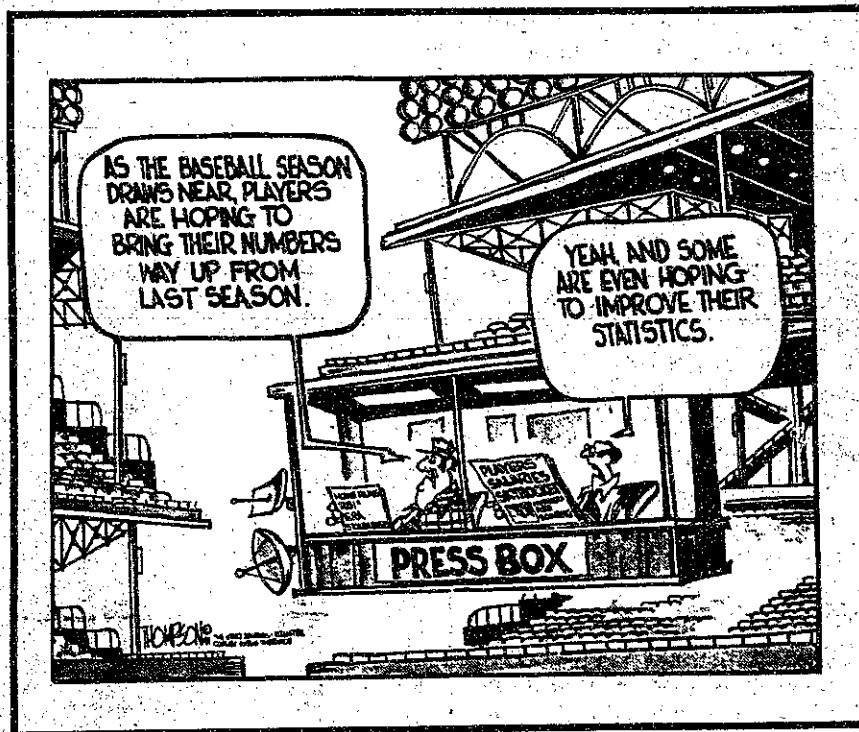
Although our drop poster did not fall, we had to constantly reinforce the top of the poster with tape as these persons kept deliberately tearing off bits of the tape. If it weren't for our diligent efforts, our drop poster would have met the same fate as the Bisexual, Gay, and Lesbian Awareness Days (BGLAD) drop poster.

Perhaps the most disturbing event that took place during our Respect Life Week was an outward display of hatred and bigotry in front of our information booth in the Student Center.

There is a picture we like to display of a mother and infant. The infant is one of the youngest known preemies to survive, born only five months after conception.

In the picture, the mother and child happen to be black. One person passing by our booth remarked, "Just what we need — another black baby." Well, I happen to be black, and I happen to be expecting in May.

Monnica Williams '91
 Vice President
 MIT Pro-Life



Harassment policy endangers freedom

In recent issues of *The Tech*, Associate Provost Samuel J. Keyser has pointed out that words can hurt. Keyser's response is to restrict free speech and suppress hurtful words.

This approach is fundamentally misguided. Institutional threats and coercion are a perverse way to promote mutual respect and civility. Moreover, repressing bigotry can lead to a false sense of self-confidence within the MIT community and stunt a collective examination of conscience.

Free speech is a crucial democratic value that should be espe-

cially cherished at a university. Vague restrictions on speech inhibit discussion and give MIT administrators arbitrary power to enforce their own prejudices.

Here's an example of how such arbitrary power operates. In a letter published in *The Tech*, Arnold N. Weinberg, the MIT medical director, labeled as "audacious" persons who think abortion is a public concern ["Abortion, insurance separate issues," Nov. 20]. I felt offended and belittled by this statement, especially since Weinberg was writing in his official capacity as

an MIT administrator.

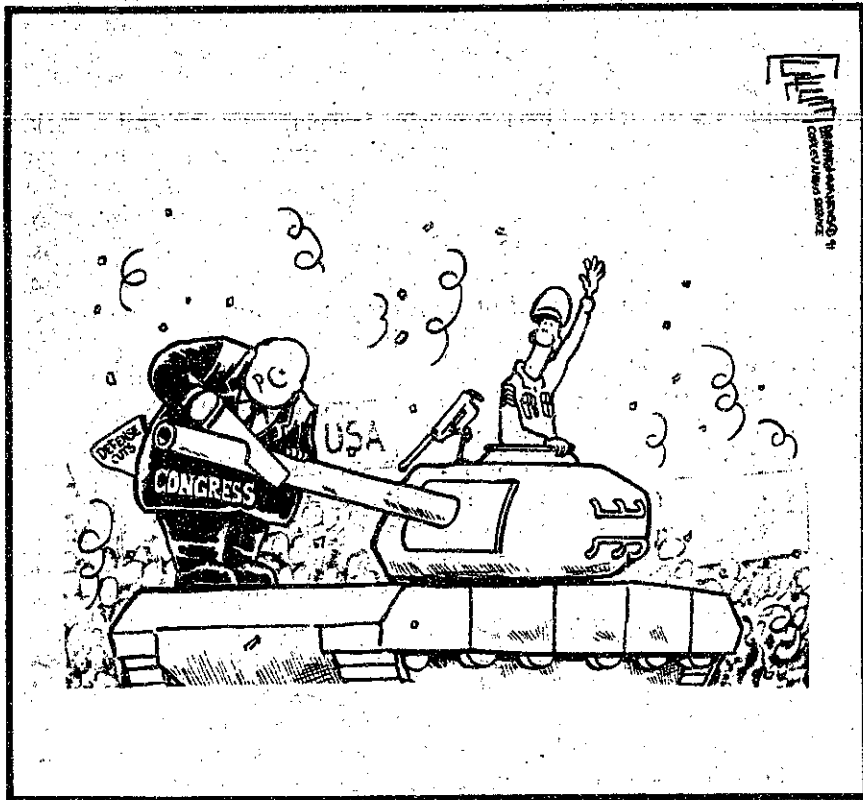
I brought this matter to Keyser's attention in a letter, and he ignored it. President Charles M. Vest, on the other hand, endorsed Weinberg's statement as representing MIT policy, and refused to discuss the matter further.

MIT administrators can't even deal with their own offensive statements. I doubt they can successfully police students' offensive statements, and I think it is wrong even to make an attempt.

Douglas Galbi G

opinion

LETTERS TO THE EDITOR



Anonymous posters breed hate

Thursday, as I walked down the Infinite Corridor, I noticed a poster stuck into one of the display cases. It had a quote from *Leviticus* about how a man who lies with a man as with a woman shall be damned, and so on.

In the fine print, the group taking "credit," a reincarnation of the infamous Dudes At MIT of past years, said they did not want their tuition to go towards groups promoting immoral sexual activity, and they wanted to see an end to it.

I got angry. This is a university community, and I understand that my tuition money will go towards supporting those groups with whom I do not agree. However, I firmly believe it is the

right of all people to speak their minds, even if I find their views distasteful. At the time, I thought about writing a letter to address this issue, but it wasn't clear that I could make time to do so.

However, 20 feet later, I saw a poster that shocked me, outraged me, and upset me deeply. It said, simply, "Buttslammers Give Losers Anal Disease." This is not a discourse of opposing views. This is harassment. This affront pains me in a way for which I cannot find words.

To the people who put up those posters, I have questions for you: Do you know anything about the people you are attacking? Do you hate them because they refuse to censor their

thoughts and feelings? Do you want to hurt those who have never even done any of those acts which you find "immoral?" Why would you want to hurt the people who have?

What are you afraid of?

Ignorance breeds bigotry. I can tell you that gay people are not monsters. They eat, sleep, do homework, play sports, hang out with friends, and love their partners, just like straight people do. They have minds with which to decide how best to live their lives, and they do not need you to impose your set of morals on them.

