

t h e y e a r

In REVIEW

Tuesday, February 7, 1995

The Tech

UROP

25 years and counting



For 25 years, UROP has provided MIT undergraduates, like these students from the Artificial Intelligence Laboratory, with valuable research experience. This year, changing government regulations threatened the future of the program. Will undergraduates have the same opportunities for the next quarter century?

See page 11.

Students rise to the occasion in '94

By Daniel C. Stevenson

As the 115th volume of *The Tech* begins today, we offer a look back at the issues, events, and personalities of the past year in this, our 10th annual Year in Review supplement.

It is always difficult to categorize the changes that shape a year at MIT. However, as I review the last 12 months at the Institute, one idea seems to speak to the character of 1994: The past year was one in which students' goals and ideals were frustrated both within and outside the walls of the Institute. Fortunately, it was also a year in which students mobilized to defend their interests, to fight for the preservation of the ways they live, learn, and work.

In the spring, a restructuring of financial regulations threatened the very existence of the Institute's pioneering Undergraduate Research Opportunity Program. UROP, which provides valuable research experience to over 80 percent of the undergraduate student body, is an integral part of the MIT experience and one of the most attractive features of the Institute; facts which make its reduction or extinction all the more frightening.

A \$1 million cash infusion from the provost and an extensive lobbying effort by students and administrators, as well as a strong effort by the UROP staff, have preserved the program for the time being. However, the events of the past year remind us that nothing can be truly taken for granted, not even one's dormitory ...

For many students, their dormitory, with its unique culture and protective environment, is their special "safe haven" from the sometimes unfriendly atmosphere of the Institute. With this in mind, it is no surprise that last fall, undergraduate and graduate students mobilized to protect these environments as an administration committee discussed a major restructuring of the housing system with little or no student input.

Concerned residents of Senior House, Ashdown House, and East Campus organized quickly and lobbied strongly for the preservation of their living environments. The latest word is that a few undergraduates may be housed at Ashdown next fall, but little else will significantly change. The administration, announcing this moderate course of action last week, cited the various reports and surveys prepared by concerned students in these last few months, validating these students' efforts. However, it is a distressing comment on the way MIT works that the onus of organizing and soliciting student opinion lay upon those very students.

Unfortunately, students were sometimes their own worst enemies in 1994: The Gays, Lesbians, Bisexuals, Transgenders, and Friends at MIT poster was attacked again, a non-residential fraternity was caught hazing new members, and arsonists disrupted life at Burton-Conner House and MacGregor House. But in most cases, resolution was sought and achieved for new and past wrongs: witness Warren J. Blumenfeld's engaging discussion about homophobia, the joint statement by Phi Beta Epsilon and the Black Students' Union, and student-led forums about harassment.

The year was not without some somber milestones: Vice President Constantine B. Simonides '57 died suddenly last April. Two prominent former presidents of MIT, Jerome B. Wiesner and Julius A. Stratton '23, both passed away in the last few months.

Career shifts also made their mark on the Institute: The undergraduate and graduate deans, Arthur C. Smith and Frank E. Perkins '55, announced they will resign within the year, while former provost John

M. Deutch '61 moved up in the Department of Defense and was briefly considered a candidate for Director of Central Intelligence.

Professor Emeritus of Physics Clifford G. Shull received the Nobel Prize for work done over 40 years ago, the 26th person affiliated with the Institute to be so honored.

In closing, it is worthwhile to observe that in 1994, student activism did not focus as in the past on issues like divestment or ROTC policy. Rather, we started our own dining hall because we were dissatisfied with Lobdell Court, we formed an action committee to save our dormitory, or we traveled to Washington to lobby for undergraduate research. It is this new kind of activism that seems to have served MIT and its students well, and will hopefully continue on into the new year.

So ends 1994, and so begins 1995. Take one last look back at the year at the Institute, and enjoy this Year in Review and a new year of *The Tech*.

Daniel C. Stevenson, a sophomore majoring in physics, is editor in chief of *The Tech*.

Clockwise from front: Dean I. Franck '95, Isaac C. Persley '97, Anita M. Flynn G, James D. McLurkin '95, Hope M. Barrett '98 work in the micro-robotics lab of the Artificial Intelligence Laboratory. Flynn, a student of Professor of Electrical Engineering and Computer Science Rodney A. Brooks, works with the undergraduates to build tiny robots for medical applications.



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The Year in Review

An annual supplement to *The Tech*
February 7, 1995

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Residents fight proposed plan to switch dormitories

By Daniel C. Stevenson

Alarmed Senior House, East Campus, and Ashdown House residents found themselves fighting for the preservation of their dormitory communities last fall as an administration committee considered the largest housing restructuring in decades.

The work of the Strategic Housing Planning Committee first came to light in a Nov. 1 *Tech* article which reported that the committee was considering plans to move undergraduates out of the east campus dormitories and possibly into Ashdown.

Dean for Undergraduate Education and Student Affairs Arthur C. Smith said that he directed the committee in September to "look very seriously at the idea of having all undergraduates live on west campus."

However, the final report of the committee, released at the beginning of this year, recommended that Senior House and East Campus remain undergraduate dormitories and that Ashdown, which houses over 400 graduate students, become undergraduate housing in the next few years.

The committee also recommended immediate construction of a new graduate dormitory at the corner of Sidney and Pacific streets in Cambridge.

Smith said that the administration had decided on a moderate course of action, calling for renovations of Senior House over the next two summers. "While plans for renovation should allow for flexibility in long-term use or alternative summer use, the basic assumption is that Senior House will house undergraduates," Smith said.

Smith also said that only about 50 spaces in Ashdown would be used for undergraduates to "relieve the potential overcrowding in undergraduate housing." The changes can be made "without harmful effect on the graduate student community and can produce a good undergraduate experience for those who would live there," he said.

Graduate dorm plans on hold

Smith put on hold any plans for construction of a new graduate dormitory until the summer or fall, after an open meeting "to exchange information and to develop an agenda," he said.

The housing committee is chaired by Senior Associate Dean Robert M. Randolph, who works under Smith.

The committee was originally concerned with general housing issues but suspended its work to address overcrowding and Senior House renovations, Randolph said.

Since the release of the report, the committee has returned to its original work and plans to issue a broader report on housing by March, he said.

During the course of its consideration of housing plans, the committee was criticized for largely ignoring student input and operating in perceived secrecy.

"It seems that people were kept in the dark about this," said Undergraduate Association President Vijay P. Sankaran '95, in late October.

The early planning stages were not publicized because "whenever you're doing that kind of strategic planning, you really don't want to publish those kinds of scenarios," Smith said.

"I don't want to keep anything secret, but I believe that a lot of campus discussion about changes would not be useful unless we could reasonably identify potential means to finance them," said President Charles M. Vest last November,

when students began lobbying for greater input.

Student committee formed

Concerned residents of Senior House and East Campus formed a committee to present residents' concerns to the administration. It was created to explore independent options, allay student concerns, and ensure that students were included in planning and decision making.

The UA Committee on Student Life and the Graduate Student Council also stepped up the pressure on the administration. The GSC Housing and Community Affairs Committee released two housing surveys, and UA and GSC representatives met extensively with administrators.

Residents stressed to the administration the value of their unique

dormitory communities. The idea of moving all undergraduates to west campus "is completely ridiculous," said East Campus resident Leah C. Schechter '96, who feared the move would destroy east campus culture.

"If you try to shove everybody into housing in west campus, and you take away this tradition, you will not only be making a lot of people who live here very unhappy, but also will be hurting the grand tradition that has been carried on for years," Schechter said.

Senior House "is one place where you can go where they leave you alone," said Brian C. Rider '95, a Senior House resident. "To some people, that is very important."

"Everyone has a strong sense of attachment ... to the dorm," said Jacob M. Harris '97, Senior House secretary.

Grad students like Ashdown

Undergraduates were not the only ones to prize their dormitory communities. Ashdown "has a social environment that is different than the other buildings," said Joseph J. Bambenek G, chair of the GSC Housing and Community Affairs committee.

"Living in a dormitory like Ashdown with common areas, especially a kitchen, is much more conducive to social activity" than apartment-style dormitories, Bambenek said.

Smith said the administration had "received many thoughtful communications from students, alumni, faculty, and staff regarding the renovation of Senior House, overcrowding of undergraduate housing, and the future form and location of graduate housing."

Smith also said the administration had read and considered the reports and survey results from the action committee, the GSC, and the UA.

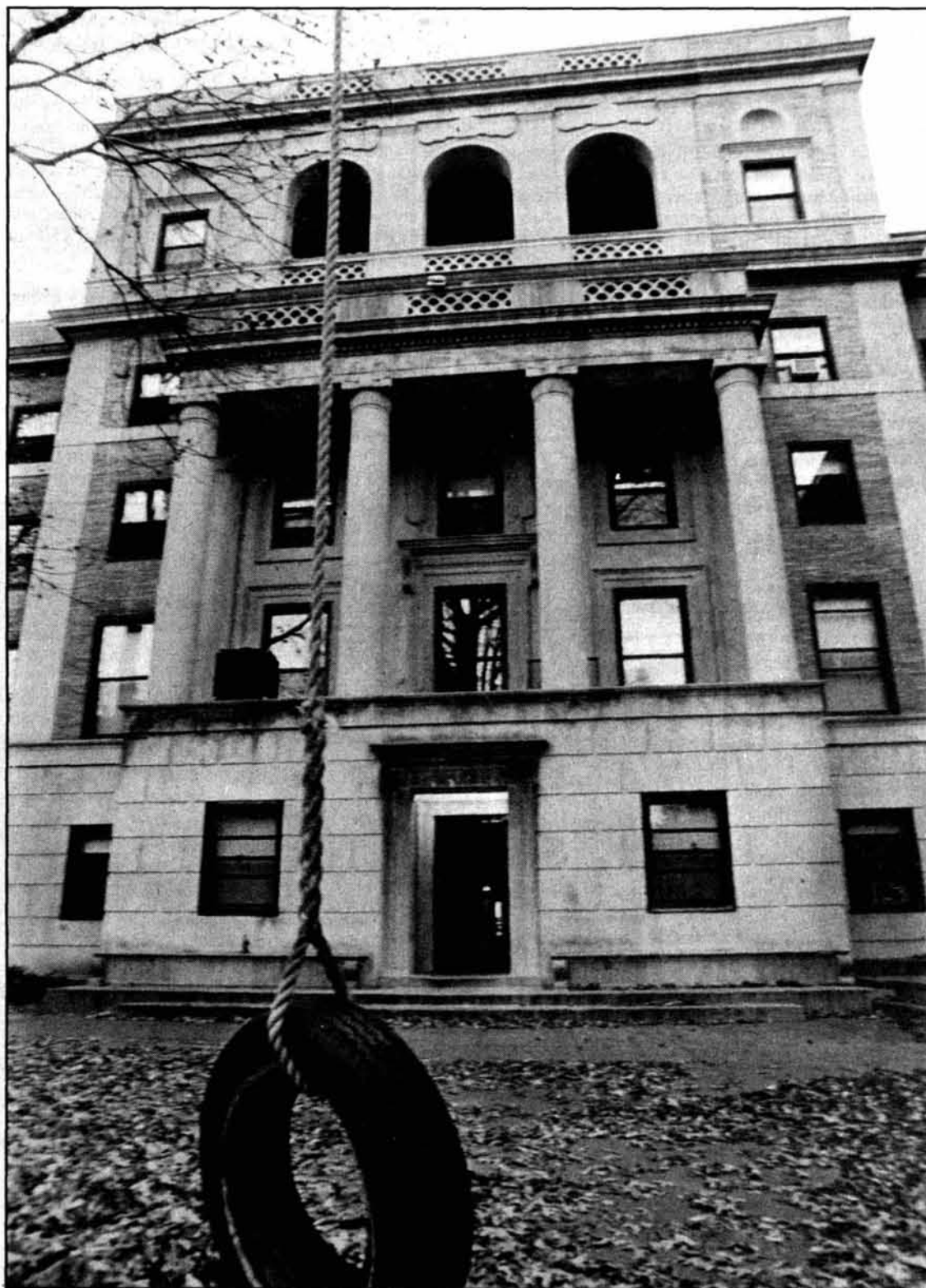
The threat of renovating east campus dormitories for graduate student use is not a new one. In March 1980, the administration announced a plan to switch Senior House and East Campus residents with Ashdown residents.

The administration aired the proposal to the MIT community before making any decisions. The Corporation was to have the final say because of substantial costs of the renovation.

However, the UA president at the time complained that he and the Dormitory Council president had not been consulted before the announcement of the proposal. Then, as now, residents of Senior House and East Campus strongly opposed the idea.

On May 15, 1980, the administration withdrew the proposal, calling it a "pre-proposal." The administration cited the desire to preserve house identities and lifestyles and the need to further study alternatives to the housing problem.

The administration also said that it needed to dispel the considerable animosity and mistrust between the administration and students that the proposal raised.



Senior House

Thomas R. Karlo

January

10 Inventor Jerome H. Lemelson establishes the \$500,000 Lemelson-MIT Prize as part of a \$6.5 million innovation and invention program he is funding at the Institute. "We've established the Lemelson-MIT prize to encourage young people in this country to seek careers in invention and innovation — to inspire their ingenuity," said Lemelson, who holds over 500 patents and is America's most prolific, living inventor.

10 More than 1,700 attend funeral mass of Thomas P. "Tip" O'Neill at St. John's Church in North Cambridge. O'Neill died on Wednesday at the age of 81, after serving as the Speaker of the House of Representatives from 1977 to 1987.



Current and former US leaders attend the funeral of Thomas P. "Tip" O'Neill.

11 Two MIT students are threatened by two men — one brandishing a knife — at about 1:50 a.m. near Blanche Street and Massachusetts Avenue. The students are not injured, and the suspects flee toward Central Square.

12 A continuing investigation into human radiation experiments done by MIT and Harvard University researchers in the late 1940s and early 1950s show that subjects in at least two of the experiments were not exposed to dangerous levels of radiation.

14 Gretchen Kalonji '80, a former professor in material science and engineering who was denied tenure in 1991, sues MIT for reinstatement as a full professor and \$1 million in damages on the basis of sexual discrimination.

14 A national conference focusing on issues concerning black women in academia — the first of its kind — is held from Jan. 14-16. "Black Women in the Academy: Defending Our Name 1894-1994" includes keynote speaker Lani Guinier and various presentations around campus.

David LaMacchia cleared; case raises civil liberties issues

By Jeremy Hylton

For the typical MIT student, an average semester brings an un-average stress level. From problem sets to final exams to job interviews, the pressure can be intense.

But for David M. LaMacchia '95 the pressure was unusually high — even by MIT standards.

On April 7, LaMacchia was indicted on one count of conspiracy to commit wire fraud, a crime that carries a maximum sentence of five years in prison and a \$250,000 fine. The pressure continued for LaMacchia until Jan. 27, when he learned that prosecutors would not appeal a judge's Dec. 28 decision to dismiss the case.

"I'm of course relieved. The past year has been extremely stressful for me, my family, and the people I live with," explained LaMacchia, a senior in the Department of Electrical Engineering and Computer Science. "The dismissal removes some of the weight from my shoulders that I've unwillingly been carrying around for the past year."

"I wouldn't wish this on my worst enemy; the stress is tremendous," said David's older brother, Brian, a graduate student in EECS.

Federal prosecutors charged that LaMacchia ran a service on a pair of Athena Computing Environment workstations that allowed users across the Internet to exchange copies of commercial software. The site facilitated the distribution of over \$1 million in copyrighted software, according to the U.S. Attorney's office.

Not a case of software piracy

The case drew wide publicity, including a segment on the ABC television news program *Nightline*. Despite the publicity, there was often confusion about what exactly was at stake in the case.

Although LaMacchia was alleged to have helped other users make illegal copies of software, there was no claim that he profited from the activity — and current laws only attach criminal penalties to copyright infringement done for profit.

"People look at the alleged statement of the facts and say, 'That's wrong.' We know it's wrong to trade in unlicensed software, but the proceeding is [about] whether he violated a statute," explained Mike Godwin, staff counsel to the Electronic Frontier Foundation, a cyberspace civil liberties group.

Instead of charging LaMacchia under criminal copyright laws, the U.S. Attorney chose to prosecute under the more widely applicable wire fraud laws, written in 1952 to apply to communication over telephone lines.

The case was ultimately dismissed by U.S. District Judge Richard G. Stearns because of the bad fit between existing copyright laws and the activity LaMacchia was alleged to have perpetrated.

In his decision to dismiss the case, Stearns wrote that the government's "interpretation of the wire fraud statute would serve to criminalize the conduct of not only persons like LaMacchia, but also the myriad of home computer users who succumb to the temptation to copy even a single software program for private use."

Attempt to broaden interpretation

U.S. Attorney Stern clearly intended to broaden the interpretation of the wire fraud statute to apply to many software piracy cases. "We need to respond to the culture that no one is hurt by these thefts and that there is nothing wrong with pirating software," Stern said.

"In this new electronic environment it has become increasingly difficult to protect intellectual property rights. Therefore, the government views large-scale cases of software piracy, whether for profit or not, as serious crimes and will devote such resources as are necessary to protect those rights," Stern continued.

The case addressed a gap the government saw in the law, Godwin said. "If we can make the wire fraud act address it, then we would have this seamless web of federal statutes addressing copyright violation," Godwin said in an April interview.

Many civil libertarians — and LaMacchia's lawyer Harvey A. Silverglate — saw broader implications for the case and whether operators of computer services could be held responsible for the actions of

the users of their service.

Godwin said it was clear that the prosecution was trying "to create a conspiracy to make him liable for everyone who used that site."

Because the case was dismissed, it will set a precedent that makes such an extension of the law less likely. "This case sets a precedent largely because it is the first reported case dealing with an indictment for Internet copying and distribution of copyrighted software under the federal wire fraud statute," Silverglate said.

"It is important because it makes clear that the only conduct that is a federal crime is conduct that the Congress says in the copyright statute is criminal," Silverglate continued.

Prosecutor will turn to legislation

In deciding not to appeal the case, Stern said that he would pursue legislative approaches to extending copyright laws to apply to cases where there is no commercial motive. "An appeal of this case, whether or not ultimately successful, might serve to delay the legislative process," Stern said.

Brian LaMacchia remained skeptical of the U.S. Attorney's hope that "multiple, willful infringements of copyright" be criminalized. "I think that would lead to criminalizing much of the Internet," he said.

Silverglate also expressed con-

cern about future legislation as it related to the liability of system operators. "Someone who does what David LaMacchia is alleged to have done ... should not be turned into a criminal by whatever law Congress writes, because a [system operator] should not be

pair of Athena workstations from Nov. 21, 1993 until Jan. 5, 1994. The Athena rules of use make clear that such use of Athena resources is improper.

"MITnet and Athena public workstations are shared resources intended to advance MIT's basic educational and research goals," said Gregory A. Jackson '70, director of academic computing services for Information Systems. "Anyone who redirects those shared resources to private or external purposes is depriving others in the community of resources."

"This is especially true when staff, our scarcest resource, must

devote extensive time to undoing and otherwise dealing with improper use," Jackson said.

Although Institute policy prohibits administrators from commenting on whether disciplinary action is being considered against a student, officials have made it clear that they believe LaMacchia was responsible for running the file servers.

The servers were first detected over the winter break at the end of 1993, and IS began to monitor the use of the machines, according to Professor James D. Bruce ScD '60, vice president for Information Systems.

From the monitoring that was conducted, IS was able to determine that LaMacchia was responsible for the servers, Bruce said.

I'm of course relieved. The past year has been extremely stressful for me, my family, and the people I live with.

David M. LaMacchia '95

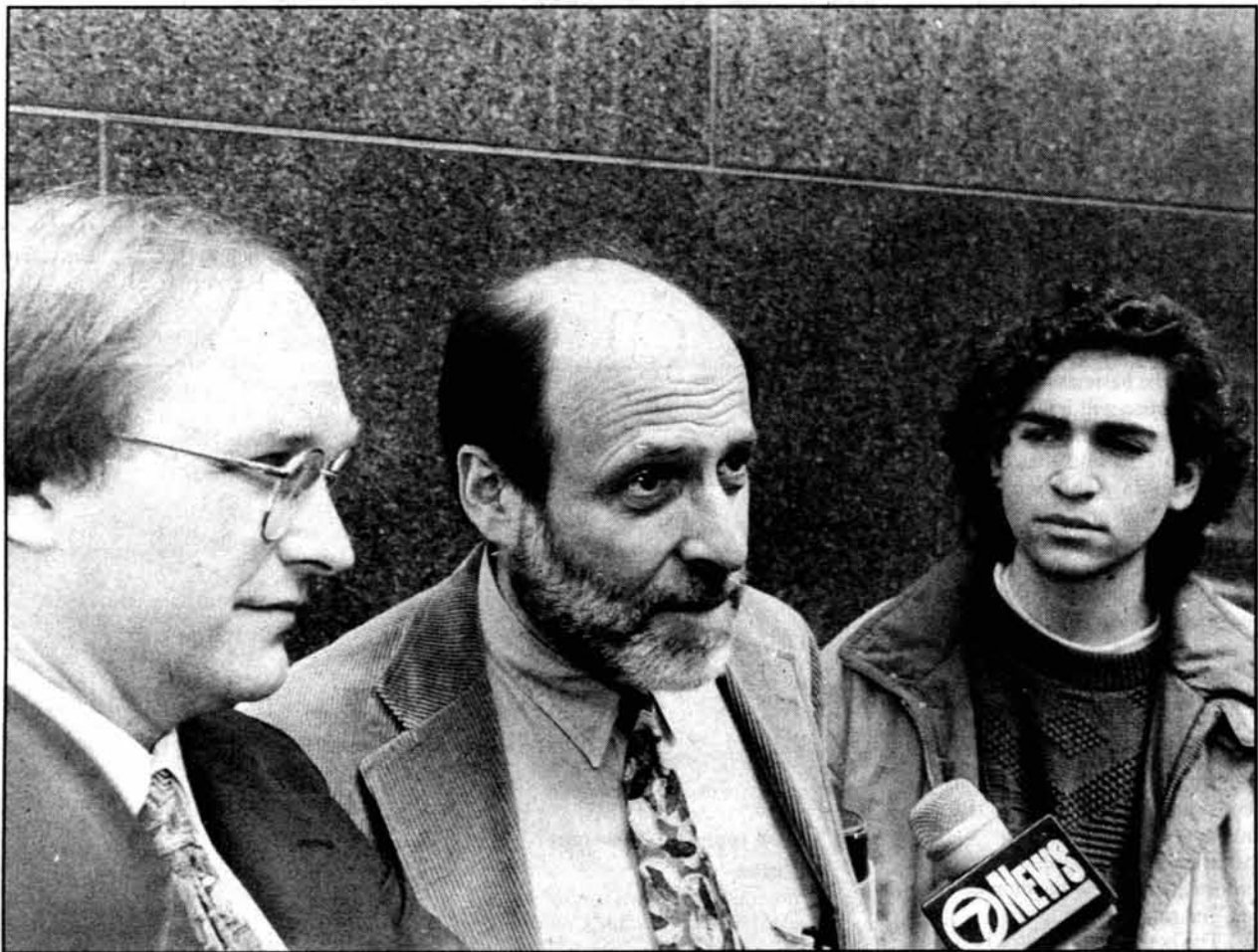
held criminally responsible for what the users of the system do," Silverglate said.

Although he dismissed the case, Judge Stearns also criticized the behavior described in the indictment. "If the indictment is to be believed, one might at best describe his actions as heedlessly irresponsible and at worst as nihilistic, self-indulgent, and lacking in any fundamental sense of values," Stearns wrote.

MIT may take disciplinary action

LaMacchia no longer faces criminal charges, but he must still face the consequences of an internal MIT disciplinary process that were put on hold while legal proceedings were underway.

According to the indictment, LaMacchia ran a file server on a



Thomas R. Karlo

David M. LaMacchia '95 (right) and his lawyer, Harvey A. Silverglate

17 The number three generator at Commonwealth Electric's Kendall Square substation short-circuits and sends a power surge through MIT's electrical system. The power surge causes the load transfer switches to catastrophically fail, and many of the buildings on the east side of campus plunge into darkness as both main and emergency lighting fail.



Shon McHugh

AP Photo

17 In Cambridge District Court, Shon McHugh is again found guilty of first degree murder in the stabbing death of Yngve K. Raustein '94. Raustein was killed on Sept. 18, 1992. On Oct. 7, 1993, McHugh was found guilty and sentenced to 20 years in prison. As a juvenile, however, McHugh had the automatic right to a retrial, this time before a jury.

18 Resnet, the newest addition to MIT's growing computer network, allows students to conduct many functions available on Athena from their personal computers.

19 Alfredo Velez, an accomplice in the murder of Yngve K. Raustein '94 on Sept. 18, 1992, is sentenced to 12 to 20 years in state prison.



Alfredo Velez

Thomas R. Karlo

Shull wins physics Nobel for work done 40 years ago

By Daniel C. Stevenson

Although 1994 will be the date recorded for Professor Emeritus of Physics Clifford G. Shull's Nobel Prize, the records probably won't record the campaign on his behalf that followed the real prize-winning effort, which took place more than 40 years ago when Shull worked at the Oak Ridge National Laboratory.

Shull's most important work was done at the Oak Ridge facility in Tennessee from 1946-51. At Oak Ridge, Shull, 79, and his colleague, the late Ernest Wollan, "systematically investigated the fundamental principles of elastic neutron scattering, thus providing the groundwork for this type of research," said Robert J. Birgeneau, dean of the School of Science.

Members of the physics community have been lobbying the Nobel committee for 10 years to award the prize to Shull. The effort succeeded last year because Birgeneau and Institute Professor Jerome I. Friedman, a 1990 winner in physics, were able to convince international leaders in physics to recognize Shull and Bertram N. Brockhouse of McMaster University as the "real pioneers," Birgeneau said.

Shull, 79, and Brockhouse shared the \$930,000 prize for developing a new way of looking at atoms.

Shull is the fourth member of the MIT physics faculty and the 26th person affiliated with MIT to win a Nobel.

"It is very exciting to be honored in this fashion," Shull said at a press conference on Oct. 12, the day he learned of the award. "It's all the more exciting" that it happened over 40 years after the work was done, he said.

Where and what atoms are

Shull received the prize for the development of neutron scattering techniques to analyze condensed matter. The techniques are "tools for learning things about materials," Shull said. Using these techniques, scientists can find "very basic information that determines the physical properties of a material."

"In simple terms, Clifford G. Shull has helped answer the question of where atoms are, and Bertram N. Brockhouse the question of what atoms do," the Nobel citation read.

The award was "a very, very well deserved prize," said Professor of Physics Ernst J. Moniz, who is also head of the department.

"Neutron scattering has proven to be the most important single technique for elucidating the structure and dynamics of solids and fluids," Birgeneau said. "Professors Shull and Brockhouse stand out as having



Adriane Chapman

Professor Emeritus of Physics Clifford G. Shull and his wife Martha-Nuel answer questions at a press conference the day he learned he won the Nobel Prize.

made singular contributions which provide the essential foundations of the fields."

Neutron scattering provided new information not available from the earlier technique of X-ray diffraction, Shull said. Neutron scattering is particularly applicable to hydrogen atoms and has been used to advance research in many fields, including polymers and superconductivity, he said.

Shull is quiet, precise

As a researcher, Shull was "a

quiet sort of guy," said Anthony Nunes PhD '69, a former graduate student of Shull's. He was also "interested and proud of precision and being precise in every detail," Nunes said.

Shull joins Friedman, Professor of Physics Henry W. Kendall, and Professor of Physics Samuel C. C. Ting as MIT physics Nobel laureates. Including Shull, 15 present or former faculty members have received Nobel prizes. One staff member and 11 alumni have also won Nobel prizes.

Shull received a bachelor's of science degree in 1937 from the Carnegie Institute of Technology (now Carnegie Mellon University). He received a PhD in 1941 from New York University.

From 1941-46, Shull worked as a research physicist with the Texas Co. in Beacon, N.Y. Shull moved to Oak Ridge in 1946, and came to MIT as a full professor in 1955. He retired in 1986.

Shull and his wife of 56 years, Martha-Nuel Summer, live in Lexington.

Deutch to No. 2 in DoD; declines CIA

By Daniel C. Stevenson

Institute Professor John M. Deutch '61 added to the Institute's influence in the federal government when he was promoted to deputy secretary of defense by President Bill Clinton last February.

Deutch, who served as MIT provost under President Paul E. Gray '54, was also a leading candidate to become the next director of the Central Intelligence Agency, but he removed himself from consideration for the position.

Deutch is the most prominent member of an MIT-Washington contingent that includes former associate provost and current Secretary of the Air Force Sheila E. Wid-

nall '60 and several economic and science advisers.

Following the resignation of R. James Woolsey as CIA director in December, Deutch was considered an ideal replacement. According to published reports, Deutch removed himself from consideration because he enjoyed his power and prestige in the No. 2 position at the Pentagon and because he was concerned that working at the CIA could prevent him from one day becoming president of the Institute.

Sound, sophisticated adviser

Deutch is highly regarded within government circles because he has shown himself to be an effective manager at the Pentagon and has worked well with Congress.

President Bill Clinton nominated

Deutch, who was undersecretary for acquisition and technology since February 1993, to be deputy secretary in February. He replaced William Perry, who was named secretary of defense following the resignation of Les Aspin PhD '66.

"This is a very important appointment and very much in keeping with MIT's long history of serving the federal government at high levels," said MIT President Charles M. Vest.

In nominating Deutch, Clinton hailed him as "a sound and sophisticated adviser whose expertise on military technology and policy has served the Department of Defense well in his tenure" as undersecretary.

Deutch's appointment continues a career in public policy that began during the Kennedy administration. Deutch has served in various advisory and consulting positions for every administration since then, except during the Nixon administration.

At MIT, Deutch was dean of the School of Science from 1982 to 1985, and head of the Department

of Chemistry from 1976 to 1977. Deutch came to MIT from Princeton University in 1970. He was named

Institute Professor in 1990 on his return to MIT from the Bush administration.



File Photo

Deputy Secretary of Defense John M. Deutch '61

20 Students have another week to enter the second round of the new computerized lottery system for enrolling in Humanities, Arts, and Social Science Distribution courses. Of the 1,206 students who entered the first round from Dec. 8, 1993 to Jan. 5, 1994, 92.8 percent, received their first choice course, and another 5.3 percent received their second, third, fourth, or fifth choice. The remaining 23 students were not placed.

21 MIT hosts a conference entitled "Technology and Employment" today and tomorrow to address the issue of unemployment in the fields of science and technology — the push toward advanced technology has caused an inverse trend by reducing the need for technically-trained workers and by replacing workers with electronics.

25 "Wastoid" triumphs over the other robot pirates in "Robo-Raiders," the annual LEGO Robot Design Competition (6.270). Created by Benjamin A. Calderon '96, Yishai Lerner '96, and Mihir Shah '96, Wastoid employs a catapult that throws foam blocks as far as five feet across the playing table.

30 The *Boston Globe* writes about the thesis of nuclear engineering student Alexander R. Sich G. Sich reported that the Chernobyl nuclear meltdown is much worse than Soviets had previously admitted. His doctoral thesis provides a definitive study of the disastrous meltdown near Kiev, Ukraine, that occurred nearly eight years ago.

30 Information Systems replaces all remaining Vaxstation 3100 workstations in the Student Center cluster with IBM Powerstation 220 machines and Sun Sparcstations as they moved toward completely withdrawing support from the older platform by mid-1995.

31 Walker Memorial's Morss Hall opens to provide a needed food service to the east side of campus while the Pritchett Snack Bar undergoes renovations. The menu will include hamburgers, sandwiches, salads, chowder, and frappes.

Provost's decision to close CMRAE sparks controversy

By Jeremy Hylton

The Center for Materials Research in Archaeology and Ethnology (CMRAE) and its director Professor Heather N. Lechtman have had an illustrious history: a three-year grant from the J. Paul Getty Grant Trust, a MacArthur Foundation "genius" grant for Lechtman, and a 16-year collaboration with eight other area institutions.

During the 1992-93 academic year, a formal review of the center concluded that "with relatively little difficulty, MIT could establish itself as having the strongest academic program in archaeological science in the world," Lechtman wrote.

But after 16 years, the center had not received enough outside sponsorship to become self-sufficient. Instead it relied on small but steady support from the Institute's unrestricted funds.

In June 1993, as the Institute was looking to close a \$10.1 million budget gap, Provost Mark S. Wrighton decided to end MIT sup-

port of the CMRAE and "close" the center. Because there is so little unrestricted money available, the Institute must regularly deny funding to worthy programs in order to allow for academic renewal, Wrighton said.

Wrighton's decision outraged Lechtman, particularly because it came after the review committee had reported so favorably on the center. Lechtman wrote a pamphlet, titled "An Institute in Ruins," charging that Wrighton had decided at the outset to close the center and had rigged the decision-making process to support that decision.

Wrighton, however, said that none of the academic deans expressed any interest in supporting the program or expanding it — and without the support of the deans, he could not justify continued funding.

'Bad at closing things'

While the closing of a lab or center is part of the academic life cycle of the Institute, it is an issue that has often generated controversy, as it did in 1988 when the Department of Applied Biological

Sciences was shut down. "MIT is very bad at closing things down," said Professor of Physics Robert L. Jaffe, chair of the faculty. "We have to learn how to do that better."

Lechtman's pamphlet drew wide faculty attention to the decision, and sparked several months of debate at faculty meetings, starting in February. Many faculty were concerned by the decision-making process Lechtman described. Some were concerned by the lack of faculty involvement in decisions about which programs deserve continued support and which do not.

Speaking in mid-February, Jaffe said that above all, the faculty "are eager to find out what the facts are."

At the May faculty meeting, a five-member faculty committee, appointed by President Charles M. Vest and headed by Professor of Economics Peter A. Diamond PhD '63, reported that "in some important aspects" the decision-making process was "seriously flawed."

Afterwards, a contrite Wrighton acknowledged the shortcomings of the review process and the decision to close the center. Wrighton said the committee report provided guidance that would be useful in the future.

At an earlier meeting, the faculty had voted to set aside the decision to close CMRAE until the committee issued its report — and after the report was issued, Wrighton and Vest said they had not established how to proceed. The two would talk with Lechtman and others "to see where we go from here," Vest said.

Wrighton also clarified what it would mean if the decision to close

the CMRAE was upheld. "For MIT there would be certain practical consequences, most important the termination of general Institute funds for use by CMRAE," Wrighton said. "However, space for the scholarly interests of Professor Lechtman remains available and equipment used in the research remains for her use and the use of others here at MIT, and for her collaborators," he said.

The May meeting closed on a conciliatory note: Institute Professor Emeritus Hermann Feshbach PhD '42, who helped instigate the faculty investigation of the decision, and Vest both expressed their hope that future relations would be more collegial.

"I pledge to you, and I'm sure Mark [Wrighton] joins me in this: It is our full intent to pursue our duties as we see appropriate, but certainly with a full understanding that the Institution is its faculty, and we certainly will continue to work in as collegial and consultative a way as I think is possible," Vest said.

Original review criticized

The review of CMRAE that concluded MIT could create a world-class archaeological science program was the source of a great deal of the initial controversy. The review committee, appointed by Wrighton and headed by Professor of History Peter C. Perdue, received sharp criticism in Lechtman's pamphlet.

Lechtman claimed that Perdue was biased against her, and that the final report reflected Perdue's bias and not the enthusiasm of the other members of the review committee.

Lechtman also criticized Wrighton for failing to fully explain his decisions and make her aware of the decision-making process. "In the case at hand, the provost recognized no obligation to discuss with me the reasons for his decision; to give me an opportunity to inform his decision; or to share with me the information he received from the review committee," Lechtman wrote in her pamphlet.

However, the Diamond committee concluded that the provost was aware of the diversity of views held by members of the original review committee. In February, Wrighton said that the review committee's findings "led me to conclude that such an activity is appropriate for MIT, that some good contributions have been made in the past, but that future excellence would hinge on being more than subcritical in terms of size; and that a graduate program was essential to realizing excellence."

Because creating a graduate program is a serious economic and financial concern, Wrighton wanted the support of the academic deans who would supervise the program. After consulting the deans, Wrighton "made the assessment of whether there was support for a new graduate program, and there was none," he said.

The CMRAE works with both the Department of Materials Science and Engineering, where Lechtman is a professor, and the program in anthropology and archaeology within the School of Humanities, Arts, and

CMRAE, Page 8

Smith, Perkins will step down; Dean's Office reorganized

By Christopher L. Falling

New students arrive each fall and seniors and graduate students leave with their degrees each spring, but changes among the deans directly responsible for these students are rare. Yet last fall both Dean for Undergraduate Education and Student Affairs Arthur C. Smith and Dean for the Graduate School Frank E. Perkins '55 announced their resignations, both effective after the end of the academic year.

The announcements were among the most prominent of many changes that took place within the various deans' offices last year.

Perkins plans to return to teaching and research in the Department of Civil and Environmental Engineering after a short sabbatical. He will also manage the new Master of

Engineering program offered by that department.

In a Dec. 14 *Tech Talk* article, Perkins said that as dean he was foremost concerned with the quality of the graduate student experience. "I tried to make the Dean's Office a place where [students] felt they were welcome," he said.

Smith integrated UE, SA

Smith, a professor of electrical engineering and computer science, was named dean for student affairs in 1990. In 1992, he took on the responsibilities of the offices of undergraduate education, becoming the Institute's first dean for both undergraduate education and student affairs.

President Charles M. Vest said that "bringing about the integration of the offices following the death of Margaret L. A. MacVicar '65, dean for undergraduate education, was a major accomplishment."



Thomas R. Karlo

Arthur C. Smith

While Smith served as a faculty member and administrator, he "was also concerned about issues important to students," said J. Paul Kirby '92, former Undergraduate Association vice president. "He brought fairness, circumspection, understanding, and generosity to students," Kirby said.



File Photo

Frank E. Perkins '55

"Art has brought a very insightful and effective advocacy on behalf of students to the Academic Council discussions," Vest said. "He always forced us to see things through the students' eyes." The Academic Council, composed of the president, vice presidents, provost, vice provosts, deans of the schools, and

other high-level administrators, is the highest policy-making body at the Institute.

Smith said he hopes to continue to "influence in some way the course of the Institute." He said he may return to teaching.

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February

- 1 Margaret A. Jablonski starts as the new associate dean for residence and campus activities.



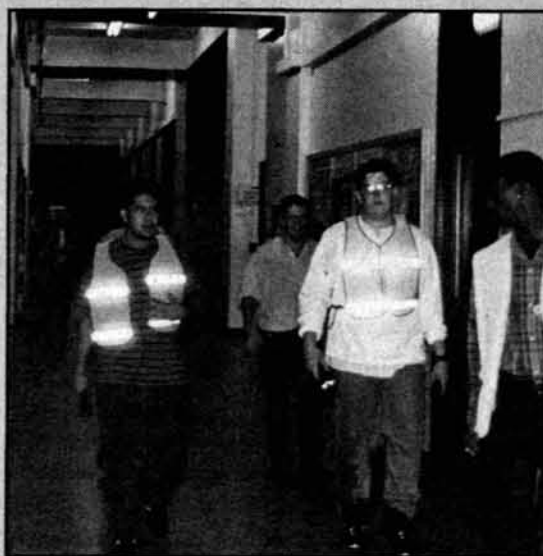
Thomas R. Karlo

Margaret A. Jablonski

- 4 Four professors are named MacVicar Faculty Fellows at a luncheon today: Richard P. Binzel of the earth, atmospheric, and planetary sciences department; Gene M. Brown of the biology department; Woodie C. Flowers PhD '73 of the mechanical engineering department; and Ole S. Madsen ScD '70 of the civil and environmental engineering department.

- 11 Coretta Scott King, widow of slain civil rights leader Rev. Martin Luther King Jr., speaks in Kresge Auditorium as part of the 20th annual MIT celebration of the life and work of her husband.

- 13 Safe Walk begins service to areas on campus not covered by Safe Ride.



Kenny Chang

Safe Walk staffers escort a student down the Infinite Corridor.

- 14 The Undergraduate Association holds a forum to answer questions about how the Undergraduate Research Opportunities Program will cope with new government regulations that could effectively double the cost of the program.

- 16 The faculty votes to approve a new Master of Business Administration degree with an optional thesis for the Sloan School of Management. A Master of Science degree, with a 24-unit thesis, will still be offered.

Administration reshuffled after Simonides' death

By Stacey E. Blau

The last year saw a number of shifts in the senior administration. Much of the realignment followed the death of Constantine B. Simonides '57, senior vice president and secretary of the Corporation, who died on April 24, at the age of 59.

Simonides served as vice president for 24 years under four presidents. His responsibilities included admissions, athletics, career services, the medical department, the MIT Press, personnel, and public relations.

Simonides, regarded as a warm,



News Office

Joan F. Rice

friendly, and effective administrator by colleagues, students, and alumni, seemed an irreplaceable loss to the Institute, according to Dean for Undergraduate Education and Student Affairs Arthur C. Smith. "I don't think there will be any other who can do that job in the same

way," Smith said.

The loss of Simonides came at a particularly crucial time, with MIT in the midst of re-engineering efforts. Because of his death, "some very significant changes" were going to have to take place, said Provost Mark S. Wrighton.

Administration reconfigures

A reshuffling of senior administration officials took effect on June 1. Director of Personnel Joan F. Rice and Barbara G. Stowe, director of foundation relations and developments system, were promoted to vice president, and two other vice presidents took on new responsibilities.

President Charles M. Vest named Rice vice president for human resources. Rice had been director of personnel since 1984 and an MIT staff member since 1972. Vest called Rice an experienced leader who "has commanded enormous, widespread respect as she has risen through our ranks."

Rice's responsibilities include matters of personnel, equal opportunity, family and work, and general management of MIT's human resources, Vest said. These areas are "critical to our future and require direct attention at the vice presidential level," Vest said.

Stowe was appointed vice president for resource development. She is responsible for individual giving, the Office of Development Research and Systems, the Office of Foundation Relations and Development Services, and the Office of Corporate Relations.

Stowe, who has served MIT in various positions since her arrival in 1981, said that she is most concerned with undergraduate scholarship and building needs. Another

concern of hers is solving the current funding problems with the Undergraduate Research Opportunities Program.

Vice Presidents Glenn P. Strehle '58 and James J. Culliton were assigned new responsibilities at the vice presidential levels following the realignments. Strehle, who oversees resource development, became vice president for finance. He remains treasurer of the Institute. Culliton, vice president for financial operations, was named vice president for administration.