They understand the implications of their actions and take full responsibility for them. Many of us rejoice in taking responsibility for our actions, because we are being true to ourselves. Putting up anonymous, harassing posters belies your cowardice.

If you are truly going to be the good Christians you wish the world to believe you are, you will not condemn gays, but love them as God's children and let Him do the judging.

Take a good, long look at yourselves and find out why you put up the posters. They do nothing to further your cause and only hurt the opinion of those who might otherwise be sympathetic.

I will defend your right to hold your opinion, but I will not tolerate harassment.

Lindasusan Ulrich '91

Lerner's notebook omits terrorist attacks by Israel

In his discussion of terrorism in Israel, Reuven M. Lerner '92 clearly attempts to treat the relevant issues fairly, but I believe his account is misguided ["Reporter in Israel: the trap of terrorism," March 19].

Lerner balances Arab terrorism by mentioning Jewish terrorist groups whose "activities have been condemned by the Israeli government and military authorities." However, he omits the much more important examples of Israeli state terrorism, such as the Haram al-Sharif killings of last October, even though he notes that many define terrorism to include government violence directed against civilians.

This bias is strongest in his description of the 1982 Israeli invasion of Lebanon, which he claims was undertaken "to the star sounds like it was, then, the motivation for the invasion of Lebanon."

from firing rockets at Israeli settlements along the northern border."

In fact, during the year preceding the invasion there was a cease-fire with the PLO. The PLO twice attacked the Israeli settlements in this period, but as Norman Finklestein notes in the *Journal of Palestine Studies* [Winter 1991], "both these attacks were preceded by Israeli air assaults against Lebanon."

An official pretext for the 1982 invasion not mentioned by Lerner was the attempted assassination of the Israeli ambassador in London; however, this was carried out not by the PLO but rather one of its deadliest enemies, the Abu Nidal terrorist group, possibly with the aid of Iraq.

was, then, the motivation for the invasion of Lebanon."

non? Many Israeli commentators have suggested that the cause was the PLO's apparent willingness to abide by the cease-fire and the Israeli government's preference for a politically weak, terrorist PLO to a politically strong, orderly one.

Finally, Lerner agrees that "the government's policy of not negotiating with terrorist groups has resulted in more, rather than fewer, attacks," but then claims that "Israel has told those who would negotiate through fear that they have nothing to gain by continuing to use the same tactics."

An obvious corollary to this

statement is that Israel would reward those who renounce terrorism with negotiations. There is little compelling evidence for this, especially given Israel's policy of not negotiating with the PLO.

I think the matter was best put by Yehoshafat Harkabi, former head of Israeli military intelligence: "Terrorism is ugly . . . but put yourself in the shoes of the Palestinians and ask yourself what you would do — climb on the roof and shout, 'We deserve a state of our own!'" Who would pay attention to that?"

Stephen Fromm G

United States has become greatest threat to peace

Along with US atrocities in Iraq and Kuwait, and the grossly illegal actions in Panama, current reports of a Bay-of-Pigs style fiasco in Libya underscores the fact that the United States has become the greatest threat to world peace.

The message is clear: Any nationalistic world leader who does not want to join the Washington puppet show will be targeted for removal — by any means possible.

Based on non-existent "proof" of Libya's connection with terrorist activities, a bombing raid was conducted to kill Quaddafi. When the attempt failed, a group of dissidents were trained to overthrow him.

This has also succeeded in failing, with the United States spending enormous amounts of money to relocate these dissident commandos. It seems to me very hypocritical that this country should be so scared of purported domestic terrorist activities when it engages in them itself with no remorse.

The American government acts as if the world is a chess board. Foreign leaders are pawns to be manipulated for its own self-interests, and the rights and dignities of other peoples are blatantly ignored and trampled upon.

In the name of empty words such as "freedom" and "democracy," dictatorial regimes are supported, and the United Nations is considered a toy. When the United Nations condemned the US invasion of Panama, Bush cared less, but now with the Persian

Gulf situation, to avoid an overtly imperialistic image, Bush regards the UN as a sacred institution to drum up world support.

The worse aspects of American foreign policy that make it even more dangerous to the world are its nearsightedness and discontinuity. American leaders lack the capabilities and intelligence for strategic planning. They also completely lack any moral scruples.

If a foreign leader is anti-American he must be removed — now. No consideration is given to the future stability of the region and long-term effects.

For example, in Panama, after the kidnapping of Manuel Noriega and the installment of a new president (who had to be sworn in on a US base) the United States promised over \$400 million in aid. So far a mere \$30 million has been given, and with growing economic troubles a recent poll indicated that the new Panamanian president has a mere 20 percent of the people's support.

The sole objective of the Panama adventure was to remove somebody the United States didn't like — the well-being of the Panamanians was never considered.

The other problem, discontinuity, is intrinsic in the American government. Each administration has its own world view. Allies during one administration may be considered enemies during another — and you know what happens to enemies.

Robie Samanta Roy G

GOOD FRIDAY SERVICE

March 29
12:00 Noon

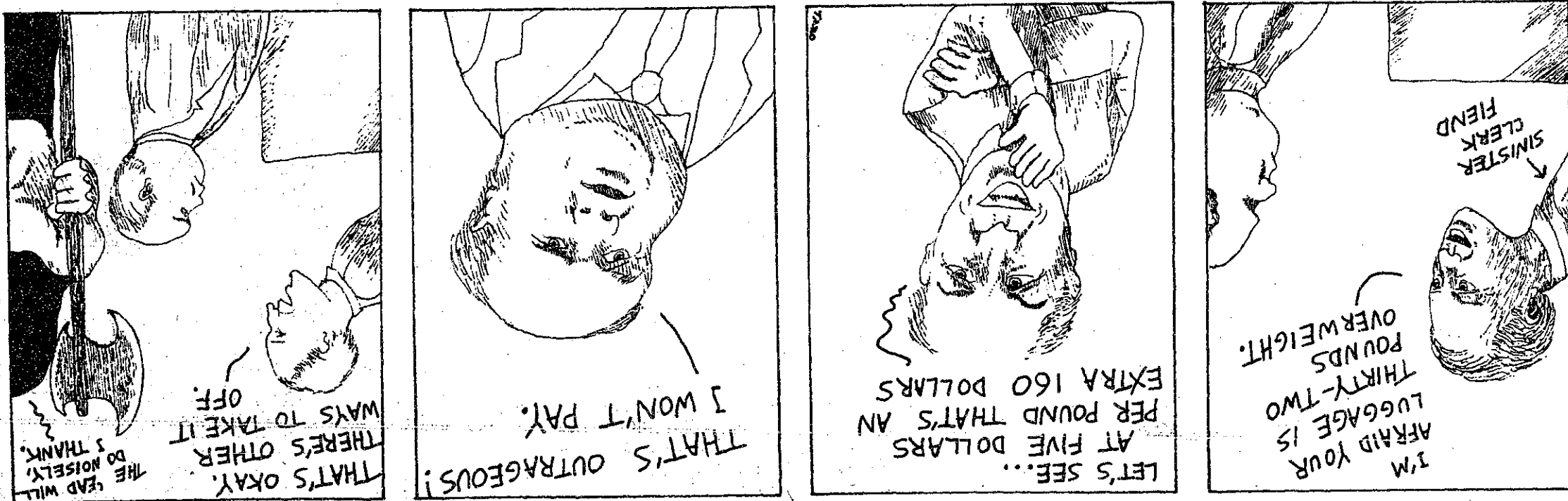
MIT Chapel



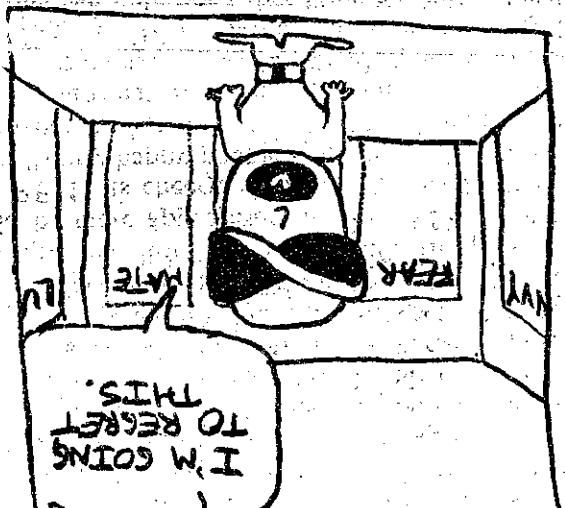
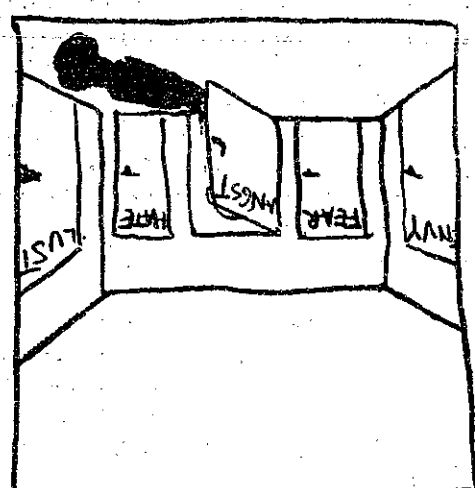
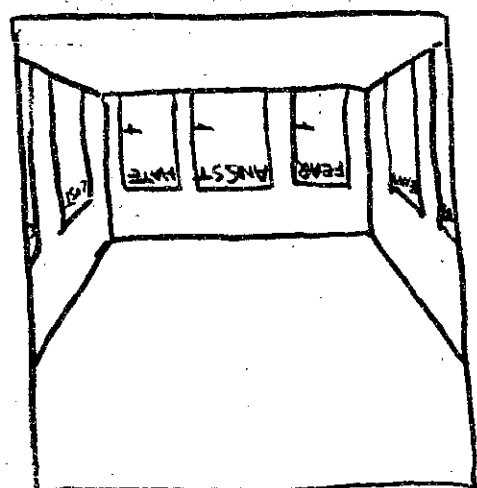
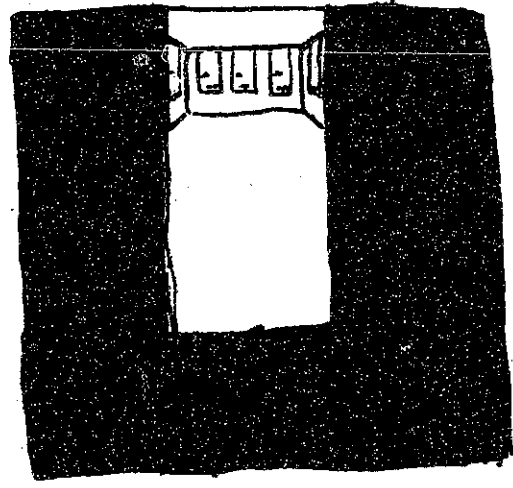
Sponsored by the Lutheran-Episcopal Ministry at MIT

COMICS

By Taro Okkawa



ANGST by Jon Cravat
 Introduction: The Chamber of 32 Doors



ACNE
 Department of Dermatology
 HARVARD MEDICAL SCHOOL

- NEW MEDICINE for acne under study
 - NO CHARGE for participation
 - INFORMATION about acne provided
 - REMUNERATION (\$) provided
- (617) 726-5066



INTERNSHIPS

LONDON
 PARIS
 WASHINGTON

SEMESTER/ACADEMIC YEAR	SUMMER PROGRAMS
GRENOBLE	CORTONA CYPRUS
HAIFA	LONDON MADRID
MADRID	MONACO PADUA
NIGER	PARIS
OXFORD	USSR/E. EUROPE
PADUA	

Name _____
 Address _____
 City _____
 College/University _____
 Summer _____ Fall _____ Spring 19 _____

BOSTON UNIVERSITY

OFFICE OF CAREER SERVICES

ARE YOU STILL IN THE JOB MARKET?

The Office of Career Services, located in room 12-170, is still hosting many companies for on campus interviews. Some of the firms that have scheduled dates with us include:

- April 1 Information Resources
- April 2 DRI/McGraw Hill
- April 3 Oracle - Burlington
- April 4 CGI Informatique
- April 5 Videofashion
- April 5 Digital Design
- Shipley Corporation

Keithley Corporation
 Logicon Data Architects
 Recognition Technology

Come in and check the job notebooks and notices posted outside on the bulletin boards for current listings.

Out of Time shows some big changes for REM

OUT OF TIME

REM.

Warner Brothers Records.

By LARRY SMILG
and JEREMY HYLTON

MAYBE AFTER A TWO-AND-A-HALF year hiatus, REM thought people would forget what they sound like. It is easy to forget that their new album, *Out of Time*, was actually created by the same band that recorded *Murmur* and *Life's Rich Pageant*.

REM gained its reputation as alternative music's darling with songs like "Radio Free Europe," showcasing driving guitar and percussion and Michael Stipe's occasionally understandable vocals. After moving to Warner Brothers Records from IRS for their last album, REM gained popularity, and with it a "pop" sound. The album, *Green*, often made political statements with songs like "Orange Crush" and "World Leader Pretend," commenting on the arrogance and narrow-mindedness of today's world leaders. ("World Leader Pretend" was also the only song for which REM has published the complete lyrics.)

Out of Time is a far cry from these political statements. It is a quiet, personal album, marked by plucky mandolin and string accompaniments. Its moods range from dark and introspective to "shiny happy people holding hands." The pictures of plants, earth tones, and a dog's tail on the CD insert reflect the moodiness of the album.

The change is not entirely welcome. "Shiny Happy People" includes the vocals of Kate Pierson of the B-52s, and the song ends up sounding like something that would be more appropriate for the B-52s than REM. Its cheery, sickly-sweet vocals about "shiny happy people laughing" gets repetitive and annoying. "Near Wild Heaven" also has the same pop sound, but with more complex vocals. After producing songs as bland and unappealing as this, one can only hope that Stipe has not gone soft in the head.

The album's closing song, "Me in Honey," also features Pierson on vocals. Here it almost works. "Honey" is a little more like old REM, as the guitar sounds like it might have come from *Document*.

Sometimes the experiments of this album work well. By combining their old driving rhythms with the fullness of a string ensemble, REM creates a new sound that will not alienate old fans the way "Shiny Happy People" will. On "Texarkana," the classic REM guitar and percussion are complemented by the addition of strings. The vocals on the track, which begins "20,000 miles to an oasis," are both distant and, surprisingly, understandable.

The third track, "Low," is a clear departure from the rest of the album. Stipe's vocals are beautifully despondent and dark, but the real surprise is the guitars. They begin quietly, working with the organ in the background, but occasionally the guitars take the lead with a riff that sounds hauntingly like Bauhaus, the progenitor of the early-80s Gothic rock movement. Stipe matches the guitars' intensity, with vocals less haunting but more melodic than Peter Murphy.

The instrumental on this album, "Endgame," combines strings and flugelhorn to create a sound reminiscent of the peacefulness of a walk in the woods, a pleasant break in between "Near Wild Heaven" and "Shiny Happy People." The sound is completely unrecognizable as REM, unlike other tracks, where Stipe's voice marks them as his own.

The songs that work best are those that keep some of the old REM style. This may not be an entirely fair standard by which to judge the album, but the comparisons are inevitable. Initially songs like "Radio Song" and "Losing My Religion" sound disappointing, but they grow on you. If this were a band's first album, we would have enjoyed it. The burden of a trademark sound is that the public has greater expectations for an album — particularly after a wait longer than George Bush's presidency. (*Green* was released on election day, 1988.)