Many of Strehle's responsibilities as vice president for resource development were transferred to Stowe. Strehle assumed some of Culliton's former duties, including heading the audit division, the Office of the Comptroller, the Lincoln Laboratory fiscal office, the



News Office

Kathryn A. Willmore

property office, the Office of Financial Planning and Management, and purchasing.

Vest praised Strehle for his "modern, effective organization, a talented staff that is second to none, and a highly successful Campaign for the Future that has secured the Institute's future in many dimensions."

Culliton retains responsibility for the Office of Sponsored Programs and Office of Registration and Student Financial Services. His new duties include many of Simonides' responsibilities, such as heading the Office of Admissions, Career Ser-

vices and Preprofessional Advising, the Athletic Department, and the Medical Department.

Kathryn A. Willmore was elected secretary and *ex officio* member of the Corporation following the recommendation by the Corporation's executive committee. Willmore formerly served as executive assistant to the president and director of public relations.

"It's kind of bittersweet," Willmore said at the time of her election. "None of us would have had these opportunities if Constantine hadn't died. It's hard. At the same time, I'm looking forward to working with the Corporation."

Shifts in associate provosts

Professor of Linguistics and Philosophy Samuel J. Keyser stepped down as associate provost for Institute life on June 30 after holding the position for nine years. Keyser worked extensively with harassment policies, conflict resolution, and faculty and student relations.

Keyser continues to hold the Peter DeFlorez '38 Fund for Humor Professorship, which was created to encourage humor in the learning process. Keyser, now special assistant to the provost, will be teaching a graduate linguistics course this semester.

Professor Phillip L. Clay PhD '75, former head of the Department of Urban Studies and Planning, was named associate provost effective Oct. 1, filling the position vacated by Sheila E. Widnall '60, who was sworn in as Secretary of the Air Force in August 1993.

Clay assumed responsibilities in promotion and tenure policies, academic integrity, faculty recruitment and retirement, and international education programs. He also absorbed many of Keyser's former duties.

In December, Associate Provost for the Arts Ellen T. Harris announced that she would step down this summer after six years in her current position. Harris plans to take a year-long sabbatical to complete a book on the composer George F. Handel and will then teach for the music department.

Harris originally committed to her job for four or five years, but



News Office

Phillip L. Clay PhD '75

said that she stayed for six years because it was "exciting and fulfilling." The position of associate provost for the arts had not existed at MIT before Harris' arrival. Harris said that she sought to emphasize the importance the arts have for even the most technical-minded of students.

Library director retires

Director of Libraries Jay K. Lucker announced in June that he plans to retire next August. Wrighton has appointed a 10-member committee, chaired by Professor Peter S. Donaldson, head of the literature section, to advise him on the appointment of a new director.

Luck together, making MIT a leader in the "new age of digital handling of scholarly information," Vest said.

Krzysztof Wodiczko, associate professor of architecture, was appointed director of the Center for Advanced Visual Studies last August. Wodiczko is internationally renowned for his work in image-projection installations relating to social issues, particularly on homelessness. He has had a number of solo exhibitions and public installations in both the United States and Europe, and will have another this year in Japan.

Wodiczko succeeds Senior Lecturer in Architecture Otto Piene, who retired in September 1993, after a 20-year career as CAVS director.

Promotions and other shifts mark year in UESA

UESA, from Page 6

Two of Smith's subordinates were promoted to new positions as part of a broad reorganization of his office last spring to reduce overlap between different sections, Smith said.

Travis R. Merritt, formerly an associate dean for undergraduate academic affairs, was promoted to dean of UAA. Robert M. Randolph, former associate dean in charge of student assistance services, was named senior associate dean for

UESA. Randolph has worked in the Dean's Office since 1979 and Merritt, a former professor of literature, since 1987.

Merritt now oversees activities such as the Undergraduate Research Opportunities Program, Independent Activities Period, Residence and Orientation Week, and the Wellesley Exchange Program.

Not all of the changes in the Dean's Office were administrative: Margaret A. Jablonski began her tenure as associate dean for residence and campus activities last

February. Jablonski replaced James R. Tewhey, who left MIT in 1993 after an affair with a financial aid administrator led to charges of harassment.

Osgood new OME dean

In September, Judy Jackson, an associate dean in UESA and director of the Office of Minority Education, left MIT to pursue a doctoral degree in higher education at Harvard University.

During her more than four years at MIT, Jackson expanded many of OME's programs, including tutorial services, Project Interphase, and Project Excel according to Vest and Smith.

She also worked for improved industrial relations through the

Industrial Advisory Council on Minority Education and increased financial support for, and the number of internships offered to, minority students.

Jackson's replacement, Associate Professor of Athletics and Dean-on-Call Leo Osgood Jr., took office this month after a three-month search process.

In the interim, retired Professor of Mechanical Engineering David Gordon Wilson served as OME director.

"I have worked with minority students on an array of issues and concerns," said Osgood, who is also the head basketball coach. "I think that this will be a good opportunity to work more closely with minority students."



Thomas R. Karlo

Robert M. Randolph

16 Random Hall residents vote to reinstate the use of the house tax to fund alcohol at house parties. Two weeks earlier, they had passed a motion, 21-9, to stop spending part of the house tax on alcoholic beverages for house activities.

16 The Graduate Student Council sponsors a student-run panel to discuss the Institute's recently-abridged policies and procedures concerning harassment. "After the [harassment] guide came out, there was a fair amount of discussion ... but there was not enough discussion between people who had somewhat opposing views to see what middle ground could be reached," said Anand Mehta G, the event's organizer.

18 The Department of Housing and Food Services issues the new MIT card, an expansion of the old Student Services Card that will now be used for identification, meal purchases, dormitory access, and library privileges.

22 The Class of 1994 Senior Gift Committee announces its plan to renovate the structure and improve the services of the Student Center information desk.

24 President Bill Clinton nominates Institute Professor John M. Deutch '61 as deputy secretary of defense. Deutch has served as undersecretary for acquisition and technology since February 1993.

27 The Undergraduate Association holds a debate between the candidates for UA president and vice president — Colin M. Page '95 and Michael R. Evans '95 against Vijay P. Sankaran '95 and Carrie R. Muh '96.

28 Alpha Phi Omega installs the newest version of the rideboard — a map of the United States where students can post notices soliciting or offering rides — outside the Lobdell Court exit in the Student Center.

March

2 The Office of the Dean for Undergraduate Education and Student Affairs undergoes several organizational changes: Travis R. Merritt is promoted to dean of Undergraduate Academic Affairs, Robert M. Randolph to senior associate dean, Arnold R. Henderson Jr. to associate dean in Counseling, Susan D. Allen to assistant dean of Residence and Campus Activities, Danielle Guichard-Ashbrook to dean in the International Students Office, and Debbie H. Shoap to staff associate in the Undergraduate Research Opportunities Program office.

Redesign teams aim to streamline support services

By Shang-Lin Chuang

Throughout 1994, several support services re-engineering teams have been working to reduce complexity, improve quality, and reduce costs, according to James D. Bruce ScD '60, vice president for Information Systems and manager of the Institute-wide effort.

Although re-engineering is aimed at reducing costs, a lower-than-expected budget deficit for the fiscal year 1994 will not affect the effort, according to Vice President for Finance and Treasurer Glenn P. Strehle '58.

The project began in November 1993 with the goal of finding new, more efficient ways of providing services since the decline in federal

funding of research and the shift in federal priorities at the end of the Cold War.

As part of the project, interdepartmental teams of staff members design efficient models for specific administrative processes, ranging from custodial services to information technology transformation. Each redesign team completes its work in about 12 weeks, then reports to the steering committee, Bruce said. Once a redesign is approved, it is turned over to an implementation team, he said.

Designs ready to implement

In early December, eight redesign teams had been created, with four ready to enter the implementation phase. The four teams with redesigns focused on the

appointments process, management reporting, custodial services, and mail.

The Appointments Process team focused "on automating the appointments process for all classes of employees," Bruce said.

Team captain Stephen D. Scarno, an assistant to Bruce, said that the development phase begins this month and the program will be ready to pilot in about four months.

The management reporting group "has developed a design to deliver the management information that a department, research laboratory or center, or an administrative unit needs to it in a timely, effective manner," Bruce said. Now that the redesign is done, the team has been succeeded by a set of teams that will install a new financial management system from an external vendor, he said.

The Custodial Services team has finished its redesign, and "two pilot teams are now deployed and are testing the concept," Bruce said.

The Mail team's redesign, which calls for paper mail to be distributed through 40 centers around campus, has been approved, Bruce said. A process for handling outgoing U.S. mail still needs to be developed, he said.

The other teams still in the design stage in December covered information technology infrastructure readiness, information technology transformation, supplier consolidation, and community involvement.

The Information Technology Transformation group will keep existing systems running and support the use of them until they are replaced, connect over 1,000 administrators to the campus computing network, and deliver and support campus-wide use of several new network-based administrative applications, services, and tools, said Marilyn A. McMillan, team captain and director of Information Systems planning.

The Community Involvement team "works to communicate the re-engineering work to the community and to involve the community in the work of the teams," Bruce said.

Last month, the Training and Development team began work. "Key to the success of any re-engineering project is a well-trained work force," Bruce said. "Training needs to occur in three basic areas: organizational culture and the ability to function in a changing environment, computer skills, and new business applications."

The Repair and Maintenance team started working recently, and the Student Services team will probably start in late February or early March, Bruce said.

"The desired impact of re-engineering on the community is that everyone — faculty, staff, and students — will be able to do their work easier," he said.

Deficit less than projected

MIT concluded fiscal year 1994 with a deficit of \$6.2 million, \$4.1 million less than projected, according to a report issued by Strehle.

This is down from the \$10.1 million deficit recorded in FY 1993.

However, the decrease is not expected to affect the fiscal year 1995 budget, with an estimated deficit of \$8.9 million, or re-engineering plans, Strehle said.

"The continued search for ways to improve efficiency and self-imposed conservatism across the Institute were important to this [year's] outcome," Strehle said in *Tech Talk*.

The deficit decrease was unrelated to the re-engineering plan, said Senior Vice President William R. Dickson '56. "I think it had more to do with constraint on the part of people at MIT," he said.

Concern surrounds picture book cover

By Eva Moy

In August, President Charles M. Vest made a last-minute decision to stop distribution of the Technology Community Association's annual Freshman Picture Book. He felt that its cover drawing of a monkey could be perceived as racist by African Americans. Publishing the books with new covers delayed their delivery until Aug. 30, after Residence and Orientation Week had already begun.

The original cover shows a monkey wearing glasses, dressed in a

cap and a lab coat with a pocket protector, and holding a calculator. The monkey has one arm raised and is asking a question: "What does 'intuitively obvious' mean?"

"The concern about the picture is that the symbolism of a monkey type of creature has traditionally been used negatively in a racist manner in the United States to depict African Americans," said Susan D. Allen, assistant dean for residence and campus activities.

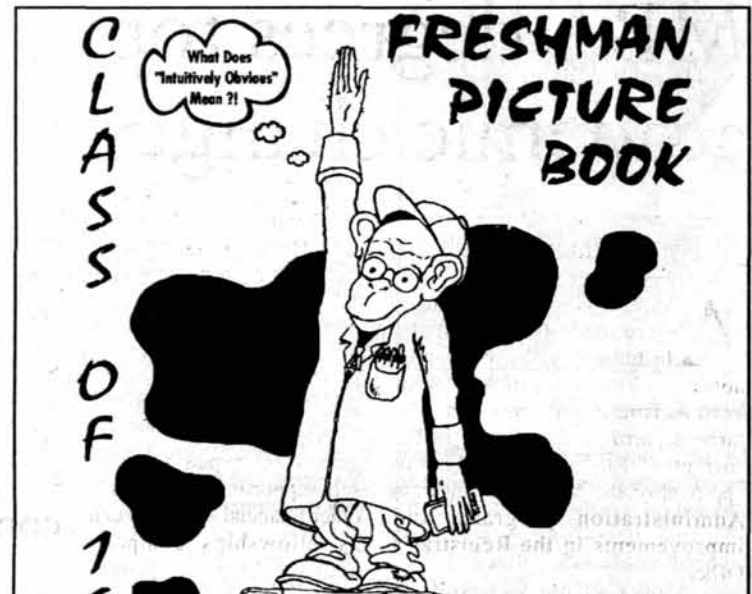
The caption added to that perception, Allen said. "There are three videos produced at MIT that are

entitled 'Intuitively Obvious' done by Black, Hispanic, and Asian students on what it is like to be a Black, Hispanic, or an Asian at MIT," Allen said.

The TCA, a student-run and funded nonprofit organization, produces the picture books. Risa H. Wechsler '96, who helped to design the cover for TCA, said there was no particular reason why the monkey was chosen.

President Vest said he stopped the distribution of the picture books with the original cover because the cover "could be misinterpreted as racially derogatory."

"Experiences on many campuses, including ours, clearly indicate such events have caused substantial anguish within the student body and community, despite the fact that no ill will was intended," Vest said.



President Vest stopped distribution of the Freshman Picture Book because the cover could be perceived as racist.

Faculty debate CMRAE

CMRAE, from Page 6

Social Sciences. But neither Dean of Engineering Joel Moses PhD '67 nor HASS Dean Philip S. Khoury offered to support a graduate program.

To decide which programs merit support, Wrighton said he first determines if they achieve the level of excellence expected of MIT programs. After a program's excellence is considered, the resources required by the program are considered.

Wrighton concluded that the CMRAE met the excellence requirement, but that newer programs were more deserving of unrestricted funds.

The Diamond committee noted that closing the CMRAE had been proposed in 1984 and 1985 by the provosts, but then-President Paul E. Gray '54 had put off the closure.

It also noted that the CMRAE had been involved in a bitter dispute with members of the anthropology and archaeology section until it was transferred to the provost's office for administrative control in 1992. "Part of the resolution of this dispute was an agreement that the CMRAE would be reviewed," the Diamond committee reported.

Faculty asks for review

At the February faculty meeting, Feshbach and Professor of Brain and Cognitive Sciences Stephen L. Chorover rose to object to the review process as it was described by Lechtman and asked that a faculty committee review the decision.

At the same meeting, Vest said he would appoint a committee of faculty members to review the decision. But his offer was criticized by several faculty members.

Feshbach said that the committee should be appointed by the chair of the faculty, because it would review an administrative decision. "Not only must the process be impeccable, but it must

be perceived as impeccable," Feshbach said.

In the end, Vest appointed the Diamond committee after consulting with faculty chair Jaffe. The committee's other members were: Institute Professor Jerome I. Friedman, Associate Professor of Physics Jacqueline N. Hewitt PhD '86, Professor of History Pauline R. Maier, and Professor of Aeronautics and Astronautics Earl M. Murman, head of the Department of Aeronautics and Astronautics.

At its meeting the next month, the faculty debated two motions about the decision to close CMRAE and about the Diamond committee. Many faculty members spoke at the meeting, which drew

several senior faculty members including Feshbach, Institute Professor Emeritus and former Provost Francis E. Low, and Professor Emeritus of Biology Jerome Y. Lettvin '47.

The first motion asked that the Faculty Policy Committee re-examine the membership of the Diamond committee and the second asked the administration to set aside the decision to close the CMRAE until the decision was reviewed by the faculty.

The first motion failed by a 55-62 vote, and the second passed easily after Vest and Wrighton announced that they intended to vote in favor of the motion. "As members of the faculty, we will support the motion. If this advice is

3 The Corporation approves a tuition increase from \$19,000 to \$20,100 for the 1994-95 academic year. The nominal self-help level also rises to 7.7 percent, increasing \$550 to \$7,650. "All must recognize that there is a price for educational excellence," Vest said. "Nonetheless, we must all work together to reduce costs and improve the efficiency and effectiveness of MIT wherever this can be done while maintaining programs of the highest quality."

4 Space Shuttle Columbia lifts off from Cape Canaveral, Fla., carrying an experiment designed by professors in the Department of Aeronautics and Astronautics. The Middeck zero-gravity dynamics experiment tests how large structures vibrate in space. Another part of the experiment measures the forces that astronauts exert while doing routine activities in the shuttle.

7 Author and gay activist Warren J. Blumenfeld talks about homophobia. Blumenfeld's talk, entitled "Homophobia: How We All Pay the Price," is sponsored by Gays, Lesbians, Bisexuals, Transgenders, and Friends at MIT, the Interfraternity Council, and Lambda Chi Alpha fraternity. "Homophobia, as well as many forms of oppression, is pervasive throughout the entire society, and because of that it is not our fault. ... We must accept responsibility for it within ourselves," Blumenfeld said.

8 The Class of 1996 unveils its brass rat design at the ring premiere.

10 The Association of Student Activities finalizes room allocations, assigning office space to 60 of the approximately 160 recognized student activities.



Warren J. Blumenfeld

Women comprise record 40 percent of Class of 1998

By Sarah Y. Keightley

This year's freshman class is 40 percent female, the largest number of women ever admitted to MIT, according to Assistant Director of Admissions Zaragoza A. Guerra III.

"The Admissions Office did make a conscious effort to recruit women into the Institute" by addressing their concerns and offering them encouragement, Guerra said. This helped increase the number of female applicants, so the Institute could accept more female students, he said.

The overall number of applicants increased as well, Guerra said.

When the Institute offered admission to applicants for the Class of 1998 in March, a record number of the offers were for women: 913 of 2,123, or 43 percent. The number of applications from women in the United States increased by 27 percent.

Associate Director of Admissions Elizabeth S. Johnson said that "there were more women in the stronger part of the applicant pool."

The highest percentage of women admitted to a freshmen class before this year was 38 percent in

1987, Johnson said.

Admissions Office officials attribute the rise in female applicants to several factors, including the new view-book, the current admissions video, and a special letter sent out to 1,200 prospective female applicants who scored well on the Scholastic Aptitude Test.

The new view book focuses more on student life and answers concerns to "confront head-on a lot of the stereotypes" that applicants have about MIT, Guerra said.

In addition, "our video has won awards as best college video," Johnson said. "We wanted to show that students who come here are articulate, sociable, and have lives outside

the classroom," she said.

"We also think our new publications and video are appealing more to women than to men," Johnson

...our new publications and video are appealing more to women than to men... Women are less likely to apply when they think that MIT is just for engineering.

Elizabeth S. Johnson

added. "Women are less likely to apply when they think that MIT is just for engineering."

Assistant Director of Admissions Lisa J. Oliveira and Associate Director of Admissions Marilee Jones coordinated the effort to recruit more high school women.

They asked Dean of the School of Science Robert J. Birgeneau to write a letter to 1,200 prospective women.

Birgeneau wrote about his daughter who attended MIT and graduated in 1993. "I know from her firsthand that MIT is a wonderful place for a bright, ambitious young woman to obtain an undergraduate education," he wrote.

Of the women who received the letter, 41 percent decided to apply to MIT, Birgeneau said.

Other recruiting tactics which have led to more women and more students overall applying to MIT are higher attendance at the Campus Preview weekend in April and telethons. About 50 to 75 more students attended last year's Campus Preview than the year before, Guerra said.

Telethons work well because "it does seem to be important to personalize the communications to the applicants," Johnson said.

New MEng, Sloan MBA degrees top academic changes

By Venkatesh Satish

A variety of academic changes were made throughout the Institute this past year, most notably the addition of Master of Engineering degree programs by three departments, a change in the format of Physics I (8.01), the approval of the Master of Business Administration program, and improvements in the Registrar's Office.

The faculty approved in November new MEng programs for the Departments of Aeronautics and Astronautics, Civil and Environmental Engineering, and Ocean Engineering. The Course XVI and Course I degrees are designed for undergraduate students looking for a one-year graduate program and will be offered starting this September.

The Department of Ocean Engineering, which began to offer the 12- to 18-month program in September, hopes to attract students looking for a fifth-year professional degree, graduate students interested in a second degree, and mid-career people from government and industry.

None of these programs will replace the existing Master of Science degrees in the departments, which usually require two years for completion.

The Course XVI program "is a structured master's program emphasizing multidisciplinary instruction,

product design, and a design thesis," said Head of the Department of Aeronautics and Astronautics Earl M. Murman. "The MEng and SM offer complementary options for graduate students. The MEng is focused on design and the SM on research," he added.

Students in these programs are expected to be self-supporting or will have other financial support, such as fellowships, company sponsorships, or student loans.

The Course I MEng program was developed in order to help students build skills necessary for a successful practice and will emphasize teamwork, according to Professor Rafael L. Bras '72, head of the Department of Civil and Environmental Engineering.

Changes in 8.01

Many MIT undergraduates take Physics I (8.01) during their freshman year. This past fall, the format of the class was extensively changed.

The new format implemented smaller recitations of about 16 students, with two such recitations a week. In addition, there was one large lecture each Monday which also included demonstrations. This reflects a difference from the previous system of three lectures and two recitations every week.

Also, the class had no graded homework, though practice problems were given to students in a detailed study guide. In order to monitor their progress, students were given short weekly quizzes which contributed to the final grade.

The 300-page study guide included a brief overview and list of aims for each covered topic. It also contained a set of sample quiz questions, fully-worked example problems, and regular problems with hints and answers.

Students taking 8.01 had mixed reactions to the format of the course. Some expressed their enjoyment of the class, while others complained that there was too great a

the sake of changing. Why fix something that ain't broke?" he said last fall. "8.01 ain't broke."

Lewin sees the new system as a means to "force individual professors to get more involved." Students would only benefit from the system if "the bad professors improve on their student evaluations."