Out of Time moves toward a more smooth, personal REM — a mellow version of *Green*'s pop enthusiasm. "Losing my Religion" has been getting airplay on local stations, and the video is on MTV. Early signs indicate that this album will be a huge commercial success.

While REM's new sound seems to have guaranteed album sales, old fans may not enjoy the band's move from the simple rhythms and blurred vocals of *Murmur* to

the mellow, sometimes bland sound of "Near Wild Heaven." REM purists will probably find this album to be a disap-

pointment. For everybody else, the new material will get more enjoyable with every listening.



The Tech Performing Arts Series announces

ENGLISH CHAMBER ORCHESTRA

Pinchas Zuckerman, conductor and violin soloist. The English Chamber Orchestra will mark its 30th anniversary with a program including works by Bach, Shoenberg, Elgar, Mozart, and Haydn. A Bank of Boston Celebrity Series event.

Symphony Hall, April 8, 8 pm.

MIT price: \$6.

Tickets are on sale at the Technology Community Association, W20-450 in the Student Center. Office hours posted on the door. Call x3-4885 for further information.

The Tech Performing Arts Series, a service for the entire MIT community, from The Tech, MIT's student newspaper, in conjunction with the Technology Community Association, MIT's student community service organization.

Meet Renowned Theoretical Astrophysicist, David N. Schramm,

Monday, March 25th, From 5:30 to 6:30 PM
In The Book Department At The M.I.T. Coop at Kendall.



He'll Be Autographing
Copies Of His New Book,
Written With
Michael Riordan,
The Shadows Of Creation
Dark Matter And The
Structure Of The Universe

David N. Schramm and Michael Riordan examine what is now known about dark matter and explore its possible impact upon the motions of galaxies, their composition, and their distribution in the vastness of space. Along the way, *The Shadows of Creation* describes the dramatic efforts to determine just what dark matter might be, why most of the Universe is invisible, and how it all affects the world we live in.

\$18.95

Published by Freeman

MIT COOP AT KENDALL
3 CAMBRIDGE CENTER
M-FRI 9:15-7 THUR TIL 8:30
SAT 9:15-5:45

the
Coop
M.I.T.

COOP CHARGE, MASTER CARD, VISA AND AMERICAN EXPRESS ARE WELCOME!
FREE PARKING AT KENDALL: AFTER 5 WEEKDAYS AND ALL DAY SAT AT CAMBRIDGE CENTER GARAGE.
*WITH SALES RECEIPT SHOWING \$5 MIN. COOP PURCHASE VALIDATE AT CASHIER'S DESK AT THE COOP.

We're Looking for Business Partners, Not Employees

April 4th & 5th
On-Campus Interviews

Software Engineers, Programmers, Software Architects

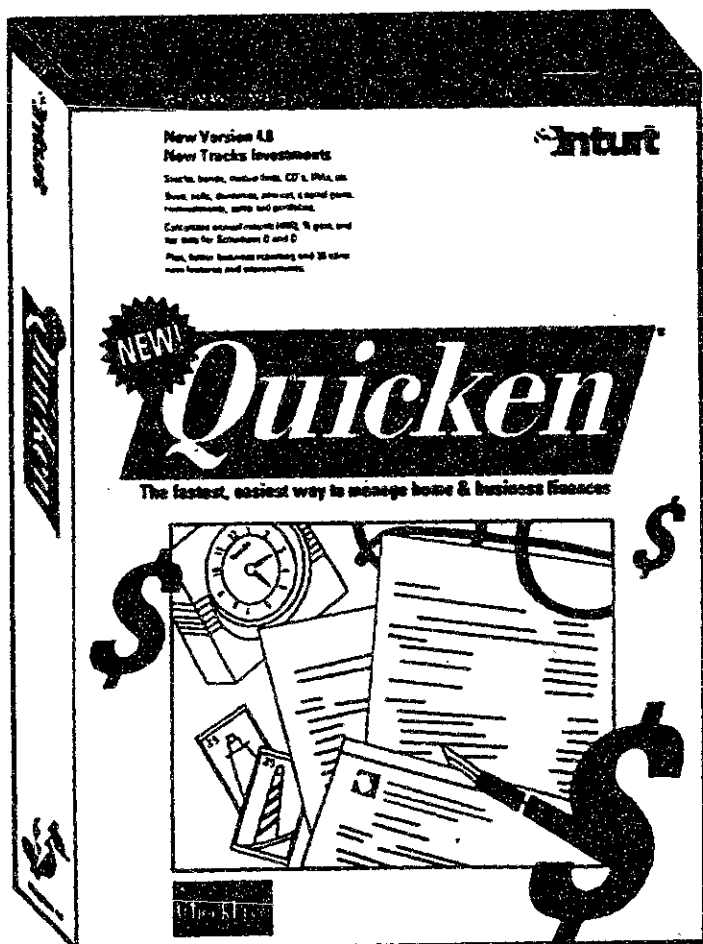
Intuit, makers of Quicken, the 3rd best selling application software on the planet for Macintosh and IBM computers (behind WordPerfect and Lotus 1-2-3), will be conducting on-campus interviews for software engineers, programmers, and software architects on Thursday, April 4th, and Friday, April 5th.

Our software development team is small enough to be personable and a place where you will enjoy using your creative talents. And it is big enough to offer you a challenging variety of programs to work on. We are responsible for honing existing products and developing true state-of-the-art new products. We are also researching and developing object-oriented technology in multi-platform development.

We're looking for individuals who want to make a meaningful contribution to a cutting-edge software development department with a proven track record of successful products. You will be responsible for the design, implementation, and ultimate delivery of signifi-

cant portions of software products to the consumer marketplace, as well as applying your design expertise to other product areas. We are particularly interested in engineers with strong program internals experience. We have a number of projects going on and several that are just starting out on Macintosh and PC platforms in both C and C++. We'd love to talk with you and find out what excites you.

Qualifications. Exceptionally high IQ (but hey, this is MIT). Bachelor's or Master's degree. C or C++, experience with the Macintosh or IBM PC's, and previous commercial software development experience would be outstanding. You must enjoy creating robust, maintainable, well documented, and easy-to-use (and therefore not easy to program) code that will be sold to and used by millions of users. User interface design expertise is a definite plus. You must be excited about working in small teams and taking on responsibility for large programming tasks. Oh, yes. We do write product specifications, so your HASS-D classes weren't a complete waste of time after all.



Description: Software Engineers.

Location: Menlo Park, California.

Compensation: Great! Including stock.

On-campus interviews: April 4 & 5.



An equal opportunity employer. We are looking for creative, hard-working, qualified individuals. Harvard boys and girls need not apply.
Copyright Intuit, Inc. 1991

Jesus Jones produces uneven but likeable Doubt

DOUBT

Jesus Jones,
SBK Records

By RICK ROOS

NEWCOMERS JESUS JONES HAVE recently released their second album *Doubt*, an utterly enjoyable and novel piece of work, but one unfortunately marred by occasional musical and creative lapses.

Jesus Jones is another one of the seemingly endless number of groups from Manchester, England, to have invaded the American alternative music circuit. However, their sound is remarkably different from that of neo-psychedelic Manchester bands like The Stone Roses, The Charlatans UK, and Inspiral Carpets.

Jesus Jones' music contains an infectious mix of sampling, churning guitars and danceable backbeats. The band cites such diverse musical acts as Sonic Youth, Public Enemy, Jimi Hendrix and Prince among their long list of influences. The result is a musical flavor which is truly unique, drawing only remote comparisons to the "grebo" sound of bands like Pop

Will Eat Itself and Renegade Soundwave.

The band itself has been around for only a few years. Their first album, *Liquidizer*, was initially released on the UK's Food Records. Soon afterwards, the band gained such a substantial following that their album was picked up by SBK, a major American label. The band's signing to SBK was significant in that SBK — a label known for carrying such musical lightweights as Vanilla Ice and Wilson Phillips — previously had no alternative bands on its roster.

Liquidizer's release in the United States was received with almost universal acclaim, but it garnered only marginal airplay and lukewarm sales. At the same time, the tracks "Move Mountains," "Never Enough" and "Info Freako" were slowly becoming club favorites across US dance floors. Prompted by this slight crossover into American markets, and their continued success in Great Britain, Jesus Jones rushed into the studios to record their sophomore effort.

The result is an album which took but a week to record: *Doubt*, an uneven but rather likable piece of music. The disc has 12 of the most diverse cuts ever to be unit-

ed on one album. The more energetic cuts on the record are clearly the standout ones, featuring the explosive vocals of frontman Jesus H. Jones and the seething guitars of Jones and Jerry De Borg.

The lead cut, "Trust Me," is a perfect illustration. The song is reminiscent of the fast and furious, three-chord epics of The Ramones, igniting the listener from the first moment to the last.

Another standout track is "Are You Satisfied," with Jones posing the questions "Are you satisfied?/ Do you know what you want, will you go with it when you die?" The song moves rather calmly, then launches into an exciting, ferocious chorus, a typical pattern for many of Jesus Jones' songs. Such tracks as the Beatles-esque "Welcome Back Victoria," the marvelous "Real, Real, Real," and the truly silly "International Bright Young Thing" are also surefire treats to any music lover.

The one major drawback of the album is the group's blatant attempt to capitalize on the commercial American market by providing the dreaded "easily accessible" songs on *Doubt*. The record contains four cuts ranging from forgettable, as in "I'm

Burning" and "Blissed," to truly reprehensible, as in "Right Here, Right Now" and "Nothing To Hold Me." The latter song features a slower, more haunting sound with Brian Ferry-like vocals, producing a laughable effect.

Even more annoying is the feeble track "Right Here, Right Now." The song is such an obvious stab at widespread airplay that it's almost funny — that is, until one has actually listen to it repeatedly. The vocals leave an impression on the listener like that of fingernails on a chalkboard. Gone are the grinding guitars and fresh, funky sounds of other cuts, leaving just a monotonous beatbox. "Right Here, Right Now" belongs in a class with the vast majority of drivel currently clogging up radio airwaves.

Basically, *Doubt* is a tremendous effort in the making. If the band had taken the time they had to make their masterpiece, *Liquidizer*, rather than trying to keep their names in people's minds by rushing out a second album, then they and their fans could have been satisfied. Still, this album is worth picking up. Be sure to buy it on CD in order to avoid the few duds on the disc.

classified advertising

Outstanding opportunity . . .
for aggressive entrepreneurial student — here's your chance to shine. Be the first in the Northeast to represent Superglow Industries of Santa Barbara, manufacturer of Glow-in-the-dark T-shirts and novelties. With a minimum investment of \$750 you could produce an income stream big enough to pay for a full year of college expenses. For all the details call Stephen Holda at (617) 423-1120.

Use your PC to Job Hunt Silicon Valley! "The Silicon Valley Profiler" — A Hi-Tech Employment Guide/Database.
• 1600+ Technology Companies.
• Prints cover letters/labels.
• Runs on IBM XT/ ATs / PS/2s / Compaqs.
• Makes a great graduation gift!
Order by mail today from:
InfoDiscs, 3687 Bryant #429, Palo Alto, CA 94306, (415) 493-2212 or (800) 755-2212 (USA); \$39.95 + \$2.80 CA tax. Hard disk required. Specify 5 1/4" or 3 1/2" disks.

Luxurious Claridge House Condo on Comm. Ave over looking C.H. Reservoir. Large Top Floor 1 Bedroom Unit. Roof Top Sun Deck, HealthClub, Sauna, Underground Parking, Laundry, Storage, Security, Meticulously Maintained. \$165,000. 787-7939.

I need an HP 38C Calculator — new or old. Please call George at work (617) 444-7778 or home (617) 456-8126. Manual not required. Top dollar.

The Tech Subscription Rates: \$20 one year 3rd class mail (\$37 two years); \$55 one year 1st class mail (\$105 two years); \$52 one year air mail to Canada or Mexico or surface mail overseas; \$140 one year air mail overseas; \$10 one year MIT Mail (2 years \$18). Prepayment required.

Bedford suburbs, near 128 & Route 2, furnished house, nice yard, to share with professionals. Washer/dryer, parking. \$350.00+ month. (617) 275-8944.

Legal Problems? I am an experienced attorney and a graduate of MIT who will work with you creatively to solve these problems, answer your legal questions and provide legal representation. My office is conveniently located in downtown Boston just minutes from MIT via MBTA. Call Attorney Esther Horwich, MIT '77 at 523-1150.

2 Male + 1 Cat seek 3rd M or F for East Cambridge house. Excellent location. Parking. \$340/mo. Avail now. 491-0855.

Mathematical Consulting
Mathematician with experience in curriculum development, operations research, actuarial science, technical writing, industrial consulting, software development, tutoring and teaching, etc.
Call Joseph Shipman, MIT '82, at (617) 862-0081.

Clerk position at Massachusetts General Hospital available in Warren Building with beautiful view; typing of dictation and bookkeeping needed; PAY — \$8.00-\$9.00 per hour. Call Dr. Holmes: 726-1742.

Summer Rental
Martha's Vineyard
House in Oak Bluffs with 6 bedrooms, 2 baths, big porches, walking distance to town and beach. Rent \$7,000/season. Contact Daniel, 13115 Claxton Drive, Laurel, MD 20708, (301) 725-7377.

Harvard-Epworth United Methodist Church

1555 Massachusetts Ave.
opposite Cambridge Common
Sunday Worship: 9 and 11am
Undergrad Forum: 5:30 PM

Council Travel

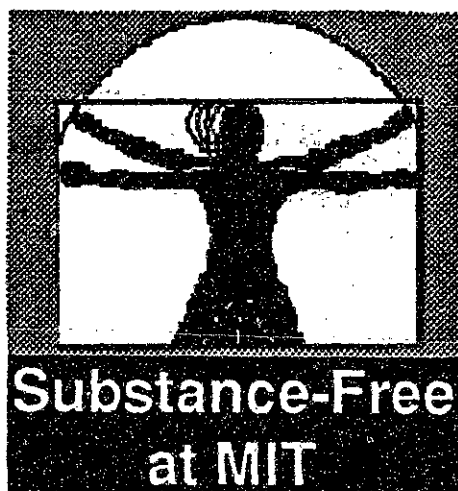
SPRING BREAK
from Boston
Cancun starting at \$489
Jamaica starting at \$509
Price includes:
• Round trip airfare & transfers
• 7 nights accommodation & hotel taxes
Low Student Airfares!

CALL FOR MORE INFORMATION

Stratton Student Center, W20-024
M.I.T., Cambridge
225-2555

America's oldest & largest Student Travel Agency

Mocktail* Contest Rules



Substance-Free at MIT

1. Mocktails may contain non-alcoholic ingredients only.
2. No more than 5 ingredients per mocktail.
3. Ingredients must be available locally.
4. Deadline for submission is 5 pm on March 22.
5. Submit entries to GAMMA c/o Health Education Resource Center, W20-547.
6. Decisions of the judges are final.

* A Mocktail is a non-alcoholic beverage.

Prize of \$100 toward non-alcoholic refreshments for winner and their living group.