However, "it is not our task here at MIT to teach performance," Lewin added. He also said that the changes will only have been shown to be worth it if students rate the course higher in the next *Course Evaluation Guide*.

The differences in teaching styles and ability were accounted for by an adjustment in grading,

Busza said. Despite this normalization, the course was not graded on a curve, with the pass/fail mark set at 55 percent at the beginning of the term, he said.

Professor of Physics George F. Koster '48, who helped run the course, also said the course was a success. The course was "sufficiently [successful] that we'll do it again," he said.

The course will be completely reviewed by the physics department after the spring term, he said.

Students who took the new version of 8.01 will be polled after they take Physics II (8.02) to see which they prefer; 8.02 is offered in a traditional lecture/recitation style. "We'd like all the data before we do the modifications," Koster added.

According to the Undergraduate Academic Support Office, 574 students in 8.01 were given grades last term. Of those students, 77, or 13 percent of the class, failed. The previous year, 88 of 559 students, or 16 percent, failed the class.

Early in 1994, the Sloan School's new MBA degree with an

optional thesis was approved by the faculty. First-year master's students in the Sloan School last year were the first to be given the option to pursue an MBA.

The Sloan School had considered revamping the curriculum and making the thesis optional for some time, according to Paul M. Healy, a former deputy dean of the Sloan School.

With an optional thesis, "it made more sense to call [the degree] an MBA," Healy said. Sloan will continue to offer the SM with a 24-unit thesis, and those who write a thesis may receive either degree.

Registration services revamped

There were also changes in the Student Information System and the Registrar's Office during the last year. A revised and optimized SIS was released in early November and affected registration, transcripts, Bursar's Office bills, financial aid forms, and departmental information, according to James J. Culliton, vice president for administration.

SIS access on the Athena Computing Environment did not change because of difficulties with updating the Athena program, said Registrar David S. Wiley '61.

Transcripts will now be prepared electronically, a move that represents a major improvement in quality and speed, Wiley said.

The Bursar's Office bill was redesigned to be more readable and understandable. The bill now lists individual transactions, Culliton said.

Students also received new randomly-assigned MIT ID numbers in order to address privacy issues, Wiley said. Students will still be able to use their old ID numbers when completing forms, he said.

In addition, a new final exam scheduling system allows better tailoring of exam schedules and better management of conflict exams.

The MEng and SM offer complementary options for graduate students. The MEng is focused on design and the SM on research.

Earl M. Murman, Course XVI head

difference in the teaching abilities of the recitation instructors.

Professor Wit Busza, the lecturer for the new 8.01, said in an interview last fall that over half the class gave the course 7 or above out of 10 in a mid-term class survey. "Based on the survey, I say the class is a success," he said.

Despite this attitude, not all faculty responded so positively to the changes. Professor of Physics Walter H. Lewin, who taught the old version of 8.01, objected to the changes in the course. Lewin views 8.01 as having been "changed for

10 Vijay P. Sankaran '95 and Carrie R. Muh '95 win more than half that ballots cast for Undergraduate Association president and vice president.



Vijay P. Sankaran '95 and Carrie R. Muh '96

15 Disability services at MIT may not be in compliance with federal standards, according to a letter from Undergraduate Association Vice President Anne S. Tsao '94 to Senior Vice President William R. Dickson '56.

15 An individual posing as a janitor assaults an employee of the Media Laboratory when asked for his identification. The employee is not seriously injured.

16 Huntington Hall residents first learned a leaking petroleum storage tank near the dormitory may have contaminated the air in at least one room in the dormitory. Air sampling tests reveal above-normal levels of benzene, a toxic compound in petroleum.

16 The faculty passes a motion asking the administration to set aside its decision to close the Center for Materials Research in Archaeology and Ethnology until a faculty committee could review the process by which the center was closed.



The Chorallaries' 1994 Concert in Bad Taste

18 U.S. News & World Report ranks MIT as the top graduate engineering school for the fifth consecutive year in its annual report on the "Best Graduate Schools" in the United States. The report also ranks the Sloan School of Management as the second best business school, one slot ahead of the Harvard Business School.

DoD funding cut threatens research; bodes ill for future

By Ramy A. Arnaout

The near-passage of a congressional bill that would have cut Department of Defense funding for university research by more than half — from \$1.47 billion to \$547 million — sent waves of concern through MIT last summer and has left researchers uneasy in its wake.

The impact of the cut would have been catastrophic for the Institute, where last year's \$61.6 million from the DoD accounted for nearly one-fifth of MIT's total federal research funding, according to the Office of Sponsored Programs.

"It is not hyperbole to say that the impact would be devastating," said John C. Crowley, special assistant to the president and director of MIT's Washington Office, in the Aug. 10 issue of *Tech Talk*.

While a strong lobbying effort by MIT helped reduce the House of Representatives' proposed cut to \$200 million before the bill's final passage, researchers at MIT saw the event as a sign that difficult times may lie ahead for government funding of academic research here and at schools across the country.

"This is not a separate incident," said Paul E. Penfield Jr. ScD '60, head of the Department of Electrical Engineering and Computer Science. "This is an issue that will come back next year, and the next."

"I suspect that this is only the first shot" Congress will take at university research funding, said Professor of Aeronautics and Astronautics Daniel E. Hastings PhD '80,

associate head of research in the department. "What's going on is a very fundamental shift in the paradigm of what ... defense money is going for," he said.

Changing priorities

The near crisis last summer marked a major break with Cold War-era tradition. Since World War II, the military has devoted billions of dollars to university research in the name of national security, with the hope that the investment would eventually yield defense applications.

DoD money still forms the backbone of the nation's academic research in science and engineering: All told, the department funded 42 percent of all engineering research at universities last year, according to National Science Foundation figures. With that figure, the DoD was — and remains — the single largest backer of research in engineering fields.

But since the end of the Cold War, Washington has increasingly come to question the value of funding university research and the relative importance of research when compared to other government expenditures.

In pushing through the initial 63 percent funding cut in the House, former Rep. John P. Murtha (D-Pa.) said it was not designed to punish research.

Murtha, who chaired the appropriations subcommittee that came up with the cut, said the bill was geared toward rescuing defense: With the military cutbacks that have

followed the end of the Cold War, the value of research simply pales before the long-term importance of defense and the military, he said.

This same doubt over the merit of research was one of the main reasons Congress decided to abandon the \$10 billion Superconducting Super Collider in late 1993, although waste and political distrust of "big science" were also factors. "A number of people in the House [of Representatives] had the feeling that this kind of research was a luxury," said Institute Professor Jerome I. Friedman, recipient of the 1990 Nobel Prize in physics.

"Budgets are tight as the nation deals with its deficit, and the cutting comes in ... discretionary accounts that include most of the agencies that support research," said President Charles M. Vest.

Concern over the future

In his 1994 annual report, Vest viewed government's shifting priorities with concern. Despite an estimated 30 percent economic return on research investment, "the public and the Congress now increasingly question the value, priority, and relevance of this investment."

"The sense of partnership between government and universities has decayed dramatically" since the Cold War, Vest said. Safeguarding the future of research funding "requires that we establish a sense of common purpose," he said.

To that end, MIT has begun to work "with great intensity to promote understanding of the issues by members of Congress and their staffs" in response to the summer's funding cut, Vest said.

"I think the burden is on MIT and on other research institutions to educate the new Congress and the public and the administration" as to the importance of funding university research, said Ronald P. Suduiko, assistant to the president for government and community relations.

"Much of the change is related directly or indirectly to the shift from military security to economic

security as the dominant national concern," Vest said earlier this week.

"We can't take for granted any more that people in Washington or

the public in general understand us for what we do," Suduiko said. If Congress proposes something and hears no protest, it can't be blamed for going through with a cut, he said.

Percent of Research Funding Supplied By the DoD

Office of the Provost	51%
School of Engineering	38%
Artificial Intelligence Laboratory	87%
Laboratory for Computer Science	77%
Ocean Engineering	58%
Electrical Engineering and Computer Science	38%
Civil Engineering	35%
Mechanical Engineering	17%
Aeronautics and Astronautics	14%
Materials Science and Engineering	10%
Chemical Engineering	6%
Nuclear Engineering	6%
School of Humanities, Arts, and Social Science	41%
Center for International Studies	100%
School of Architecture	17%
Media Lab	18%
Interdepartmental laboratories	13%
Sloan School of Management	5%
School of Science	4%
Physics	22%
Chemistry	12%
Mathematics	11%
Earth, Atmospheric, and Planetary Sciences	10%
Brain and Cognitive Science	6%
Biology	1%

TOTAL: \$61.6 million, or 17% of MIT's research funding

SOURCE: Office of Sponsored Programs

Despite early fears, Fernald tests posed little risk to subjects

By Jeremy Hylton

In late 1993, Energy Secretary Hazel O'Leary declassified thousands of documents about government-sponsored radiation experiments. Some of the documents shed new light on experiments conducted by researchers from MIT and Harvard University, in which children were exposed to radiation.

The experiments, conducted at the Walter E. Fernald State School

in Waltham, Mass., in the 1950s, used radioactive tracers to study the way the body absorbs calcium and iron. The Fernald School was officially a home for retarded children, though some of the residents at the time of the experiments were not retarded.

Shortly after the documents were declassified, President Charles M. Vest read of the Fernald School tests in a *Boston Globe* article and asked Professor of Physics J. David Litster PhD '65, vice president and

dean for research, to head an investigation of Institute records.

As Litster's investigation proceeded and negative publicity mounted, two primary concerns emerged: that the subjects had been exposed to high levels of radiation and that the children may have participated in the experiments without their parents' consent.

A state task force, headed by Rev. Doe West, and a special hearing of the Senate Committee on Labor and Human Resources, chaired by Sen. Edward M. Kennedy (D-Mass.), also investigated the experiments.

'No significant health effects'

After a four-month investigation, the state task force concluded that "no significant health effects were incurred by the research subjects as a direct result of the nutritional research studies."

The task force also worked with

Litster to identify which of the residents of the Fernald School had participated in the study.

Litster calculated the amount of radiation the youths at the Fernald School were exposed to based on the researchers' original data, which was published in several journal articles and a PhD thesis.

The highest exposure for any youth was 330 millirems, less than the yearly background radiation in Denver. The doses were all below the standards of the time, as well as today's more stringent standards.

However, the task force also concluded that the youths and their parents had not been informed that the children were being exposed to radioactive tracers.

"I was sorry to hear that at least some of the young people who participated in this research and their parents apparently were unaware that the study involved radioactive tracers," Vest said. Both he and Litster

emphasized that informed consent is required for all research performed now, and that much stronger safeguards and guidelines are in place.

"The procedure in those days was that the medical person who provided access to the patients was the one who was responsible for the informed consent process," Litster said.

The burden for the Fernald School experiments apparently fell on C. E. Benda, clinical director at the Fernald School and a professor at Harvard Medical School.

Study of nutritional processes

The research, supervised by the late Professor of Nutrition Robert S. Harris, investigated how the body absorbs iron and calcium, in both cases making significant scientific advances.

"They did learn some interesting things from these experiments," Lit-

Fernald, Page 11

18 In the past week there have been three reports of a man lurking in women's restrooms, in Buildings 4, 66, and 16.

22 MIT hosts the Russian National Women's Hockey Team in five exhibition games on March 22-25 as part of their training for the 1998 Winter Olympics.

29 MIT and Amgen, a biotechnology company, announce an agreement for a decade-long partnership.

April

2 The Office of the Dean for Undergraduate Education and Student Affairs sponsors a seminar called "Eliminating Racism."

4 The Undergraduate Academic Affairs office distributes a survey to seniors asking them to comment on their experiences at MIT, ranging from their impressions of student life to satisfaction with their majors.



Thomas R. Karlo
Institute Professor Emeritus Victor F. Weisskopf

7 David M. LaMacchia '95 is indicted on one count of conspiring to commit wire fraud for allegedly allowing the piracy of over \$1 million in business and entertainment software using Athena Computing Environment workstations. LaMacchia pleads not guilty.

8 Wrighton announces the transfer of \$1 million from the endowment to the Undergraduate Research Opportunities Program office in an effort to keep funding for summer UROPs close to last year's levels.

7 In observance of Holocaust Remembrance Day, MIT Hillel sponsors exhibits in Lobby 7 and a memorial service.

8 Professor of Civil and Environmental Engineering Robert D. Logcher '58, teaches Introduction to Computers and Engineering Problem Solving (1.00), is honored with the Big Screw Award.

9 A grocery shuttle for MIT students organized by the Graduate Student Council and sponsored by Laverde's Star Market begins operation this Saturday. The shuttle picks up students at several MIT locations for the 15-minute trip to the Medford store.

23 This year's Spring Concert features Belly, with Cold Water Flat as the opening act.

New overhead rules endanger UROP funding

By Ramy A. Arnaout

The Undergraduate Research Opportunities Program "has become the most powerful and distinctively MIT-like element in the undergraduate educational experience," said Dean for Undergraduate Academic Affairs Travis R. Merritt last February.

Unsettling changes in government regulations in the year since then have seriously threatened UROP's future, as the embattled program faced the most difficult funding period in its 25-year history, according to UROP Director Norma McGavern.

The crisis had its roots in 1993 changes to the federal guidelines that govern the overhead and employee benefits costs on university research. Historically, the government had allowed MIT to waive these costs, which include physical plant, library, administrative, and other indirect research expenses.

But a 1993 revision of an Office of Management and Budget document said that effective July 1, MIT could no longer waive these costs.

The change held dire consequences for undergraduates since 80 percent of them hold UROPs at some point during their academic careers. The new rules affect the salaries of most students who do UROP for pay — 76 percent of the 1,082 UROP students in fall 1993, according to the UROP office.

Because those students' salaries would now incur overhead and employee benefits costs — 58 percent and 43.5 percent, respectively — the change would effectively double the cost of hiring students for the last half of the summer, said Comptroller Philip J. Keohan.

Researchers would most likely hire only about half as many UROP students if they became twice as expensive, Merritt said last February.

The rule changes were intended to correct what the congressional

General Accounting Office called the "lax oversight practices" of agencies supervising research activities and monitoring indirect costs.

"UROP is inadvertently caught in these revisions," McGavern said. The program "was by no means singled out. If you look at the language of the document, you would be hard-pressed to fit that language to UROP," she said.

But solving the problem is "not that easy," McGavern continued. "Just because something is inadvertently caught, it's not like saying [to the government], 'Excuse me, please, could you please move your foot?'" would fix things, she said.

Part of the problem is the way the revised regulation treats UROP. "In the document, UROP looks like a research project" instead of an educational one, McGavern said, despite what many people see as the program's underlying educational merit. But the distinction between research and education is not entirely clear, since some people consider UROP to be a little bit of both.

MIT mobilizes in spring

The funding crunch was expected to be especially difficult over the summer, when more students turn to UROP for pay instead of credit, McGavern said.

In response to the threat the new regulations posed for summer funding, Provost Mark S. Wrighton appointed a working group to explore possible solutions to the funding crunch. Wrighton's group was only one of several efforts community members undertook to defend UROP this past spring.

Anne S. Tsao '94, then vice president of the Undergraduate Association, distributed packets to students that described the problems facing UROP. The packets also suggested that students write to their senators and representatives asking them to help save UROP. In a separate lobbying effort in April, three students traveled to Washington, D.C. to meet with government offi-

cials to seek a solution to the crisis.

Locally, students and faculty discussed a number of options for restoring the lost funding in a forum sponsored by the Undergraduate Association on Feb. 14. One solution, dedication of \$2 million of the Institute's general operating budget to cover UROP's expected overhead costs, would be a "very difficult possibility," said Wrighton, who was the featured speaker at the event.

Another option, taking the \$2 million from MIT's endowment, would present even graver problems, Wrighton said: Since only about four-and-a-half cents on every dollar of endowment can actually be spent on projects, a \$50 million endowment increase would be needed to cover the UROP bill, he said.

The gravity of the summer funding situation evoked apprehension from faculty and students.

The new rules "will have far-reaching and very unpleasant consequences for both faculty and students," said Professor of Physics Walter H. Lewin in a letter to the *Faculty Newsletter* in the spring.

"I can no longer justify in my grants the hiring of an undergraduate student," Lewin said. He offered this economic argument that two UROP students would cost as much as one graduate student, but would produce less.

\$1 million saves summer UROPs

A \$1 million infusion from the provost's office last April to keep funding for summer UROPs close to 1993 levels met with widespread relief. The contribution came from funds that function as an endowment "that [has been] set aside to deal with abrupt changes in funding from research sponsors," Wrighton said.

"I'm delighted," said James L. Elliot, professor of earth, atmospheric, and planetary sciences and a member of the working group, at news of the contribution. "We certainly needed something as an emergency measure so that the summer UROP wouldn't be devastated."

In another successful effort, Keohan prepared MIT's 1995 employee benefit package with a UROP benefit category that "would include only the benefits that the students actually get: Social Security

(when not registered), Medicare, and workman's compensation," according to a May memorandum to Wrighton from the UROP working group.

The final benefits rate for the summer after the changes was 6.5 percent, down from the 43.5 percent benefit rate initially required by the

funding to the recurring budget of the UROP Office."

Without the additional funding, however, UROP participation did suffer some from the effects of the revised regulations. The number of paid UROP students fell 38 percent, from 827 to 515, compared to the fall 1993 term, McGavern said.

While more students turned to credit — the number of credit students rose 15 percent to 293 — the total number of people with UROPs fell by 25 percent, from 1,082 to 808.

The drop was anticipated, McGavern said. Her concern now centers on how UROP will fare next summer, when the office will again be swamped with students looking to take UROPs for pay.

Outlook still unclear

The government's changes and UROP's difficulty in responding to it "are not good portents for the future," McGavern said.

The program is taking steps to assure a strong funding base for the near future. This year, "UROP was the star of an alumni fund drive which has resulted in getting us \$100,000 for UROP endowment," McGavern said, although she noted that only about four cents on the dollar can be used for funding.

UROP also received a number of monetary gifts throughout the year. "We hope that will continue," McGavern said.

But government funding is still important to UROP, which receives part of its \$800,000 annual funding from the government.

Whatever happens in the government "all filters down to MIT" and then on to UROP, said administrator Debbie H. Shoap.

"It is clear that UROP will survive, something that was not obvious last spring," McGavern wrote in the *Faculty Newsletter*. "UROP still fits MIT students and faculty better than just about anything else students and faculty do together."

"What makes this struggle especially poignant right now is the fact that it was exactly 25 years ago, in the fall of 1969, that UROP began," through the vision of its founder the late Margaret L. A. MacVicar '65, former dean for undergraduate education, McGavern wrote.

UROP has become the most distinctively MIT-like element in the undergraduate educational experience.

Travis R. Merritt

government, McGavern said. In a lesser development, the overhead rate fell slightly to 52 percent, instead of the projected 55 percent, McGavern said.

All told, the combination of the infusion, the benefit rate reduction, and understanding by faculty mentors was able to keep summer involvement near 1993 levels, according to the UROP office.

However, these events did not prove to be a cure-all for UROP. The summer's financial strain forced the office to allocate a significant portion of its fall budget to meet summer demand, according to an office memo. While students' funding requests topped \$1.3 million, UROP had only \$400,000 to distribute.

"We must now begin to secure the resources needed to maintain UROP in the period beyond the summer of 1994," said Wrighton after the April announcement of the \$1 million infusion. "Unfortunately, the resources of the Institute are not sufficient to simply add the needed



Thomas R. Karlo
Mark S. Wrighton

Institute investigates impact of Fernald radiation trials

Fernald, from Page 10

ster said. "Certainly the calcium experiments laid the groundwork for all kinds of follow-up studies involving calcium, metabolism, and

trying to understand osteoporosis."

In three different calcium studies, each of the subjects was given two breakfasts of oatmeal or farina containing 0.85 microcuries of calcium-45. The doses amounted to

exposure of between 4 and 12 millirems, depending on the body weight of the subjects.

Radiation exposure is measured by in units of rem, equivalent to one rad applied uniformly to the whole body. One rad equals one erg of energy per one gram of matter.

In the third experiment, the subjects also received a direct injection of calcium tracer. The first calcium study involved 45 youths, the second 17, and the third one had nine

subjects.

In the iron studies, a small amount of radioactive iron was introduced in breakfast cereals. The study exposed the 17 youths involved to higher levels of radiation, ranging from 170 to 330 millirems, according to Litster's calculations.

Current government standards allow a 500 millirem yearly exposure to radiation for minors working with radiation, and a 5,000 millirem yearly exposure limit for adults.

The radiation exposure in the calcium experiments was roughly equivalent to the exposure received during a flight from Boston to California (10 millirems). The exposure in the iron studies was similar to the yearly exposure a person receives from natural sources.

The equivalent increase in the risk of fatal cancer would be about 1 in 2,000 as the result of a 330 millirem exposure. The normal lifetime risk of contracting fatal cancer is 1 in 5.

24 Vice President of MIT and Secretary of the Corporation Constantine B. Simonides '57 dies while playing tennis, apparently of a heart attack.