Elias

hair care

319 Massachusetts Avenue
Cambridge, Massachusetts 02139 497-1590 • 1591
Appointments preferred

\$5.00 OFF
cuts, perms, etc. Mon.-Wed.
with this ad or MIT I.D.
Expires March 30, 1991
(\$2 discount other days)

comics

FIREHOSE TAVERN

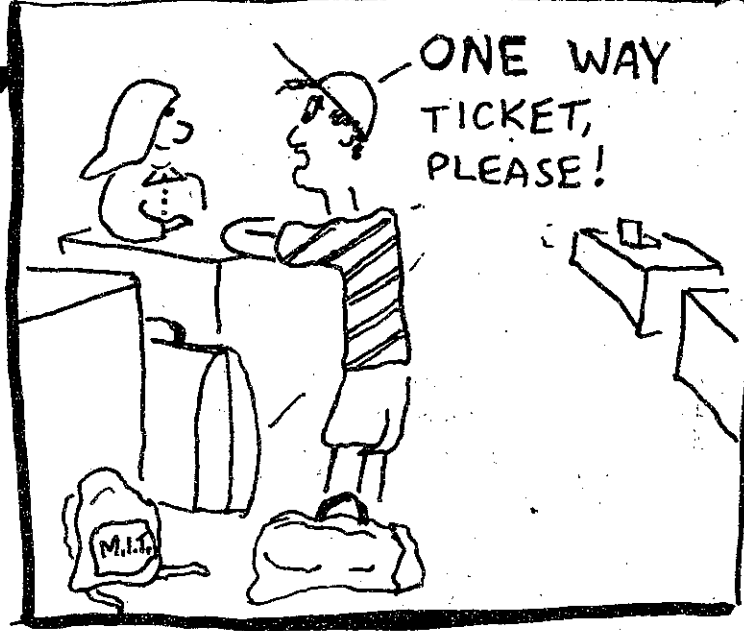
By Mark Hurst

YOU CAN RUN BUT YOU CAN'T HIDE...

KISS I'LL MISS YOU - BE GOOD!

GET A LIFE, LARRY...

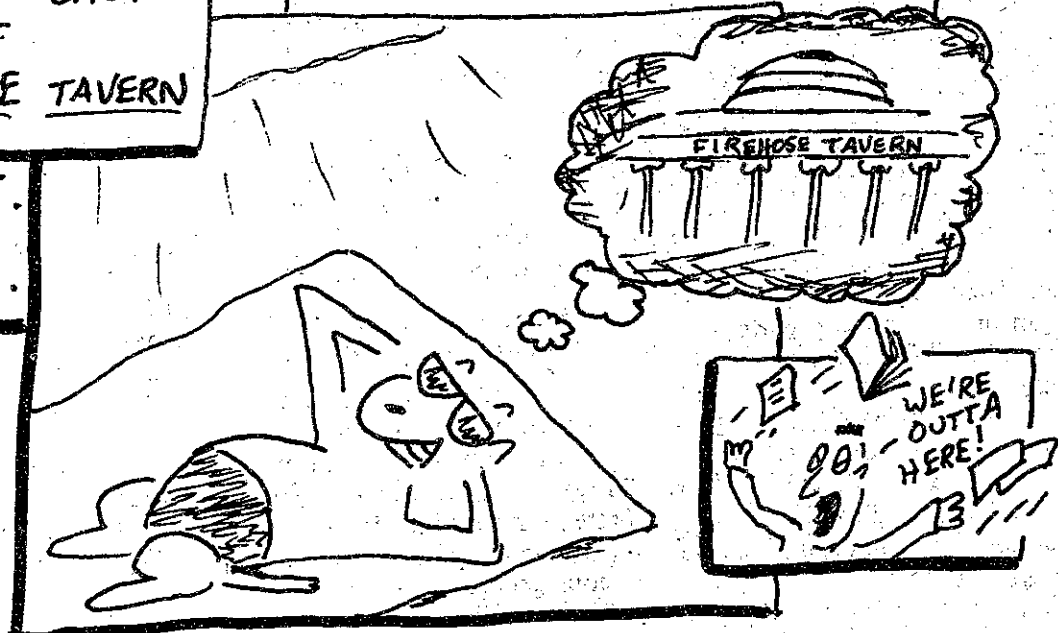
HAPPY SPRING BREAK FROM THE CAST OF FIREHOSE TAVERN



ONE WAY TICKET, PLEASE!



Huh?



WE'RE OUTTA HERE!

tumbleweed-garden

pawan sinha

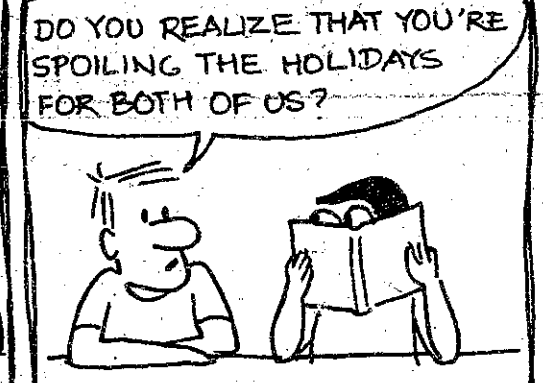


I'LL SPEND THE SPRING BREAK IN TAMPA. IT'S GONNA BE REAL JAZZ!



HOW 'BOUT YOU? WHAT ARE YOUR PLANS?

OH, WELL... I DON'T WANT TO WASTE ANY TIME. I'LL JUST STAY HERE AN' STUDY.

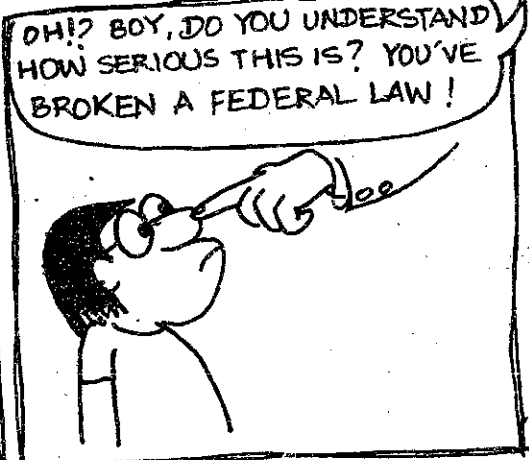


DO YOU REALIZE THAT YOU'RE SPOILING THE HOLIDAYS FOR BOTH OF US?

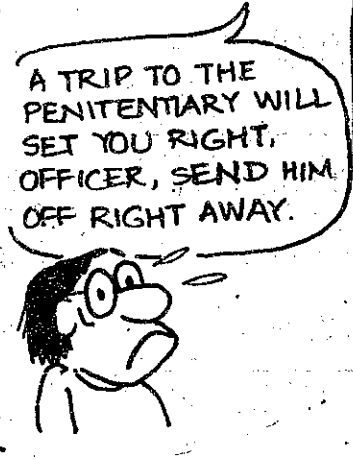
STUDYING SMOKING PROHIBITED BY LAW during Spring break



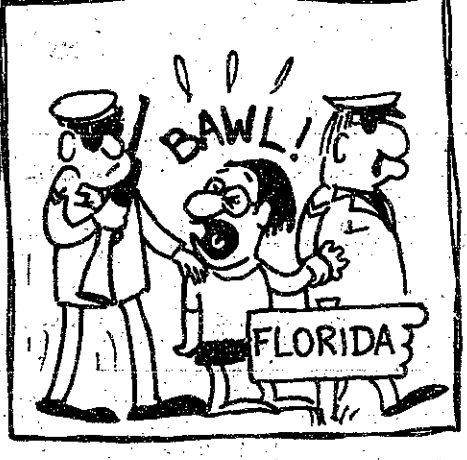
DR. VEST, WE FOUND THIS GUY STUDYING IN THE BOYS' ROOM



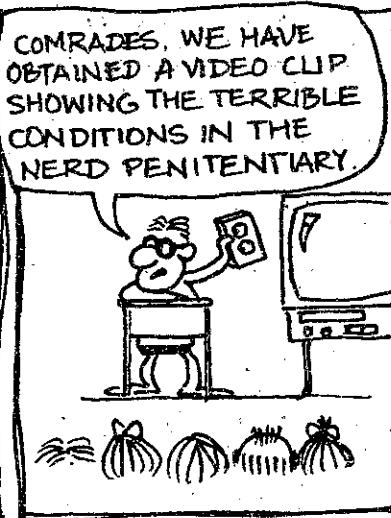
OH! BOY, DO YOU UNDERSTAND HOW SERIOUS THIS IS? YOU'VE BROKEN A FEDERAL LAW!



A TRIP TO THE PENITENTIARY WILL SET YOU RIGHT. OFFICER, SEND HIM OFF RIGHT AWAY.



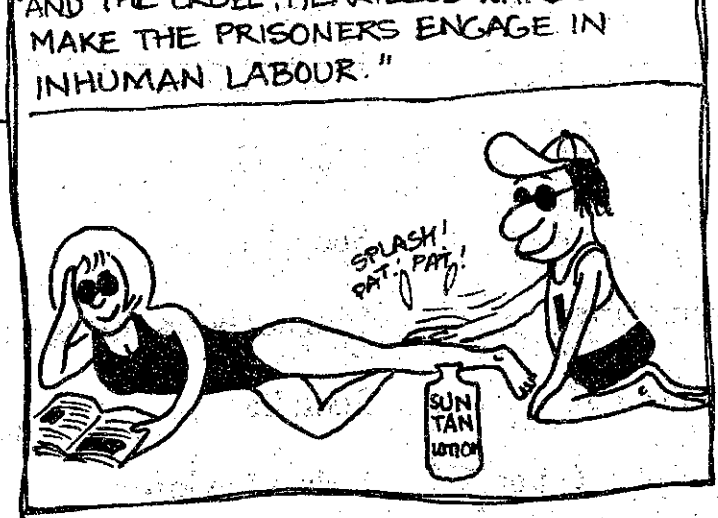
NERDS OF THE WORLD UNITE! YOU'VE NOTHING TO LOSE BUT YOUR SKATEBOARDS. P.S. SECRET MEETING TONIGHT -SPCN



COMRADES, WE HAVE OBTAINED A VIDEO CLIP SHOWING THE TERRIBLE CONDITIONS IN THE NERD PENITENTIARY.



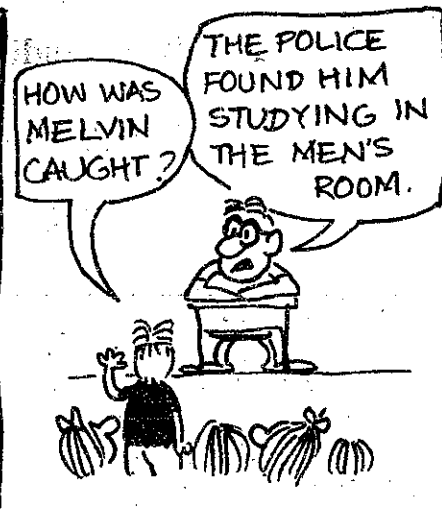
"HERE'S MELVIN. ONCE A SERIOUS NERD. NOW REDUCED TO THIS PATHETIC STATE."



"AND THE CRUEL, HEARTLESS WARDENS MAKE THE PRISONERS ENGAGE IN INHUMAN LABOUR."



THESE TORTURES MUST STOP. WE MUST DO... YES ALF, YOU HAVE A QUESTION?



HOW WAS MELVIN CAUGHT? THE POLICE FOUND HIM STUDYING IN THE MEN'S ROOM.



OM...EXCUSE ME... I'VE GOT TO USE THE UM... MEN'S ROOM. COMING THRU... OH, ME TOO! STRANGE, BUT I'VE GOT TO GO THERE TOO. I'VE THIS CHRONIC PROBLEM OF INCONTINENCE.

pawan sinha

Graduate students discuss possible unionization

(Continued from page 1)
 "We now have a contract that standardizes grievance procedures, limits class sizes, has non-

discrimination clauses, and guarantees minimum health insurance coverage for all the TAs," Bromley reported. The contract also

addresses the similar concerns of projects assistants, who are analogous to research assistants at MIT, he added.

Amy Polk, secretary of the Graduate Employees Union at the University of Michigan, Ann Arbor, said that "it is important to get undergraduate support for all the causes of a union."

"[The GEU] explained to the undergraduate students [at Ann Arbor] that poor working conditions among teaching assistants have a serious effect on the quality of undergraduate education, and they were very sympathetic

to our cause," Polk said. Kochan noted that all three schools represented at the colloquium were publicly funded. "Private sector industrial relations statutes, which have to be invoked to form student unions

in private schools, are in a shambles," he said. "Under the present rules, it is very convenient for an institution like MIT to drag on an arbitration for as long as five or six years before responding positively," he added.



Caroline Hoemann
 Hank J. Bromley '83 (left), Professor of Management
 Thomas A. Kochan (center), and Andrea DeVries

GSC discusses new status

(Continued from page 1)

part- or full-time while continuing to write their dissertations as non-resident students, Perkins said.

Many other major universities offer various kinds of ABD status, both for master's degrees and doctoral degrees. During his talk, Perkins cited examples from eight other major research universities, seven of which offer some kind of ABD status.

In justifying MIT's inability to offer ABD status to its students, Perkins said that the Institute has historically tried to use federal research grant money to pay for most graduate tuitions, and that making a transition to more MIT support would be difficult.

"MIT has been very successful at leveraging its operation on research support instead of endowed university fellowships," Perkins said.

Candidates nominated for next year's officers

At the end of the meeting, the GSC accepted nominations for next year's officers. More nominations and elections for officers will take place at the GSC's next meeting.

Rosina Samadani, Mary E. Herndon and Furio Ciacci were nominated for president; Jennifer L. Smith, James Rilbey and Christopher S. Stipp for vice president; Ramnath Subramaniam for secretary; and Jennifer L. Smith for treasurer.

GSC Secretary David G. Steel said that more nominations and withdrawals of some of the candidates already nominated could be expected.

Bloomfield, Stewart kick off MIT program on Middle East

(Continued from page 1)

States as the "only one who could talk to both sides" and make peace in the conflict. Still, the 1980s were filled with "competitive blundering" between the United States and the Soviet Union in attempts to solve the crisis.

The Cold War kept the United States and the USSR at odds in the Middle East, Bloomfield explained. He said that after the Suez War, the two superpowers began an "unifying pattern of competition for influence in the Middle East."

Recent UN operations in Iraq changed superpower relations, Bloomfield asserted. He said the United States and the USSR were "holding hands and jumping over the cliff together."

Of the three main factors in US-Middle East relations, Bloomfield said that oil was the "least important until very recently," largely because the United States did not need the oil. He humorously noted that former President Gerald R. Ford's Project US Independence "increased our need for oil."

Currently, the United States is "almost dependent on Middle East oil," Bloomfield said. He said that if Iraq had captured both Kuwait and Saudi Arabia, "half the world's oil would be vulnerable" to price increases.

Bloomfield ended his lecture by stating that the Middle East will become peaceful when a way is found to give the Jewish people a "homeland and legitimacy in the eyes of their neighbors."

Stewart: America was founded on isolation

Stewart spoke on three aspects of American foreign policy: "the American public's inattention to things foreign, the Congress' inattention to things foreign, and the domestic political power of various groups."

The American public is largely uninterested in foreign policy, Stewart said. He said that United States is a nation "founded on isolation."

In a given year, only nine percent of Americans travel overseas, Stewart said. Furthermore, 80 percent of those who do leave the country go to the Caribbean,

Western Europe and Japan, which means the Middle East receives very few visitors.

Israel is the only Middle Eastern country the US government keeps travel records for, Stewart said. The records indicate that only two percent of Americans who travel each year go to Israel.

Most Americans who follow the news are looking for "human interest stories," Stewart felt. He argued that despite a Times-Mirror poll indicating that approximately two-thirds of the American public kept a close watch on the Middle East during Operation Desert Storm, the public was captivated by stories about individual soldiers and their families, not about foreign policy.