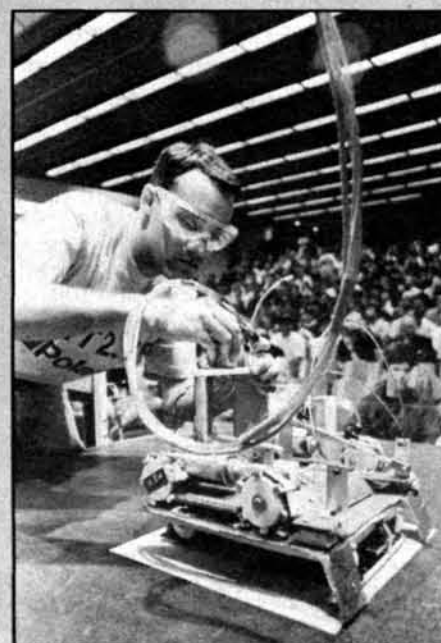
Thomas R. Karlo
Belly's performance was part of the 1994 Spring Weekend festivities.

27 The deadline to submit summer Undergraduate Research Opportunities Program proposals is extended until today. The deadline extension will give faculty and students more time to compile proposals in light of the recent \$1 million cash infusion to the program from the provost.

27 At the April faculty meeting, the Killian Award is presented to Professor of Music John H. Harbison and the Harold E. Edgerton Award to Associate Professor of Electrical Engineering and Computer Science Martha L. Gray PhD '86.

May

4 David S. Cuthbert G, Kristala L. Jones '94, Anand Mehta G, Mark Y. D. Wang G, and *The Tech* receive Karl Taylor Compton Prizes at the 1994 Awards Convocation. The Compton Prizes are presented "in recognition of outstanding contributions in promoting high standards of achievement and good citizenship within the MIT community."



Thomas R. Karlo
Dave Das '96 prepares his machine for the 2.70 competition.

IFC and GAMIT, BSU and PBE look for resolution

By Stacey E. Blau

A conciliatory attitude on the part of different student groups brought about resolutions to difficult and long-running conflicts this year. While some tensions still continue between the Interfraternity Council and Gays, Lesbians, Bisexuals, Transgenders, and Friends at MIT, and between the Black Students' Union and the Phi Beta Epsilon fraternity, efforts to work together to achieve resolution have opened communication and eased difficulties.

During the fall, problems arose between the IFC and GAMIT, but a series of meetings at the end of September helped to ease tensions. "We established really good lines of communication," said GAMIT Political Coordinator Joaquin S. Terrones '97. "GAMIT and the IFC never really had communicated before," he said.

"There's no agenda that we've settled on," but opening communication between the groups was important, said IFC Judicial Committee Chair Daniel J. Dunn '94.

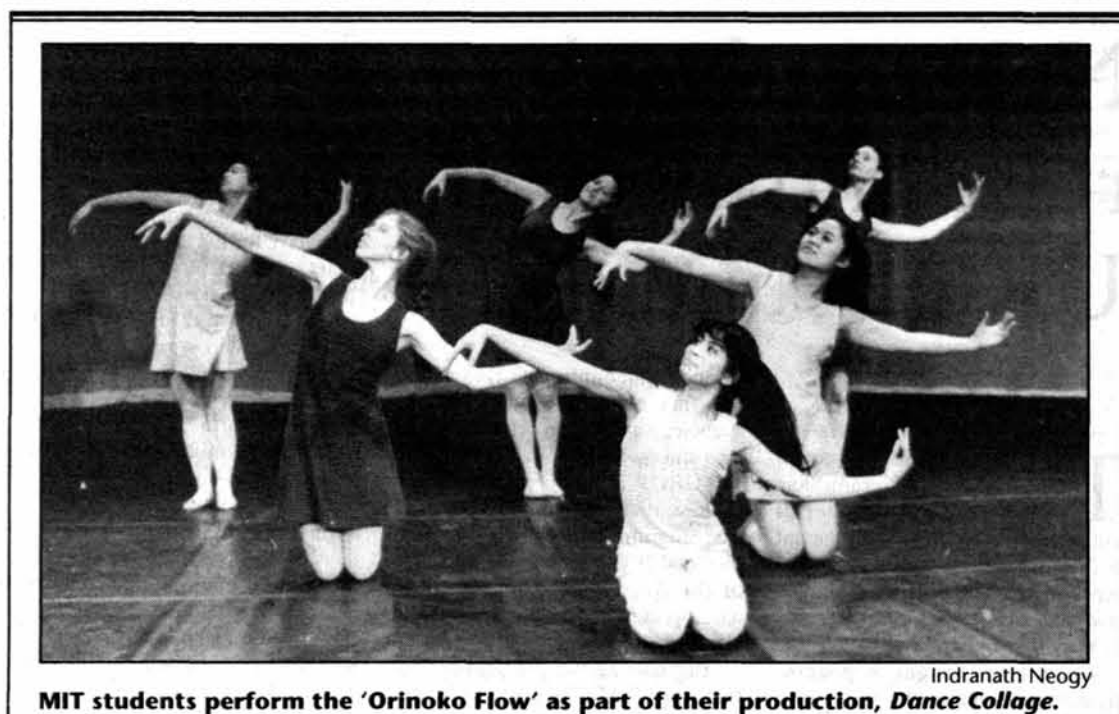
Problems between the two groups arose during Greek Week in September, when the IFC objected to GAMIT's display in an Infinite Corridor display case. GAMIT posted a list of homophobic incidents in the Greek system at MIT over the last 15 years.

The posters were "a slap in the face," particularly because of the timing during Greek Week, Dunn said.

The IFC has been very proactive in response to homophobia within the Greek system, Dunn said, following a November 1993 incident in which members of Lambda Chi Alpha spray-painted a homophobic slur in front of the Tau Epsilon Phi fraternity house. Following the incident, the IFC and GAMIT cosponsored a talk by gay activist and author Warren J. Blumenfeld in the spring.

The IFC also sponsored a diversity program during Residence and Orientation Week by comedian Karen Williams.

"We might get together to bring in a speaker," Dunn said. But interaction between the IFC and GAMIT is "not particularly substantive at



MIT students perform the 'Orinoko Flow' as part of their production, *Dance Collage*.

the moment," he said. "We're talking a lot but not doing much."

PBE, BSU release statement

PBE and the BSU reached a resolution to their long-running controversy with the publication of a joint statement in *The Tech* on May 6. Several black students alleged that on Mar. 13, 1993, members of PBE "screamed racial epithets that are demeaning to black people on this campus and throughout the world," according to the statement.

The Committee on Discipline eventually concluded that racial epithets had been shouted but that there was not sufficient evidence to impli-

cate the students charged.

"I think there was a mutual understanding ... that the details of this would never be resolved," said PBE President Joseph A. Veys '95. "We needed to put that behind us."

"We both agreed to disagree on the matter," said Tommie A. Henderson '95, a member of the BSU. "We don't fully agree that each [side] is truly telling the truth about what happened that night. We can deal with each other, but that's as far as it can go."

Henderson criticized the administration for its handling of the charges. The administration's "one concern is that a situation is over,"

Henderson said. "They don't care if things are going well. They just care if things are taken care of."

The BSU and PBE had agreed to work jointly on community service projects, but those plans "have not come to fruition yet," Henderson said.

PBE has "incorporated a lot of things into our pledge training on race relations," Veys said. Pledges were required to read *Race Matters* by Cornel West, a leading scholar in African American studies, and write essays on the book.

"I think we did focus on making the best of the situation," Veys said.

New \$70 million bio building opens

By Eva Moy

The biology department's new 250,000-square foot, \$70 million building — known only as Building 68 — officially opened Oct. 7. The biology building brought together faculty and researchers that were spread across Buildings 16 and 56.

"It's a spectacular modern research building for biological science," said Professor Phillip A. Sharp, head of the biology department. "There have been many faculty who have told me how the movement in the building ... has benefitted their research program."

The new teaching laboratories in the basement of the building also helped relieve overcrowding in laboratory classes, Sharp said. The number of students majoring in biology has doubled in the past two years, he added.

Building 68 has "beautiful sunny labs for people who spend most of

their days and nights working," Sharp said.

"It's a beautiful, interesting building," he said. The entryway features a large mural and a solid floor-to-ceiling column that has been molded and painted to resemble the trunk of a tree.

Although the building was originally scheduled to open in December 1993, staff and faculty did not start moving in until last May. However, some laboratory facilities and details such as landscaping were still not complete at the time of the dedication.

The physical design of Building 68 took advantage of bright natural lighting and large spacious areas, encouraging interaction between laboratories in research and social settings.

Also, the Bio Cafe on the first floor and two tea rooms on every floor with basic kitchen facilities are "essential to the building since eating is not allowed in the laboratories," said Francis A. Lawton, project manager for the building.



Building 68, the new biology building, nears completion last fall.

Helen M. Lin

6 Phi Beta Epsilon and the Black Students' Union release a joint statement discussing the tensions and issues brought up by an incident in March 1993 when four black students said they heard racial epithets shouted from a PBE window. Tommie Henderson '95, a BSU member, said he hoped the statement would convey the message that "the two organizations have come to a point where we feel that the most fruitful thing for us to do is move on."



On May 10, onlookers caught a rare glimpse of a partial solar eclipse.

Thomas R. Karlo

9 After meeting for four months, the Task Force on Human Subject Research announces its conclusion that the subjects in radiation experiments done by MIT and Harvard University researchers in the early 1950s were not exposed to dangerous levels of radiation. These nutrition experiments using radiation were first made public in late 1993 when Energy Secretary Hazel O'Leary declassified thousands of government documents about radiation and radiation testing.

11 Sterwave — a new technology for the sterilization of laboratory, medical, and food products — wins the top spot and \$10,000 in the Fifth Annual MIT \$10K Entrepreneurial Competition. The team consists of Jason T. Chen '94, Alberto Haddad G, Owen Hughes '86, Robert W. Lewis G, Khinlei Myint-U G, Peter Y. Nuytkens G, Suzanne C. Oakley G, and Srikar Srinath '94

Students save Baker dining hall, start Safe Walk

By David D. Hsu

Although student activism is not as prominent as it used to be at the Institute, the last year was highlighted by student initiatives to improve student life. Concerned students worked to increase convenience and safety with projects ranging from rescuing the Baker House dining hall to creating a student escort service.

Over the past few years, several dormitory-dining halls were closed because of declining revenues. Last March, Baker House residents and Aramark worked to save the Baker dining hall from the same fate. Responding to results from a Baker Dining Committee survey, the menu was changed to include all-you-can-eat meals on Tuesdays and extended dinner hours.

Still, Baker continued to lose an average of \$10,000 a month, forcing MIT to decide to stop subsidizing the loss. To save the facility, Baker residents decided to run the dining hall themselves, according to Albert L. Hsu '95, chair of the Baker Dining Committee.

While Aramark has control of the facility, students have considerable freedom of management, Hsu said. A new chef manager and cook were hired, and offerings were changed to reflect students' wishes.

Baker is currently losing only \$10,000 a term, and the dining hall is scheduled to stay open during February, Hsu said. Baker is negotiating to continue operating the din-

ing hall through the entire term, he said.

"Our sales are constantly improving," Hsu said, "but we're still trying to get the word out."

Reopenings benefit east residents

After five months of delays, Pritchett Snack Bar reopened in the Walker Memorial yesterday. Aramark decided to renovate Pritchett last summer after students protested its closure in September 1993, according to East Campus President Parag Gupta '96.

Pritchett will provide both a 50s style diner and a convenience store open late hours, according to Robert McBurney, district manager for Aramark.

Despite the delays in the opening, Pritchett "gives us a late night

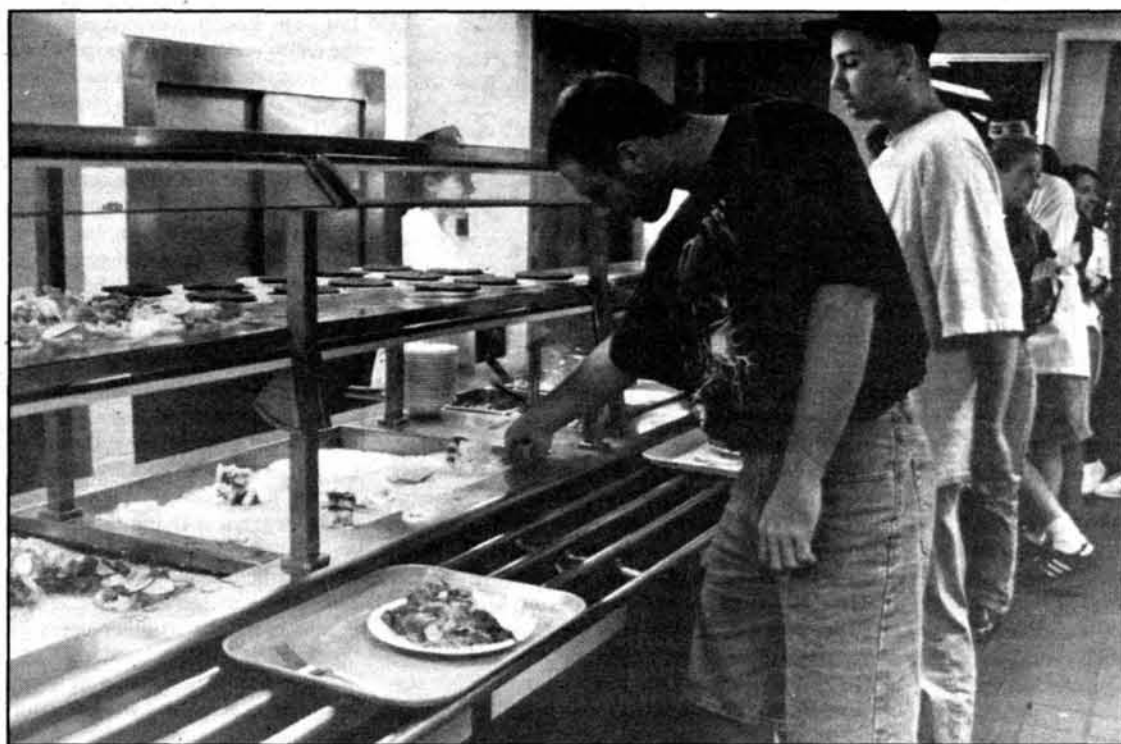
Our sales are constantly improving, but we're still trying to get the word out.

Albert L. Hsu '95

food option," Gupta said. "We're all glad that it's finally opening."

The reopening of the Walker Memorial gymnasium in September also improved life for east campus residents.

Walker gym was closed in 1993 to prevent non-MIT residents from using the facility, said Director of the Campus Activities Complex Phillip J. Walsh. Concern that the floor might be unsafe due to the age of the building also affected the closing, he said.



Sharon N. Young-Pong

Students line up on Baker dining hall's opening day.

After students pushed for the gym to reopen, administrators and students participated in a series of summer meetings about reopening the facility, Gupta said.

The CAC responded to student requests and refinished the floor, Walsh said.

New arrangements for gym use provide for greater safety, Walsh said. Groups who want to use the gym must reserve a time with student supervisors, he said. In addition, a student will oversee the gym during open hours, he said.

Students create new programs

As a supplement to the Safe Ride vans, the Safe Walk escort service was started last February. Safe Walk was founded by Kenneth M. Porter '96 and Susan L. Ipri G in reaction to the increase in crime on campus, Porter said.

Safe Walk is a student service that escorts students anywhere on campus, but not to off-campus loca-

tions, Porter said. It provides students with a safe means of getting to areas on campus not covered by Safe Ride, he said.

The emphasis is on "safety in numbers" and the knowledge that the escorts have a direct radio link to the Campus Police, Ipri said.

In September, Safe Walk Assistant Manager James O. Dobbins '96 said that students have not actively used the program. "Without students taking advantage of the service, we may lose our value then our funding," he said. "Safe Walk contributes too much to campus security to let it die."

Safe Walk now escorts about six people a night, Dobbins said. The program will definitely continue through the spring term, he said. "We're making a big push to get people to use the service," he said.

The Source, grocery shuttle debut

The Class of 1994 created another new service for the MIT community with its senior gift: The Source, an expanded information desk on the first floor of the Student

Center, opened on Aug. 23.

The Source provides a range of services for students and visitors. The student staff answers questions, provides information about goings-on at MIT, and sells copies of various publications and tickets to on-campus events.

The Class of 1994 pledged \$30,000 to be collected over a five-year period, to pay for construction of the Source's booth. Payment from the vendors who use the first floor of the Student Center will support the operating costs, said Ted E. Johnson, assistant director for programs in the CAC.

David S. Cuthbert G and the Graduate Student Council organized a grocery shuttle to LaVerde's Star Market in Medford in the spring. Frank LaVerde, the owner of the Star Market and LaVerde's Market in the Student Center, sponsored the shuttle.

Although the spring shuttle was terminated due to lack of interest, the GSC resurrected it in October. The shuttle picks up students at several MIT locations at various times every Saturday.

Former researcher punished for fraud

By Daniel C. Stevenson

When a federal agency found a researcher formerly associated with MIT guilty of 19 charges of scientific misconduct, it was only the latest development in a 10-year-old controversy surrounding former Assistant Professor of Biology Thereza Imanishi-Kari.

Imanishi-Kari "deliberately falsified research and then covered up her initial scientific misconduct with additional falsifications when the original data were challenged," according to a statement released by the Department of Health and Human Services.

Imanishi-Kari was charged with fabricating data used in a paper published in the April 25, 1986 issue of *Cell*, in a letter of correction pub-

lished in *Cell* soon after, and in two grant applications to the National Institutes of Health.

At the time of the work in question, Imanishi-Kari was working under Professor of Biology David Baltimore '61 at the Center for Cancer Research. Baltimore left MIT to become president of Rockefeller University, and returned to the Institute last spring.

Baltimore stepped down from the Rockefeller presidency after the NIH released a report in 1991 concluding Imanishi-Kari's data had been faked. Many observers believed that the controversy forced him to resign from the position.

Baltimore, a Nobel laureate, was one of the paper's co-authors and

had staunchly defended the paper since its publication. However, he and the other co-authors retracted the paper in the spring of 1991, when the NIH concluded that the data had been falsified.

Baltimore was not accused of fraud himself, but has been criticized for not reviewing the case. In the 1991 NIH report, investigators called his continued defense of the article "extraordinary" and "difficult to comprehend."

In an interview last December, Baltimore said he did not believe that "Imanishi-Kari actually did the things that are charged in the report."

The *Cell* article reported experiments on laboratory mice that seemed to indicate that the introduc-

tion of foreign genes into an animal could lead to the expression of related genes within the animal, a topic which the biology community is still debating.

With the current charges, Imanishi-Kari may not receive federal grants or contract money, or participate in cooperative agreements, for 10 years. She has appealed the decision.

Federal funding pays for about 93 percent of the biology research done at the Institute, said Professor of Biology Phillip A. Sharp, the department head.

By not allowing her to perform federally-funded work, the NIH would be excluding Imanishi-Kari "from doing significant, skilled research," Sharp said.

16 A lawsuit against the Institute and several deans by a former graduate student comes to trial. Jeffrey W. Buckholz, a former graduate student in civil engineering, was expelled from MIT in April 1985 as the result of a fist fight. Buckholz contends that he received an unfair disciplinary hearing.

24 MIT issues a new, free version of the popular data encryption program PGP, which stands for "pretty good privacy," resolving a potential patent conflict between an older version of PGP and patents held by MIT and Stanford University for the RSA data encryption algorithm used by PGP.

24 Former graduate student Jeffrey W. Buckholz's nine-year-long lawsuit against the Institute and several administration officials ends when the Middlesex Superior Court rules in MIT's favor. Buckholz, who was about six months away from receiving his PhD, was expelled in 1985 after a fight with another student.

27 About 1,700 students will receive some 2,000 degrees at MIT's 128th Commencement exercises today in Killian Court. The Aga Khan, spiritual leader of the Shia Ismaili Muslims, delivers the Commencement address.



The Aga Khan

News Office

June

1 As part of an administrative realignment following the death of Vice President and Secretary of the Corporation Constant B. Simonides '57, Director of Personnel Joan F. Rice was promoted to vice president for human resources and Director of Foundation Relations and Development Services and Barbara G. Stowe to vice president for resource development. Executive Assistant to the President and Director of Public Relations Services Kathryn A. Willmore is expected to be elected secretary and ex officio member of the Corporation this morning.

MITnet extends to dorms, ILGs; poses security risk

By Ifung Lu

Last year heralded in a great expansion in MIT's growing electronic network with the introduction of MITnet into undergraduate dormitories, independent living groups, and graduate dormitories.

The dormitory network has provided students with greater convenience — bringing the Internet directly into their rooms and onto their personal computers — but it has also raised security and privacy issues that Information Systems has been working to address.

With a connection to the Resnet extension of MITnet, personal computer users can access news, mail,

and general information archives anywhere on the global Internet. Applications such as Techmail, Gopher, Mosaic, and Zephyr allow students to use many of the features available from the Athena Computing Environment.

"Resnet is intended to extend the network to the residences," Resnet Support Coordinator Michael L. Barrow '93 said last year. "Students will get access to files, and will be able to communicate with other students around the world."

Started in the summer of 1993 by Information Systems, the Resnet project initially connected only the off-campus independent living groups and Huntington Hall to MITnet. However, with the completion of the second phase of the project

last year, Resnet provided access to the entire undergraduate population.

Graduate students received network connections after a request by the Graduate Student Council for the timely installation of network services in graduate dormitories.

Currently, Ashdown House, Edgerton House, Green Hall, and Tang Hall have been connected, and Eastgate and Westgate will be coming on-line during the next academic year.

Convenience brings problems

Security problems on a large, public network, such as the MITnet, had always been present. However, the expansion of the network into the largely uncontrolled dormitories and independent living group environment raised security concerns.