The American public's inattention to foreign policy has forced members of Congress to consider it "dangerous to be attentive to foreign policy," Stewart asserted. As an example, Stewart discussed Senator Jesse A. Helms' (R-NC) consideration of chairing the Foreign Relations Committee instead of the Agricultural Committee and the effect it had on his most

The Massachusetts Beta Chapter of

The Tau Beta Pi Engineering Honor Society

congratulates the 1990 Fall initiates:

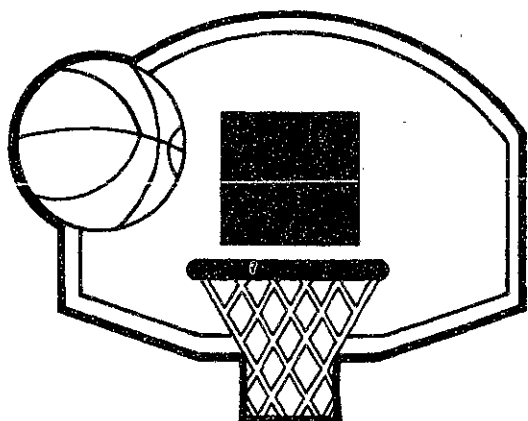
Class of 1992

- | | | |
|--------------------|---------------------|-------------------------|
| Charles Abnet | Celine Fung | James Ooi |
| Aram Agajanian | Craig Griffin | Anton Pil |
| Angelika Agarwala | Gregory Grove | Gary Porter |
| George Alexopoulos | Janelle Gunther | David Rich |
| Mohsinuddin Ansari | David Hau | Amy Rovelstad |
| Mark Armstrong | Stephen Hon | Jeanette Ryan |
| Michelle Bell | Elmer Hung | Karl Sun |
| Firdaus Bhathena | Scott Jacobsmeyer | Rajeev Surati |
| Darren Castro | Christopher Kellogg | Barbara Sweet |
| Elaine Chen | Soon Lee | Weejyn Tan |
| Christopher Crane | Joshua Levinson | Matthew Trevithick |
| Derek Curd | Robert Lustberg | Shu-Yuan Tung |
| Celisa Date | Luis Maas III | Ona Wu |
| Johan Denecke | Sujata Madan | Thucydides Xanthopoulos |
| Mark Duggan | Robi Mitra | John Zaroulis |
| Tony Eng | Michael O'Connor | |
| Juan Ferrera | Daniel Olster | |

Class of 1991

- | | |
|-----------------------|-----------------|
| Francisco Aguirre III | Norman Ho |
| Stephen Atkins | Shaun Kaneshiro |
| Ziad Azzam | Cheryl Klepser |
| Lars Bader | Sophia Kung |
| Yvette Baxter | Mark Lundstrom |
| Alex Chachkes | David Martin |
| Eugene Chen | Garet Nenninger |
| Arthur Chiu | Susanne Perutz |
| John Conger | Angela Roberts |
| Charles Davis | Shawn Rothstein |
| Francis DeSouza | David Shoemaker |
| Elizabeth Druding | Russell Stevens |
| Alnoor Ebrahim | Andrew Tainiter |
| Christina Friedrich | Lon Van Geloven |
| Leroa Goren | Arthur Wang |
| Ye Gu | |
| Matthew Halbower | |

sports



Words on Sport/ Mohamed Eissa

Don't count Lakers out

In early November the headlines were all negative: "Lakers start with a dismal 2-5 record." On Jan. 8, the Lakers were 8 1/2 games behind the front-running Portland Trail Blazers. The critics predicted that at best they could finish second in the division — first place was out of the question. The following day, the Lakers embarked on a journey which saw them win 16 consecutive games (the longest winning streak this season). By March 19, the Lakers were in sole possession of first place in the Pacific Division.

Why did *Sports Illustrated* consider them finished? First, people thought that Magic was finished and that his drive for excellence was no longer sufficient to carry Los Angeles. Secondly, they thought with a new coach and two new players, it would take the Lakers a year to adjust and by that time, Worthy and Magic would be too old.

The reason the Lakers are back is simply because of Mr. Ervin "Magic" Johnson. With his league leading 10th triple double, he has at times been a one-man team. His philosophy is plain and simple: *winning!* Whatever it takes, he will deliver. He will definitely be a finalist in the MVP voting this year.

The second reason is *defense*. There are only two teams in the NBA which hold their opponents below 100 points per game. Detroit limits its opponents to 96.5 points per game but only scores 99.7. The Lakers, on the other hand, limit opponents to 99.0 points per game and at the same time score 106.2 points per game. This is quite an accomplishment considering their vulnerability at center.

The third reason is Mike Dunleavy. To take the place of a coach who won five NBA titles in one decade and voted coach of the year is no easy task. Pat Riley established a dynasty in Los Angeles and when he left, there were big shoes to fill. Not only did Dunleavy maintain the excellence, but he also managed to incorporate Perkins and Teagle without disrupting the system. Perkins is an excellent post-up player and has been a big part in the Lakers' comeback.

The Lakers have taken a slightly different outlook in their rise to the top. They are running less and playing better defense. These are two things which are crucial in the playoffs.

Whereas before the team relied on outscoring the opponent with an offensive punch, LA now focuses on shutting down its opponents. This formula seems to be working, as the Lakers are one of the best teams in the league once again. If they stay focused on the championship, they will surely find themselves in the finals. Never count a team which has won five championships out!

Suffolk University Lowell Lecture Series

Quantum Leaps: Visions of the Future

March 27, Wednesday at 4 p.m.

Timothy Ferris, Author, Science Commentator and Professor of Journalism and Astronomy at UC Berkeley
Virtual Reality: The New Computer Revolution

April 8, Monday at 4 p.m.

Candace Pert, Ph.D., Guest Researcher, NIMH and Science Director, Integra Institute
Peptides, Emotions and AIDS

April 17, Wednesday at 4 p.m.

Cato T. Laurencin, M.D., Ph.D., Instructor of Biochemical Engineering at MIT
The Art and Science of Medicine: A Surgeon's View of the Future

C. Walsh Theatre 55 Temple Street 573-8613



ECONOMIC RECOVERY

Give yourself and your wallet a rest. The Somerville Holiday Inn may surprise you with all it has to offer your out-of-town travelers:

- Lowest MIT Preferred Rate of \$80* (single or double)
- Complimentary scheduled shuttle service to/from MIT
- Walking distance to the $\text{\textcircled{D}}$
- Two miles from MIT
- Free parking
- Indoor pool
- Holiday Inn Priority Club Points
- Number One Club offering recognition to frequent reservation makers
- Meeting and banquet facilities for up to 400

A full service hotel worth considering...

For further information and reservations, dial the Reservations Department directly at: 617-628-1000 or 617-628-1073.

Holiday Inn

Boston/Somerville
30 Washington Street
Somerville, Massachusetts 02143
*Rate subject to tax and availability.

Mmmm....
Matza Ball
Soup !!!



PASSOVER IS COMING

The SEDERS will be observed on March 29 & 30.

Due to Spring vacation, Hillel will not sponsor a seder. Home hospitality is available, contact Hillel by March 26.

PASSOVER MEALS -- APRIL 1-6

Kosher for Passover lunches and dinners are available at the Kosher Kitchen, Walker 50-007.

Lunches - 12 - 2 p.m. (\$6.65)

Dinners - 5 - 7 p.m. (\$7.85)

Shabbat Dinner (April 5) 6:30 p.m. (\$8.85)

Contact the K.K. for more information, #253-2987. The K.K. is under the supervision of the Va'ad Harabonim of Mass.

PASSOVER BAKE SALE - APRIL 2

Lobby 10, 10 am - 3 pm

PASSOVER FOODS can be purchased at area stores such as LaVerde's, Stop & Shop, and The Butcherie in Brookline)

Donate your non-Passover foods to **PROJECT MAZON**. Bring sealed donations to Hillel by Friday, March 22 and they will be given to area food pantries & soup kitchens.

For information contact M.I.T. Hillel, #253-2982