In particular, in this type of environment, users can eavesdrop on the communications of other users by "packet sniffing."

Because of the method in which information is relayed within a computer network, packet sniffing programs, which are legitimately used for network diagnostics, can be used to read data sent to and from other users, Barrow said. The security of any information that travels over the network, including files, electronic

mail, and zephyrgrams, can be compromised.

"Packet sniffing is a potential problem on any of MIT's existing networks as well as virtually all networks other than those explicitly designed for secure communications," said Professor of Civil and Environmental Engineering Steven R. Lerman '72, chair of the Academic Computing Council and former director of Project Athena.

The most recent attack on the MIT network involved the unauthorized interception of over 600 usernames and passwords during a two-day period in November.

The attackers had used a custom program to capture names and passwords of users accessing remote computers, including Athena dialup machines, from any computer on a part of MITnet covering Buildings 1, 3, 5, and 7.

Users who logged into Athena workstations may not have been affected because of the security features on the Kerberos authentication system. But programs like telnet, ftp, and rlogin were susceptible to the attacks, according to Thomas J. Coppeto '89, systems programmer for the Distributed Computing and Network Services division of IS

Information Systems has taken steps to address the security issues of MITnet, said Joanne Costello, manager of network support services for DCNS.

A secure telnet program, known as Kerberized telnet, is available for Macintosh computers and Athena workstations, Costello said. This new program encrypts the user's password when it is initially sent over the network. Any data sent over such a connection is also encrypted.

In addition, MIT released a new, free version of the popular encryption program PGP (for "pretty good privacy") last May. The release cleared up confusion over use of the program, which is protected by patents held by MIT and Stanford University.

PGP allows users to produce a digital signature to authenticate e-mail and other information exchanged on the Internet. In addition, users can encrypt the information itself so that only the intended recipient can have access.

"PGP is a high-security cryptographic software application which allows people to exchange files or messages with both privacy and authentication," Costello said.

Institute strives to comply with 1990 disabilities act

By Sarah Y. Keightley

Last spring, a letter from the Undergraduate Association Vice president drew attention to the Institute's lack of compliance with the 1990 Americans with Disabilities Act.

Since then, an *ad hoc* committee was formed to examine the issue, the administration is in the process of selecting a disabilities services coordinator, and thousands of dollars have been spent to modify campus buildings to comply with the act.

"MIT is supposed to provide services and an environment for disabled students that are conducive to one's educational pursuits," wrote Anne S. Tsao '94, the former UA vice president, in a letter to Senior Vice President William R. Dickson '56.

Tsao said that three projects to "improve disabilities services and awareness on campus" were necessary: building modifications, community awareness, and providing a federally-mandated coordinator.

In the fall, Director of Special Services Stephen D. Immerman formed an *ad hoc* committee to design and implement a strategy to improve MIT's services for disabled

people, according to John R. Squillante, an assistant in Immerman's office. The committee is working specifically to comply with ADA provisions.

The committee will probably recommend the formation of an Institute oversight committee to be responsible for all disabilities-related priorities, Immerman said.

Hiring a coordinator

The committee also developed a job description for a disabilities services coordinator, Immerman said.

One of the principal requirements of the ADA is the creation of a Section 504 coordinator, a person "intended by the federal government to be a central person that could aid disabled students and personnel via counseling, referrals, and advocacy," Tsao said.

A search committee to fill the coordinator position was created, and final interviews were held recently, Immerman said. Vice President for Human Resources Joan F. Rice must consider the committee's recommendation, he said.

"We expect the coordinator to be significantly involved in student issues," Immerman said.

Tsao's letter raised confusion over who was serving as the Institute's disabilities services coordinator.

Squillante initially said he believed that Associate Planning Officer Michael K. Owu was the Section 504 coordinator. When asked, however, Owu said that the late Vice President Constantine B. Simonides '57 held the position. Squillante later said that Immerman believed Simonides was the coordinator.

Facilities made more accessible

The formation of the *ad hoc* committee came at a time of intense activity with regard to physical modifications of buildings and facilities on campus, said ADA Projects Coordinator for Physical Plant Roy E. Ward.

During the summer, \$600,000 was spent on the main group of buildings alone, for the new ramp in Building 14, eight new elevator cabs, entrance modifications, and telephone booth and bathroom modifications.

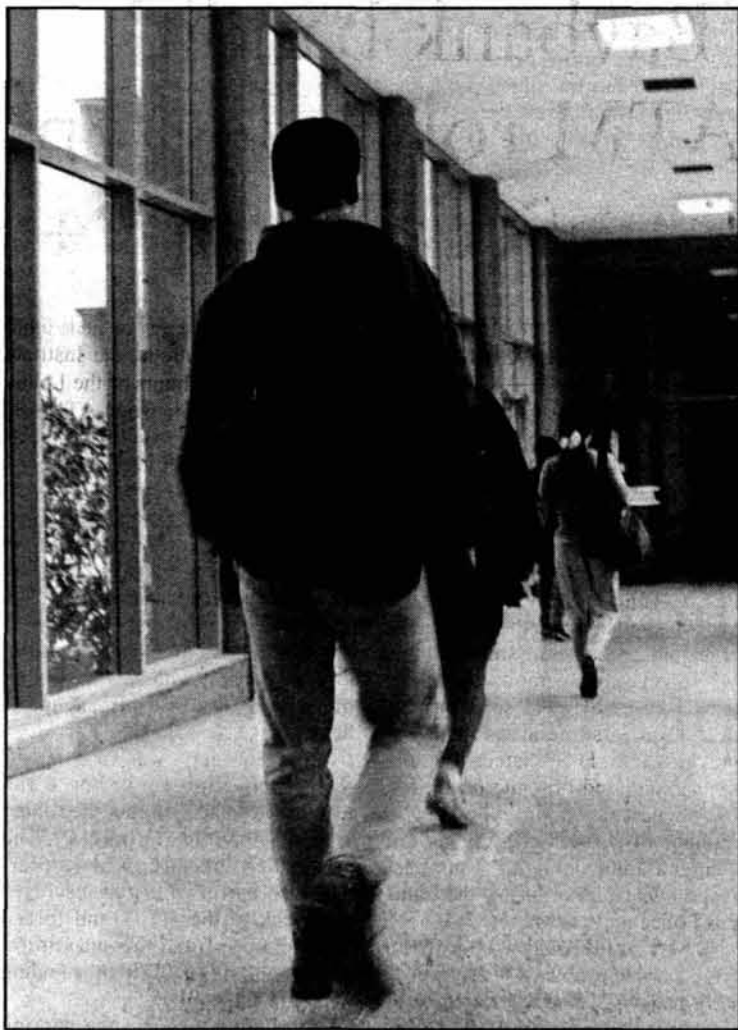
The summer spending was part of slightly more than \$1.33 million already committed to construction projects since the ADA went into effect, Ward said. In total, "MIT has allocated a little over \$2 million," Ward said, with the remaining funds yet to be committed to specific projects.

In October, the Institute was "in the process of replacing the door hardware on all of the entry doors to Athena [Computing Environment] clusters and administrative offices" in high traffic areas in the main group of buildings, Ward wrote in a Physical Plant document. The changes include "replacing knob hardware with lever hardware, providing door closers with reduced resistance to allow easier opening, and lowering the computer keyboards to a height accessible to a person in a wheelchair," Ward said.

The recent and upcoming building and facility improvements represent a historically significant effort, Ward said. "Each individual element is not large, but when you put them all together the impact on accessibility from where I'm sitting

seems to be quite significant."

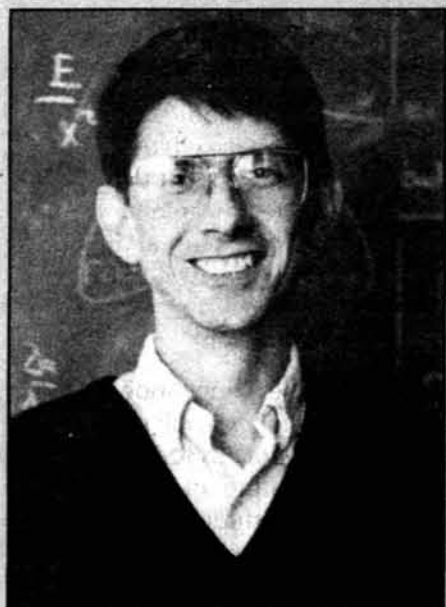
Another major disabilities services-related project Immerman is involved with is "working with Michael Owu designing a barrier removal program for the entire campus," Squillante said.



Helen M. Lin

Students walk down the new ramp corridor built between Building 2 and Building 14 in compliance with the ADA.

8 Professor of Earth, Atmospheric, and Planetary Sciences Jack Wisdom is named one of 20 MacArthur Prize Fellows, the 10th person connected with MIT to be named a fellow. Through the John D. and Catherine T. MacArthur Foundation, Wisdom will be awarded a \$260,000 grant over the next five years for his work on applying methods of chaos to problems in the solar system.



MIT News Office

Professor Jack Wisdom

21 The city of Cambridge presents a proposal to create two bicycle lanes along sections of Massachusetts Avenue, with one of the lanes replacing between 20 to 29 parking spaces along the Student Center side of the street. At the hearing, the MIT Planning Office voiced its opposition to the plan, saying it does not adequately address pedestrian safety.

22 Julius A. Stratton '23, who served as MIT's 11th president from 1959 to 1966, dies of pneumonia at the age of 93. He was an internationally-known scientist who distinguished himself as both an educator and an administrator. Stratton had been associated with MIT since his undergraduate years at the Institute.

28 Traci L. Williams '95, editor of the 26th edition of HowToGAMIT, sends out an electronic mail message asking for help in publishing this year's guide, saying that there is a good chance the guide will not be published this year or ever again. Williams receives several positive responses, the book is revised, and 3,500 copies are published.

MITES dispute attracts national media attention

By Stacey E. Blau

The experiences of a Washington D.C. high school senior at an MIT summer program for minority students attracted national media attention over a controversy with racial overtones.

Cedric Jennings, a black resident of a poor and drug-ridden section of the nation's capital, attended the Minority Introduction to Engineering and Science program last summer.

MITES is a rigorous program that crams into six weeks what most MIT freshmen go through in one semester. Students take classes in calculus, chemistry, physics, robotics, and writing.

The controversy centered on a conversation between Leon Trilling, a professor emeritus of aeronautics and astronautics and academic adviser to the program, and Jennings. Trilling met with Jennings

and other students at the end of the program to advise them about college plans. Trilling told Jennings that his chances of admission to MIT were not good, and he should consider applying elsewhere, Trilling said.

Jennings claimed that Trilling's remarks were racist, and one of several articles in *The Wall Street Journal* suggested that MITES catered to minority students who come from affluent families, prompting a response from President Charles M. Vest. Jennings' life and experiences at the MITES program were also chronicled on the Oct. 6 ABC television news show *Nightline*.

Program specifically for minorities

The MITES program is "designed specifically for and open exclusively to minority students" who are going to be high school seniors, Trilling said. About 50 students participate in the program each year, he said.

Applicants are picked on the basis of good Scholastic Aptitude Test scores or good transcripts, according to William H. Ramsey '51, the former director of MITES. Ramsey died last month of a heart attack at the age of 67.

Between one third and one half of each MITES class goes on to enter MIT the following year, Ramsey said.

Jennings' admission was partly influenced by the publicity generated by the first article printed in *The Wall Street Journal*, according to Trilling. Jennings "was a marginal applicant," he said.

"With some hesitation, we accepted him. He was far and away the best student in a not-very-good high school," Trilling said. "His SAT scores were low," he said, explaining that Jennings scored a 910 out of possible 1600 on the SAT.

Ramsey, however, said that Jennings was accepted "before the first [*Wall Street Journal*] article."

Academically, Jennings "had his struggles," Ramsey said. "His expectations were very high, and he discovered that it wasn't as easy as he thought it might be."

During the fifth week of the program, Trilling met with students individually for "20 minutes of conversation" to discuss their performance in the program, he said.

Jennings "was so focused on coming to MIT," Trilling said. "I

had the option of encouraging him" but chose to "warn him that his chances of admission were not very good," he said.

Jennings didn't expect warning

"I didn't expect him to say what he was going to say," Jennings said. "He told me, 'Your records aren't good enough. Your college boards aren't good enough.'" Jennings said. "I was angry."

Jennings said that there were racist overtones in Trilling's statements, but Trilling called the charge unreasonable. "All the other students were also minority members, and none of them reacted in this way," Trilling said.

"MIT is a competitive, performance-oriented institute," he said. Prospective candidates must "give some evidence that they can hack it. The performance of Mr. Jennings did not give us that sense."

"If I meant to put him down, I would have had a perfunctory interview," Trilling said. "I tried as honestly as I could" to advise Jennings about his chances, Trilling said. "The objective was probably the right one. The execution turned out to be inadequate."

Vest wrote a letter to *The Wall Street Journal* in response to the newspaper's Sept. 22 article. "Professor Trilling has told me how sorry he is about the hurt and misunderstanding generated by his conversation with Cedric," Vest wrote.

"Acceptance to the MITES program does not mean that a student will be admitted to MIT," Vest wrote. "MIT will continue to seek out the Cedric Jenningses of America in our effort to bring talented minority students into the nation's colleges and universities."

Jennings goes to Brown

"I don't accept Professor Trilling's apology," Jennings said. "I don't think that he should be the academic adviser [of MITES] for next year."

The program "should be more geared towards people who are in disadvantaged environments," Jennings said. "The city schools are overlooked," he said. "There should be more focus on those who really need [MITES]."

After MITES ended, Jennings changed his opinions about the colleges to which he was planning to apply. MIT was no longer his first choice. Jennings applied early to Brown University and was admitted in December.

Jennings plans to major in mathematics and minor in computer science and receive teaching certification. His experiences at the MITES program and his conversation with Trilling "are not important. I don't think about it anymore," Jennings said.

"I didn't even apply to MIT," he said.

'Baybank bandit' ATM robberies top list of crimes in '94

By Shang-Lin Chuang

Crime has always been a major concern for the MIT community. The Institute is situated "in a densely populated urban area in which some of the crimes are bound to overlap into the campus area," according to Chief of Campus Police Anne P. Glavin. "To think that we can eliminate them altogether is quite unrealistic," she said.

However, on-campus crime for the first part of 1994 substantially decreased in some areas from the previous year. Fewer larcenies, calls for service, and obscene or annoying phone calls were reported. The number of serious crimes has not changed appreciably over the past several years, according to the Campus Police mid-year report.

Theft, traditionally one of the largest crime problems, was particularly bad this fall due to a spate of robberies at automated teller machines. In response to the ATM robberies, which were situated on

the fringes of campus or near independent living groups, the Institute has extended the hours of the Lobby 10 Baybank and Shawmut ATMs.

Three robbed by bandit

Eric D. Kupferberg G was robbed at gunpoint on Sept. 23 at a Baybank ATM at 226 Main St. in Kendall Square. After making his transaction, Kupferberg exited the lobby to the right and headed into the isolated Sloan School parking lot. The robber, who was waiting in the lobby, followed him, Kupferberg said.

"I knew that I was in danger," Kupferberg said. He began to run toward Building E56, but the robber "ran and caught up quickly," he said. The robber showed Kupferberg the barrel of a gun, escorted him back to the ATM, and forced him to withdraw the maximum withdrawal limit of \$500 after finding out that he had only \$30.

"No one noticed in the parking lot that my hands were up in the air, wallet in one hand, and money in

the other," Kupferberg said. "During the time we were in the lot, two cars drove by. I am incredulous that [the robbery] occurred with a great number of people around. It is only my guess that they did not notice what was occurring in front of them."

Another MIT-affiliated person was robbed in a similar crime four days later at the Baybank ATM at the corner of Third and Broadway streets. The Campus Police did not release the name of the second victim of the "Baybank bandit."

A third victim, Joel P. Johnson '98, was robbed Oct. 7 at the Quality Mart ATM on the corner of Massachusetts Avenue and Beacon Street. The robber approached Johnson outside of the Pi Lambda Phi house, where Johnson lives. The robber asked him if he was a college student, Johnson said. The robber told Johnson that because he was a college student, he had a lot of money, Johnson said.

The robber walked Johnson to the ATM and had him withdraw the limit of \$500. After handing the money to the robber, Johnson left the store, walked across the Harvard Bridge to MIT, and reported the incident to the Campus Police, he said.

On Oct. 14, Cambridge Police apprehended the suspect in the robberies as he was breaking into a house on Bryant Street, according to Frank Pasquarello, Cambridge Police public information officer.

The robber's face was recorded

on video surveillance cameras in the Quality Mart, Johnson said. The pictures helped police to identify the suspect, he said.

The suspect, Willy Dorch, will be assigned a trial date on Feb. 22, according to the Middlesex County

District Attorney's Office. Dorch is accused of three counts of breaking and entering with the intent to commit a felony, armed assault with the intent to rob, carrying a dangerous weapon, three counts of kidnapping, and four counts of armed robbery.



Carol C. Cheung

Kendall Square Baybank, site of one of the ATM robberies

29 In a move that could have dire consequences for university-based research at MIT and schools across the country, the House of Representatives approves a measure that would cut next year's Department of Defense university research funding in half — from \$1.8 billion to \$900 million. The bill still needs to go before the Senate.

30 Professor of Linguistics Samuel Jay Keyser steps down as associate provost for Institute life after holding this position for nine years. He worked extensively with harassment policies, conflict resolution, and faculty and student relations.

30 The MIT Supercomputer Facility is shut down due to financial constraints and an uncertain hardware landscape.



Samuel J. Keyser

File Photo

July

1 New federal regulations for handling the indirect costs of doing research take effect today, making hiring a student in the Undergraduate Research Opportunities Program about 60 percent more expensive than it was last fall.

18 A two-mile-wide fragment of the comet Shoemaker-Levy 9 hits Jupiter, rivaling the "Great Red Spot" as the most prominent feature on the planet's surface. UROP student Jennifer R. Mills '96 plays a key role in processing images of the impact taken by the Hubble Space Telescope.

21 Alexander R. Sich PhD '94, a former graduate student in the nuclear engineering department, scales back his findings that the Chernobyl nuclear meltdown was far worse than previous Soviet reports by adding an erratum to his thesis. The Nuclear Regulatory Commission found that the computer program Sich used was inaccurate. The commission reported that the radiation emission was 120 million curies, about six tenths of what Sich originally claimed but still two to three times higher than original Soviet reports.

Arsonists plague Burton-Conner and MacGregor

By A. Arif Husain

A string of suspicious fire attempts were reported to the Campus Police in the fall, starting with several incidents in Burton-Conner House in October.

No evidence has been found to connect the various incidents, and investigators are still searching for a motive, according to Campus Police Chief Anne P. Glavin.

Because the fires were set so close to each other, all of the incidents are under the active investigation of the Campus Police in conjunction with the Cambridge Fire Department," Glavin said.

"The fact that we've had so many [fires] is cause for concern and is the reason why we're investigating," Glavin said. "These are very serious situations, and we're viewing them with a high degree of seriousness."

The arson attempts began with a series of fires at Burton-Conner. The first incident, which was the most serious, was discovered early on Oct. 12. It led to a small fire in suite 424 and prompted a dormitory-wide evacuation.

"I was woken up at a little past 6

a.m. by a smoke alarm outside my door," said S. Roopom Banerjee '97, who lives in the suite. "I smelled smoke. When I got outside the door, I saw a blazing newspaper on the stove. The flames were 1.5 to 2 feet high," he said.

Banerjee doused the fire with a pitcher of water.

The morning's other reported attempt, which took place in suite 213 shortly after the first one, was under control by the time residents had returned from the evacuation, said Cynthia H. Liu '95, a suite resident.

A third arson attempt was discovered in suite 333 early the next morning. Luis A. Uribarri '95, a resident of the suite, first noticed smoke in the hallway.

"I didn't know where the fire was coming from," Uribarri said. "There were some oven mitts and towels [on the stove], and the burner was turned all the way up, and there was a lot of smoke but no fire," he said. "I took the whole chunk and threw it out the window."

A similar incident was reported in a fourth suite the following afternoon.

The planning of all the attempts was similar, said Burton-Conner

President Steven A. Luperchio '95. At each site, newspaper or other flammable material had been spread over a lit electric burner, producing smoke, he said.

More West campus fires

On Dec. 4, the discovery of smoke by a Physical Plant employee initiated a complete evacuation of MacGregor House.

After half an hour of searching, fire fighters located a toilet paper roll that had been set on fire on the floor of the J-entry first floor restroom. The fire had gone out by the time firefighters arrived.

"Anytime there is smoke or fire in a building it's not a trivial matter," said MacGregor Housemaster Steven J. Lippard PhD '65. "It

needs to be addressed, and we will do that." Lippard called an emergency meeting for the 30 to 40 J-entry residents later that night to discuss the incident.

A fifth Burton-Conner incident occurred early Dec. 7. The Campus Police arrived after a resident of suite 222 reported finding paper towels and a roll of toilet paper on the kitchen stove next to a lit burner, Campus Police Chief Anne P. Glavin said.

While no material actually caught fire, "it would go up pretty fast if it ignited," Glavin said. "The [burner] was on full blast."

"It's kind of sad this is going on at MIT," said Nathan R. Schnidman '95. "I have no idea why it's happening. The way the fires have been

scattered about it doesn't look like it's against anyone personally."

Attention shifted back to MacGregor on Dec. 14 when the suite door in J21 was discovered in flames, according to Graduate Resident Tutor Russell G. Tessier G. The door had been decorated with wrapping paper and a bow for the holiday season.

The Campus Police also found that smoke detectors on the second and third floor of the entry had been disabled, Tessier said.

At 2:40 a.m. the following morning, the holiday tree that stood in front of the Student Center was found on fire by a Campus Police officer on patrol. The Cambridge Fire Department was called to extinguish the fire, Glavin said.

SigIPhi to become chapter of AEPhi

By Angela Liao

Starting this month, Sigma Iota Phi, a local sorority for the past two years, will become a chapter of the national sorority Alpha Epsilon Phi, according to SIP President Deena S. Disraelly '96.

"We look forward to being part of something larger," said SIP member Naomi S. Korn '96. A "national [organization] can give us more focus and a lot of support, especially during rush."

SIP started as a local MIT sorority in the spring of 1993 and has been an associate member of the Panhellenic Association since then. Panhel approved SIP's request for national chartership in November 1993.

The decision to obtain chartership from AEPhi was reached by the sisters of Sigma Iota Phi and Panhel, after AEPhi representatives visited the sorority, Disraelly said.

This year's Panhel President A. Rebecca Mallin '95 foresees a lot of restructuring for the sorority. Joining a national "means extra support and a chance for [Sigma Iota Phi] to get stronger," Mallin said. "I am nervous for them, and I hope things go smoothly for the sisters of SIP."

"It was an easy decision for most of the sisters," Disraelly said. "AEPhi came in, answered our questions, and talked to us. I think that they impressed people with their openness and their willingness to answer questions," she said.

SIP chose to affiliate with AEPhi because it was "founded on Jewish values, principles, and morals which are similar to ours," said SIP Vice President Ophira J. Segal '96.

The two sororities also have similar histories. Before becoming a national sorority, AEPhi started out locally at Barnard College with a sisterhood of seven Jewish women. SIP was started here at MIT, also by seven women.



Thomas R. Karlo

Firemen respond to a fire in the Student Center on Oct. 5.

21 Kenneth R. Wadleigh '43, who served as a senior administrator at the Institute for more than 20 years, passes away. His contributions ranged from the major expansion of the student residential system to the development of the MIT Health Plan.



File Photo

Kenneth R. Wadleigh '43

25 A Senate appropriations subcommittee restores all but \$81 million of the \$900 million in university funding cut from next year's Department of Defense budget by a House subcommittee in late June. A compromised bill must still be voted on by the full Congress.

August

3 President Charles M. Vest, head of the Department of Biology Phillip A. Sharp, and Professor of Earth, Atmospheric, and Planetary Sciences Mario J. Molina are named to a new private-sector committee to advise President Bill Clinton on major science and technology issues.



The Source

Helen M. Lin

12 At about 1 a.m. a summer resident at the Delta Kappa Epsilon house confronts two intruders and is sprayed with a chemical. The woman was not an MIT student, and the suspects are later apprehended by the Cambridge Police Department.

23 The Source, a much-expanded information desk on the first floor of the Student Center, opens today. This gift of the Class of 1994 has gone from seniors' pledges to reality faster than any senior gift in recent memory.

25 The Class of 1998 arrives on campus today. Forty percent of the freshmen are women, the largest number of women ever admitted to MIT.

PhD student finds Soviets misreported Chernobyl accident

By Stacey E. Blau

It is rare, even at MIT, that a doctoral thesis project merits media attention, but Alexander R. Sich PhD '94, a former nuclear engineering graduate student, found that the 1986 Chernobyl nuclear accident released more radiation than the Soviet Union reported.

The findings were still noteworthy after Sich had to scale back part of his results because a computer program he used made inaccurate calculations.

According to Sich's research, the Soviet airlifts of 5,000 tons of concrete meant to smother the burning reactor core did not work. The pilots aimed at the wrong target, a red glow located 50 feet from the core.

The core extinguished itself after undergoing a complete meltdown over a 10-day period after the explosion.

Sich found that nine days later, the core melted through the six-foot reactor shield and spilled into a lower level where it spread out sufficiently to cease the nuclear reaction. Because the radioactive material in the core was not shielded immediately, a high emission of radiation occurred, according to Sich's research.

The thesis reported that between 185 and 250 million curies of radiation were released as

a result of the nuclear reactor's meltdown. Official Soviet reports pegged the radiation level at 50 million curies. One curie is the amount of radiation given off by

in response to Sich's findings. The commission found that a computer program Sich used was inaccurate and the radiation emission from the accident was 120 million curies, about six-tenths of what Sich originally claimed, but still two to three times greater than original Soviet reports.

The error did not affect Sich's data on radiation exposure to people around the accident site, nor did it affect his assertion that the Soviet helicopter airlifts in the days following the explosion

were a failure, according to Professor Emeritus of Nuclear Engineering Norman C. Rasmussen PhD '56, Sich's thesis adviser.

According to Sich's research, the Soviet airlifts of 5,000 tons of concrete meant to smother the burning reactor did not work.

one gram of naturally occurring radium per second.

The Nuclear Regulatory Commission conducted an investigation

Senior survey shows overall satisfaction with academics, life

By Angela Liao

Few would dispute the anecdotal evidence about the Institute — that the pace is fast and the pressure high, that people like their living groups, that the freshman year is less than nurturing — but the first-ever Senior Survey, conducted last year, produced some hard evidence to back up the conventional wisdom.

The 10-page long survey, mailed to members of the Class of 1994 in April, showed that about three-quarters of the seniors were satisfied with their undergraduate education. On the other hand, 70 percent of the respondents said they were not satisfied with the most important parts of their freshman year.

The initial results of the senior survey also showed that over 80 percent of the respondents were satisfied with their living group experience.

Another section of the survey measured the perceived importance of several kinds of knowledge and skills versus how well MIT educated students in these areas. The survey showed that more than 90 percent of the students thought problem solving skills were important, and almost the same amount said they were satisfied with their education in this area.

In other areas, the difference between importance and the quality of education was great: Nearly 90 percent of the students said self-esteem was important, but only about 35 percent of the respondents said MIT helped their self-esteem. The difference for academic self-confidence was 80 percent to almost 50 percent and for writing skills it

was 75 percent to 40 percent.

Other questions covered by the survey include future plans, pressure, financial aid, and the extent to which students felt their MIT experience helped them in a variety of areas, from analytic skills to self-esteem.

The Educational Studies Working Group sponsored the survey in conjunction with the Undergraduate Academic Affairs Office, according to Alberta G. Lipson, assistant dean for undergraduate academic affairs.

More than 40 percent of the senior class, 461 people, responded. "The response rate was very substantial," Lipson said. The survey responses also matched fairly well with the make-up of the senior class demographically, Lipson added.

Freshman experience rated low

While 52 percent of the respondents said they were satisfied with their freshman academic experience, some of the major components of freshman year — quality of instruction, enjoyment of subjects, intellectual excitement, and the quality of freshman advising — all took a beating in the survey results. Seventy percent of the respondents reported that they were not satisfied.

Only fewer than 20 percent of the students were satisfied with opportunities for class discussion and out of class contacts with their instructors.

"One suggestion was to have a sophomore survey to focus on dissatisfaction in freshman year," said Arthur C. Smith, dean for undergraduate education and student affairs. Still, it is too early to tell what actions will result from the survey or how or when they will be



Thomas R. Karlo

Doug Berman, executive producer of 'Car Talk,' waits for his turn to race.

carried out, he said.

"I cannot take a whole lot of comfort in seniors' recollection of freshman year," said Travis R. Merritt, dean for undergraduate academic affairs.

Both Merritt and Smith address that the dissatisfaction with freshman year is an issue that needs to be looked at in more detail.

"I hope the results of the survey will energize departments and the institution as a whole to talk to students a lot more," Smith said. "The real question is: Now we have the data, what are we going to do with it."

"I hope we will get a lot of student and faculty reaction to the survey that will help us know where to go next," Smith said.

Pressure high, but not bad

The pace and pressure of MIT were rated high by over 90 percent of the respondents. But 50 percent of the respondents also said that the pressure was good for them.

The survey revealed that the sources of pressure included trying to maintain a decent grade point average and living up to high standards demanded by the faculty and subjects. For 71 percent of the stu-

dents, the pressure was mostly self-imposed. Fewer than 30 percent said peer pressure and competition created much pressure.

Commenting on individual departments and courses, students were most satisfied with academic computing resources, research opportunities, intellectual excitement, and their department's undergraduate academic office.

Students indicated that they were least satisfied with the quality of advising, personal contacts with instructors, availability of tutoring, and opportunities for class discussion.

25 Residence and Orientation Week begins with the President's Convocation and the annual Project Move Off Your Assumptions (MOYA), which is designed to promote teamwork and to encourage freshmen to get to know one another.

25 New students are normally given Freshman Picture Books when they check in, but President Charles M. Vest has asked the Technology Community Association to stop distribution of this year's books because he feels the cover drawing of a monkey could be perceived as racist by black students. Publishing the books with new covers will delay their delivery.

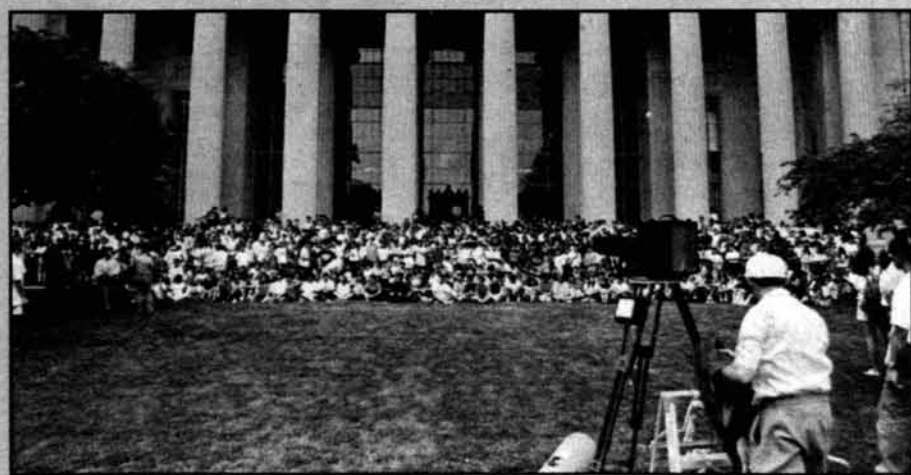
28 Freshmen submit their housing choices in the first-ever housing lottery done using the Athena Computing Environment. Most students feel the new program is convenient.

30 Freshmen receive their dormitory assignments through electronic mail. About 760 receive assignments, and another 44 will have to wait until the second round of the housing lottery.

30 The student-run graduate student orientation begins today, with an information booth and campus walking tours.

30 The results from the math diagnostic and the expository writing tests are released. This year, 48 percent of the freshmen who took the Freshman Essay Evaluation received satisfactory scores, up by 9 percent from last year. However, the number passing the pre-calculus math diagnostic dropped by 9 percent to 49 percent.

31 The remaining students are given assignments in the second round of the housing lottery. All freshmen now have housing, and a third round does not have to be held as it did last year.



Thomas R. Karlo

The Class of 1998 gets its picture taken in Killian Court during rush.

Obituaries

Constantine B. Simonides '57

Vice President and Secretary of the Corporation Constantine B. Simonides '57 died on April 24, apparently of a heart attack. Simonides, 59, served as vice president for the past 24 years under four presidents.

Simonides was responsible for personnel, public relations, admissions, the medical department, athletics, career services, and the MIT Press.

Simonides was involved with many programs and activities during his 34-year career at MIT. "He was the instruction manual for most of anything that one needs to know about at MIT," said Provost Mark S. Wrighton.

Simonides also led in the fight against the U.S. Justice Department's effort to disband the Overlap Group, the 23 east coast universities and colleges which cooperated in awarding financial aid to students.

"He would remind everyone of why we were doing this," said Executive Assistant to the President Kathryn A. Willmore. "There was nothing more important than the principle we were fighting for."

"His most significant contribution is one that will never be visible in the public archive," said Professor Samuel J. Keyser, former associate provost. "That was his ability to make it possible for the people that he came in contact with to grow into something larger than they were before they met him."

Simonides' greatest talent "was a never-ending fascination with and insight into people," said President Charles M. Vest. "Constantine left an imprint on MIT that will serve us well for many, many years into the future."



News Office

Julius A. Stratton '23

Julius A. Stratton '23, who served as MIT's 11th president from 1959 to 1966, died of pneumonia on June 2 at the age of 93.

Stratton was an internationally-known scientist who distinguished himself as both an educator and an administrator. He had been associated with MIT since his undergraduate years at MIT, which began in 1920.

During his administration, Stratton revised the curriculum and expanded the graduate program. In the last three years of his tenure, he invested more than \$40 million in new building construction.

Stratton was respected as a champion of student welfare. And when the Student Center opened in 1965, the student body requested that the building be named after him.

Along with his dedication to MIT, Stratton served under several U.S. presidents on a variety of national boards and committees. Also, he was active in professional and scientific organizations and was a trustee of several education and cultural institutions.

Chairman of the Corporation Paul E. Gray '54 said, "As professor, the first director of the first university interdepartmental laboratory, provost, chancellor, and as president, Jay Stratton provided distinguished, wise, and compassionate leadership to the Institute during a time in which the relationship between the research universities and the federal government was in flux, and the complexion and mission of MIT was in transition."

"Jay's strong commitment to the arts and humanities at MIT was particularly important in a period when those activities were first flowering," Gray said.



MIT Historical Collections

Jerome B. Wiesner

Jerome B. Wiesner, 13th president of MIT and science adviser to President John F. Kennedy, died of heart failure on Oct. 29 at the age of 79.

Wiesner served as president from 1971 to 1980, when he retired and became a life member of the Corporation. During his career, he also served as provost, dean of the School of Science, head of the Department of Electrical Engineering, and director of the Research Laboratory of Electronics.

Wiesner was a leader in the development of public policy regarding science and technology over the last 30 years. He worked with Kennedy during his election campaign in 1960, and was named special assistant to the president for science and technology in 1961.

At MIT, Wiesner was a strong proponent of interdisciplinary research programs and of the arts. He played an instrumental role in expanding research and teaching programs in the humanities, arts, and social sciences. He was also one of the founders of the Media Laboratory, housed in the building that bears his name.

"From his days as group leader and division head in the Radiation Laboratory more than 50 years ago, through his presidency in the '70s, to the last years in which he has been the intellectual champion of the Media Laboratory, Jerry Wiesner has been single-minded in his desire and his efforts to strengthen and improve his beloved MIT," said Chairman of the Corporation Paul E. Gray '54.



News Office

Kenneth R. Wadleigh '43

Kenneth R. Wadleigh '43, who served as a senior administrator at the Institute for more than 20 years, died on July 21 after a brief illness. His contributions ranged from major expansion of the student residential system to development of the MIT Health Plan.

As dean for student affairs from 1961 to 1969, Wadleigh helped establish the dormitory house master system and oversaw the expansion of student extracurricular activities brought on by construction of what is today's Student Center.

After being named vice president in 1969, Wadleigh focused on carrying out special projects, including further development of the student residential system. In 1970, his responsibilities were expanded to include the Registrar's Office, repository of the Institute's permanent records, and the Medical Department.

In 1975 Wadleigh became dean of the Graduate School as well.

Donald J. Atwood '48

Donald J. Atwood '48, a member of the MIT Corporation, former Deputy Secretary of Defense, and a General Motors executive, died April 24 at the age of 69.

Atwood started his second five-year term on the Corporation last July. He had also been a Corporation member from 1984 to 1989, resigning a few months before the end of his term when President George Bush named him to the Defense Department post. He returned to private life in the spring of 1993.

Defense Secretary William J. Perry paid tribute to Atwood, noting that he had served as deputy during a period of dramatic change. "His tenure saw the collapse of Soviet communism and the triumph of liberty in Eastern Europe, the victory of U.S. and allied forces in Desert Storm, and the first years of the downsizing of America's defense establishment," Perry said.

Atwood's activities at the Institute included membership on the development committee, the mathematics visiting committee, and the electrical engineering visiting committee. He received the Corporate Leadership Award in 1987 and the Bronze Beaver award in 1988.

William H. Ramsey '51

William H. Ramsey '51, who directed the Minority Introduction to Engineering and Science (MITES) Program as executive director of engineering special programs, died on Jan. 14, 1995. Ramsey, 67, was planning to retire this summer.

"Bill was a very caring individual," said Professor of Mechanical Engineering Thomas B. Sheridan ScD '59. He "cared a great deal about the students, and he extended his caring to the whole community."

Professor Emeritus of Aeronautics and Astronautics Leon Trilling, who worked with Ramsey through the MITES program, said, "He was a very wonderful human being and extremely skillful in understanding and thoughtful in dealing with the students that came to him."

Lawrence B. Anderson MARCH '30

Lawrence B. Anderson MARCH '30, former dean of the School of Architecture and Urban Planning, died April 6 at the age of 87.

Anderson taught at MIT for 46 years until his retirement in 1972 and was a founding partner of the Cambridge architecture firm Anderson, Beckwith, and Haible.

In 1940, Anderson and Professor Herbert L. Beckwith '26 designed the MIT Alumni Building, which houses the swimming pool — one of the first significant examples of modern design in the United States.

"The change from the architecture of the previous periods to the modern movement was a very fundamental change and Andy was the inspiration in Boston for that change," said William E. Hartmann '38, who studied under Anderson at MIT.

Harald A.T.O. Reiche

Harald A.T.O. Reiche, former professor of classics and philosophy and house master of Baker House, died on July 25.

Reiche wrote and lectured widely on classical history and thought. He taught electives in Greek philosophy and language, ancient history, and Roman political thought before retiring in 1991.

When he was first at MIT, Reiche held a Carnegie Fellowship in humanities. He later held a Guggenheim Fellowship in Athens and a Ford Foundation visiting professorship at the Technical University of Berlin. For many years, he also lectured humanities and philosophy courses at Suffolk University.

Muriel R. Cooper

Professor Muriel R. Cooper, a designer, educator, and researcher whose work has been internationally acknowledged in exhibits and publications, died May 26, apparently of a heart attack.

Cooper, 68, was a professor of interactive media design in the Program in the Media Arts and Science at the School of Architecture and Planning, and she co-founded and directed MIT's Visible Language Workshop at the Media Laboratory.

"She was a remarkable woman," said Professor Stephen A. Benton '63, head of the Program in Media Arts and Sciences. "As a founding member of the Media Laboratory, she was a wise counselor in shaping our evolution. After 15 years of leadership in graphic design, she was just reaching the fullest expression of her computational design genius."

31 Dean of the School of Architecture William J. Mitchell announces the appointment of Krzysztof Wodiczko as the director of the Center for Advanced Visual Studies, starting in February. Wodiczko is internationally renowned for his work in image-projection creations relating to social issues.



News Office

Krzysztof Wodiczko

September

1 The Lecture Series Committee upgrades the 26-100 sound system so that the sound is more balanced over the entire room. LSC's free showing of *Sneakers* tonight will test the system under normal operating conditions.

1 Sponsored by the Interfraternity Council, stand-up comedian Karen Williams gives two shows in Kresge Auditorium; one is required for all new students and the second is open to the MIT community. Her performance, entitled "Dealing with Difference — Humor in the '90s," is this year's traditional Thursday-night program for new students.



News Office

Karen Williams

1 A record number of freshmen accept bids from fraternities and independent living groups this year, with 401 freshmen pledging by 2 p.m. today. The previous record was set last year when 380 freshmen pledged.

1 In compliance with a non-binding Cambridge City Council resolution written in May, the administration extends MIT's non-smoking policy to campus dining areas.

2 MIT's third annual City Days festival takes place today. About 450 Cambridge-area fourth, fifth, and sixth graders will visit campus for a day of educational and fun activities run by students, and about 150 MIT students will trek into the city to help area organizations.

opinion in REVIEW



Institutional Wisdom Watch



Strategic Housing Planning Committee: Perverse attempt at top-down social engineering generates more heat than light.

President Vest: MIT's own President Bush spends his time out of town saving MIT's rear end. While the cat's away, the mice will play.

Provost Wrighton: MIT's Richie Rich complete with bronze Corvette. Botched UESA search, CMRAE. Woodshed time.

Dean Art Smith: SHPC hurt, but we're sad to see you go. Art, we hardly knew ye.

Robert Randolph, SHPC Chair: "We have listened" line wears thin. Motto: Vox Dean, Vox Dei.

Residence and Campus Activities: Jablonski clears the air. Allen muddies the waters.

Picture book monkey: Get it off our backs.

Aramark: ARA ditches name to improve image. Even the rats aren't fooled.

New calendar: Reading period? What reading period? MIT is still Hell...

John Hollywood, UA Committee on Student Life: Survey-king running in an open field. UA presidential bid generates zero enthusiasm.

UROP: Under siege, provost's \$1 million saves the summer. But who will be Daddy Warbucks this year? Happy 25th birthday!

UA: Student government rejoins the battle. Now where'd I put my sword?

GSC: Maximum Leader "Woja" Ker-mode single-handedly rules grad world.

Hacking: Memories of the police car fading fast. Where's Tetris?

UAP Vijay Sankaran: Extracts UA from Bush Fund imbroglio, but to where?

Gussie Simonides: Like Spock, it takes three people to replace him. And it's still not the same.

Thistle: Cannabis-laden sheet drops behind deadlines.

Counterpoint: GOP victory brings champagne and brie to office. Maybe that's why they never publish?

Voodoo: Outpublishes Thistle, becomes funny. Cilantro Boy new campus hero.

Police Log: Humor missing, later found. Ashdown: SHPC reported; dorm missing.

David LaMacchia: MIT's O.J. whips Feds; it's back to the 5th Floor of the Student Center. Go Juice, go!

John Deutch: The Deputy Secretary of Defense, our man in Washington, continues to be a player. Wisely sidesteps CIA quagmire.

Resnet: Because you can't sniff passwords in the clusters.

Coop: With no rebate, membership has no privileges. Bring back the lingerie trees!

Re-engineering: Euphemism masks shallow plan. Can you say "layoffs"?

A Review of the Year's Editorials

In 1994, *The Tech* took the opportunity to examine, extol, criticize, and congratulate a range of issues and concerns facing the MIT community. Through its editorials, *The Tech* sought to give both voice and vision to events on campus and beyond.

Editorials are approved by the editorial board, composed of the chairman, editor in chief, managing editor, executive editor, news editors, and opinion editors.

The following are selections from *The Tech's* editorials of 1994:

Overhead Waiver Vital to UROP

February 22

Starting July 1, the cost of the Undergraduate Research Opportunity Program will more than double because of new federal regulations regarding overhead costs. The UROP program is an integral and important part of an MIT undergraduate education, and any reduction in UROP represents a considerable cause of alarm for all present and future MIT undergraduates...

For many students, the UROP program has great educational value. The opportunity to do cutting-edge research as undergraduates attracts many students to MIT. For some, it is the factor that convinces them to choose MIT over other universities. Eighty percent of students hold a UROP during their academic careers...

In addition, some students use UROPs as work-study employment. If only credit or volunteer UROPs are available, these students may be denied a part of the MIT experience. Those who need to work for money may turn away from the UROP program altogether, hurting the students as well as MIT.

The administration should be lauded for its efforts to save UROP, but Provost Wrighton alone will probably not be able to convince the government to grant an exemption.

A coordinated effort by the students and affiliates of MIT must be made to make the government aware of the educational value of the UROP program. A change in policy regarding the waiver of over-

head costs associated with UROP may have substantial results, possibly affecting more than meets the eye.

It is up to us, the MIT community as a whole, to take action by convincing the government of the importance of sustaining the current UROP program.

Dean Selection Thorough, Successful

March 1

On Feb. 1, Margaret A. Jablonski began her position as associate dean for residence and campus activities. Jablonski was appointed to the office formerly held by James R. Tewhey, who stepped down last April amid charges and countercharges of sexual harassment. In her short time at MIT, Jablonski has already established herself as a motivated figure who is ready to take up the responsibilities of an effective associate dean for the students...

The role of RCA dean requires frequent contact with students and effective communication skills. Thus, including students in the selection process was an important and necessary step to ensure the appointment of the most promising candidate...

The Jablonski selection demonstrates that student involvement can have a beneficial result. This practice should be continued with other issues affecting student and campus life, including changes in food services, the academic curriculum, and the Institute calendar.

UAP/VP Candidates Disappointing

March 8

The Undergraduate Association elections taking place this week are one of the few chances the student body has to make a difference in student government. However, the candidates this year for UA president and vice president show a uniform lack of promise in the face of an apathetic constituency...

Editorial, Page 20

4 The Gays, Lesbians, Bisexuals, Transgenders, and Friends at MIT display case in the Infinite Corridor is vandalized. GAMIT Political Coordinator Joaquin S. Terrones '97 said that GAMIT is planning a poster and flyer campaign to increase awareness of homophobia at MIT.



Thomas R. Karlo

Fraternity members and rushees leave the Killian Kickoff as rush begins.

5 President Clinton attends the Rosh Hashana service at Edgartown, Martha's Vineyard. The service was conducted by Rabbi Joshua Eli Plaut, the MIT rabbi.

7 The student-run Baker House dining hall opens tonight, serving about 250 students. The dining hall is "a model for student empowerment," according to Baker Dining Committee Chair Albert L. Hsu '95.

9 Dean for Undergraduate Education and Student Affairs Arthur C. Smith announces the appointment of former Professor of Mechanical Engineering David Gordon Wilson as the interim director of the Office of Minority Education. An interim director was chosen because of the time it will take to find a permanent replacement, Smith said.

13 An elevator maintenance man dies in Building E19, and the Middlesex County Medical Examiner's Office rules that the death was caused by electrocution and coronary artery disease.

17 "Car Talk" personalities and brothers Raymond F. Magliozzi '72 and Thomas L. Magliozzi '58 finish dead last in a mini grand prix held on MIT grounds to benefit the Arthritis Foundation.

18 An intruder makes his way into McCormick Hall and wanders around the dormitory for about 20 minutes before being arrested.

Highlights of *The Tech's* Editorials

Editorial, from Page 19

In a year of budget cuts and core curriculum changes, it is especially important that our top student representatives have a positive track record of leadership within student activities, an understanding of how the UA operates, specific solutions to current issues, and the means with which to effect such changes...

While *The Tech* does not endorse a candidate pair for UAP/VP, it encourages students to vote for whomever they feel is best qualified, not only for the higher offices, but for other important UA positions.

Software Piracy A Serious Crime

April 12

While it is tempting to say that LaMacchia is guilty or innocent based on what limited information has emerged so far, a number of questions will remain unanswered until LaMacchia goes to court. Until then, it is foolish for students to condemn LaMacchia as a criminal or to hold him up as a symbol of

injustice...

It is apparent from the indictment and from news articles that MIT is quite serious about stopping software piracy from taking place on computers owned or operated by the Institute, or connected to MIT-net. Perhaps this attitude exists not only for moral reasons, but also because MIT is afraid of being prosecuted or sued for illegal software duplication. Whatever the reason, it is good for MIT to adopt such an attitude. After the publicity from the indictment has died down somewhat, Information Systems would be wise to disseminate information regarding what constitutes wire fraud and software piracy, and the possible legal consequences of these actions.

Some have criticized LaMacchia's indictment as overly harsh. Indeed, it does seem as though the government is trying to make an example of him in order to dissuade others from attempting to abuse network systems. But at the same time, LaMacchia stands accused of a serious crime.

LaMacchia's case hits home because he is one of us. But appearances can be deceiving, and if he is

found guilty of the charges presented in the indictment, LaMacchia should be punished accordingly.

\$1 Million Infusion To UROP Is Laudable

April 15

Provost Mark S. Wrighton's gift of \$1 million to summer UROP students is a laudable example of the administration's continuing commitment to the Undergraduate Research Opportunities Program — and to providing undergraduates with needed financial assistance...

Because UROP is a central part of the Institute's undergraduate program, it is no surprise that the policy change has caused such a wave of concern. The use of funds functioning as endowment demonstrates the priority placed on undergraduate involvement in the research laboratories.

Still, this funding is only a temporary solution. We cannot depend on annual cash infusions to keep UROP students working in the numbers they are now. To spend this kind of money at all is remarkable for an institution with a budget deficit of over \$10 million — but it is impossible for the long term...

Student efforts may be the most effective way to win outside support for UROP; students' personal experiences with UROP will far more

effectively persuade a legislator than the appeals of administrators.

Therefore we must not let up in our efforts to lobby the government and solicit funding from outside sources. Come September, the \$1 million grant will have disappeared and UROP will face the same problem it escaped for the summer.

Welcome, Class of 1998

August 25

Welcome and congratulations. Be proud not only of your admittance, but also of making the decision to come here to begin the first of what may come to be the most important years of your life...

Along the path to your commencement in 1998, you'll be challenged in ways you may not yet be

students at MIT who will use food services on campus. A successful Baker dining hall will serve as a model for student empowerment and will hopefully encourage other such operations. If nothing else, perhaps it will give ARA the signal that students demand and are willing to work for better services. For this reason, any increase in student empowerment deserves the support of all members of the MIT community.

IFC Trials: A Model For Self-Governance

September 27

The recent rush trials of the Interfraternity Council Judicial Committee went unnoticed for most students. At an institution where

harassment and discipline incidents often generate immeasurable controversy and discontent, the IFC should be lauded for a judicial system that works in a just and timely fashion.

Although there are legitimate questions about the system's ability to discourage rush violations, the open and generally fair process should be modeled for other Institute dispute resolution processes...

Although the IFC system processes rush violations efficiently, the ability of the system to discourage violation remains suspect. Year after year, living groups violate long-standing and well-known rules like the prohibition against badmouthing or hiding freshmen. Some living groups even budget for fines as part of their rush budgets. It seems that the punitive actions of the IFC Judicial Committee are regularly being ignored. Because some living groups fail to learn the lessons of past sanctions, the IFC should explore other methods to ensure that the living groups do not repeatedly violate rush rules...

In the final analysis, the success or failure of judicial systems will be determined by their ability to enforce rules and dispense justice in an efficient, open, and objective manner. Reasonable concerns notwithstanding, the IFC's judicial process seems to meet this standard and should serve as a model for student judicial self-governance.

The IFC's judicial system meets this standard and should serve as a model for student judicial self- governance.

able to imagine. Whether facing academic, social, or even physical challenges, you will find out what MIT is really about — stretching your mind, developing your abilities to their fullest, and pushing your limits.

So go ahead, take that hard class, try out for that team, join that interesting activity. Rush your favorite living group, and meet as many people as you can. But don't be overly disappointed if you don't get an A-plus, don't make the team, or don't have time for an activity. And don't get upset if you don't get a bid, don't get invited back to a party, or can't find the right group of friends right away. No matter what happens, always try to maintain perspective...

So welcome to MIT. Despite some flaws throughout the system, we feel that you will find your education here a positive experience overall. The resources of the Institute are truly great, both in quantity and quality. It is up to you to discover and take advantage of them.

Student-Run Dining Shows Great Effort

September 13

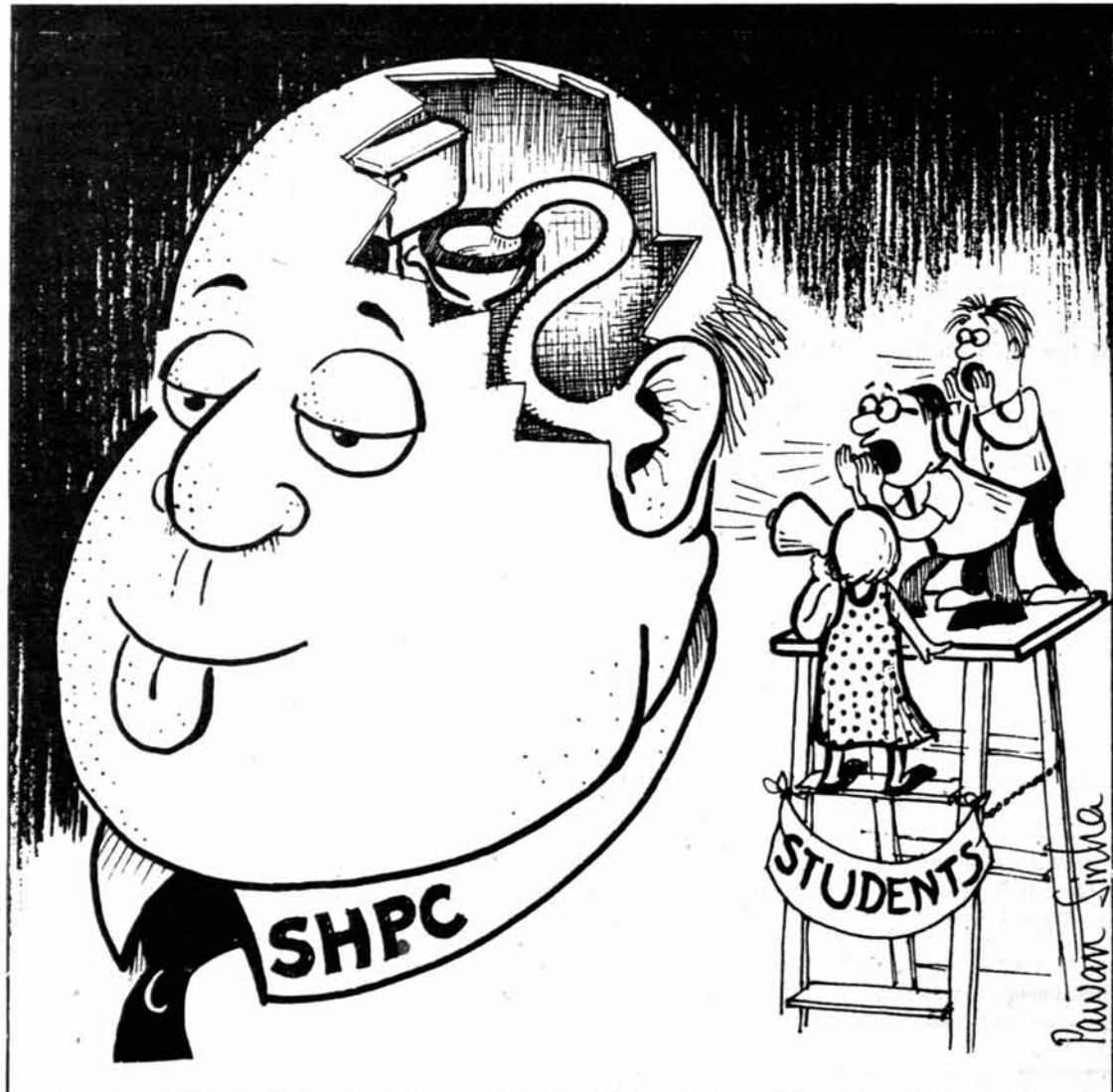
The Baker House Dining Committee should be congratulated for taking the initiative to provide quality on-campus food service. Many students have hungered for a way to prove there is a better way than ARA. At Baker, they have come forward with this proof, demonstrating that students can provide a workable alternative, at least on a small scale...

The initiative being taken at the Baker House dining hall affects all

Campus Police Must Warn Students

October 18

While the Campus Police lack the mandate or manpower to follow up robberies with a large-scale investigation, they can and should warn the MIT community about any specific threats to their safety, both on and off campus. However, the Campus Police failed miserably at



19 After the Interfraternity Council Judicial Committee trials this weekend, the committee announces that it found 13 independent living groups guilty of rush violations and fined them a total of \$8,800. Lambda Chi Alpha leads the list of violators with \$2,500 in fines and several sanctions for badmouthing and desk rule violations.

19 Today's Institute holiday comes as a pleasant surprise to many students. The holiday will not be a permanent addition to the new calendar, but it corrects for an irregular calendar by balancing out the number of Monday-Wednesday-Friday classes and the Tuesday-Thursday classes.

21 The agenda of today's faculty meeting honors the 100th birthdays of Professors Emeritus Dirk J. Struik and C. Fayette Taylor. Taylor was the first director of the Sloan Lab, and Struik is a well-known mathematician both for his work in analysis and geometry and for his pioneering book on the history of mathematics, *The Concise History of Mathematics*.

22 In a meeting open to the public, the Interfraternity Council and Gays, Lesbians, Bisexuals, Transgenders, and Friends at MIT discuss the tensions between the two groups following a GAMIT display describing instances of homophobia within the Greek system at MIT over the last 15 years.

22 The Coop announces that there is no patronage rebate this year, which makes it the first year that the Coop has not given a rebate to members. Instead, the Coop is offering students a 10 percent rebate on textbooks purchased for the fall semester.



Thomas L. Magillozzi '88, "Car Talk" columnist.

Thomas R. Karlo

this task in regard to the ATM robberies. It is possible that they put members of the MIT community further at risk because of their failure to communicate relevant information promptly.

In response to the first armed robbery of an MIT student at the Kendall Square ATM, the Campus Police ineffectually responded by sending out a year-old list of safety tips. Your awareness will help eliminate the opportunity of becoming a victim of a crime, the document read. The Campus Police made no attempt to increase the awareness of readers beyond a list of general safety tips. No mention was made of the reason for the bulletin, and no warning was provided about the suspect or the known locations of the robberies...

The ATM robberies have made two things readily apparent. First, the Campus Police need to be much more effective in disseminating relevant, specific information about serious criminal activity, and second, safe, indoor ATMs must be made more convenient for student use.

UESA, MIT Need Another Smith

October 21

The imminent resignation of Dean for Undergraduate Education and Student Affairs Arthur C. Smith will be greatly felt by the entire MIT community, particularly students. His intimate understanding of MIT and his unflinching faith in the abilities — both good and bad — of MIT students, together built an unspoken bond of trust between students and the Institute.

In Smith's own words, he was never one to manage students;

rather, his philosophy centered around the belief that MIT students should take responsibility for their own lives and actions, that education from a skinned knee was preferable to being walked by the hand. A more noble philosophy of student affairs is difficult to imagine...

MIT is now challenged with finding another leader for an organization whose administrative reach extends from Residence and Orientation Week through Commencement. MIT will likely not undertake a search so important to undergraduate life until the selection of the next President. The provost, with a soon-to-be-appointed advisory group, will face the daunting task of finding an individual with the character and vision to set the direction of undergraduate life at the Institute for years to come...

In the final analysis, MIT students should not expect a new dean for undergraduate education and student affairs to be another Art Smith. We can only hope for someone who shares his philosophy and can strive to meet his high standard of leadership and admirable commitment to students.

Housing Plan Deserves Student Input

November 1

The plans under consideration by an administration committee to renovate Senior House and East Campus into graduate dormitories raise several important questions about

how the administration makes decisions that affect student life...

While Senior House and East Campus may fare poorly compared

MIT students should not expect the new dean for undergraduate education and student affairs to be another Art Smith.

to other dormitories during dormitory rush, this should not be taken as a sign that there is no demand for housing on the east side of campus. Most residents are currently satisfied with living in these dormitories, and many would find moving to west campus to be a substantial hassle. The value of the east's unique undergraduate culture should also be taken into account.

Moreover, many residents certainly feel an emotional attachment to their current living arrangements — their friends, neighbors, halls, entries, and even rooms. Dormitories are more than just puzzle pieces to be expediently fit into some master plan, and their residents are more than just playing cards to be dealt out to various campus buildings...

In general the administration needs to begin by making proposals, learn from and guide the discussion that will inevitably follow, and then make informed and advised decisions — in that order. Any attempt to reverse this order, to leave out parts of its sequence, or to squeeze the time allotted for discussion to a minimum can only result in anger, protest, and hurt feelings.

Kennedy Should Be Re-elected

November 8

This year marks Sen. Edward M. Kennedy's 32nd year in the U.S. Senate and his sixth bid for re-election. Kennedy's opponent, venture capitalist Mitt Romney, has challenged Kennedy for his seat on the grounds that, as a moderate Republican, he can better represent the interests of the Massachusetts electorate. However, given the stands the two candidates have taken on the defining issues of this year's campaign, we feel that voters should return Kennedy to the Senate...

On all of these issues — welfare, health care, the budget, and foreign policy — Sen. Kennedy has staked out the more realistic and reasonable turf. Job training, moderate health care reform, real deficit-cutting, and multilateral diplomacy are responsible positions. Romney's are not.

Massachusetts voters should also understand that no matter who they vote for, they will elect a candidate who does more than just state positions on issues. Most bills in the

Senate are compromises that represent concessions on the part of many individuals. Many Republicans in Congress have rejected compromise measures and taken the road of filibuster and gridlock. Those senators so engaged feel that their constituents' interests are best served by their abstention from the process of legislation.

If re-elected senator, Ted Kennedy will continue to be at the heart of the legislative process, forming and shaping legislation to meet his constituent's concerns.

Weld's Successful Record Merits His Re-election

November 8

William Weld, a moderate Republican and one-term governor of the Commonwealth of Massachusetts, is currently seeking to retain his office. His challenger, Mark Roosevelt, is a representative in the General Court of the Commonwealth. While Roosevelt has an impressive legislative record for a man of his age, we feel that Weld's largely successful record as governor merits his re-election...

While we support Weld for re-election we feel that Roosevelt deserves a special commendation for the manner in which he has run his campaign. Roosevelt has operated as an underdog, always overshadowed by Weld's towering lead in the polls. Unlike other candidates in his position, however, Roosevelt has not attempted the cynical, negative smear tactics often used to bring down an opponent's lead. Indeed, it is Weld who has used negative advertisements on Roosevelt, sometimes misrepresenting Roosevelt's position on crime and social issues.

Though we commend Roosevelt for his issues-oriented, positive campaign style, we feel that Weld's record as governor has proven that he can work with the legislature to effectively run the state's government. For this he deserves re-election.

Crime Bulletin Is A Notable Service

November 18

One month ago in this space, we faulted the Campus Police for failing to promptly and adequately communicate relevant information about crimes and safety to the MIT community. People need specific information rather than vague alerts or safety tips to protect themselves. Such specific information, we said, is necessary to protect members of the community from the otherwise nebulous perceptions of campus crime.

To help solve this problem, the Campus Police has taken a noteworthy

step with the creation late last month of an electronic mailing list designed to keep members of the MIT community informed about crime on campus. The new list is an improvement and an important first step; however, it can only be one component of a larger community awareness system...

The occasional failure to be aware of our surroundings is an unfortunate consequence of our busy lives as MIT students, faculty, and staff. The open and urban nature of our campus demand that we recognize the limits of the Campus and Cambridge Police to absolutely protect us from crime. The electronic bulletin is a good first step to increasing awareness and thus safety, but further methods need to be implemented before the job is complete.

SHPC Should Have Sought a Consensus

November 29

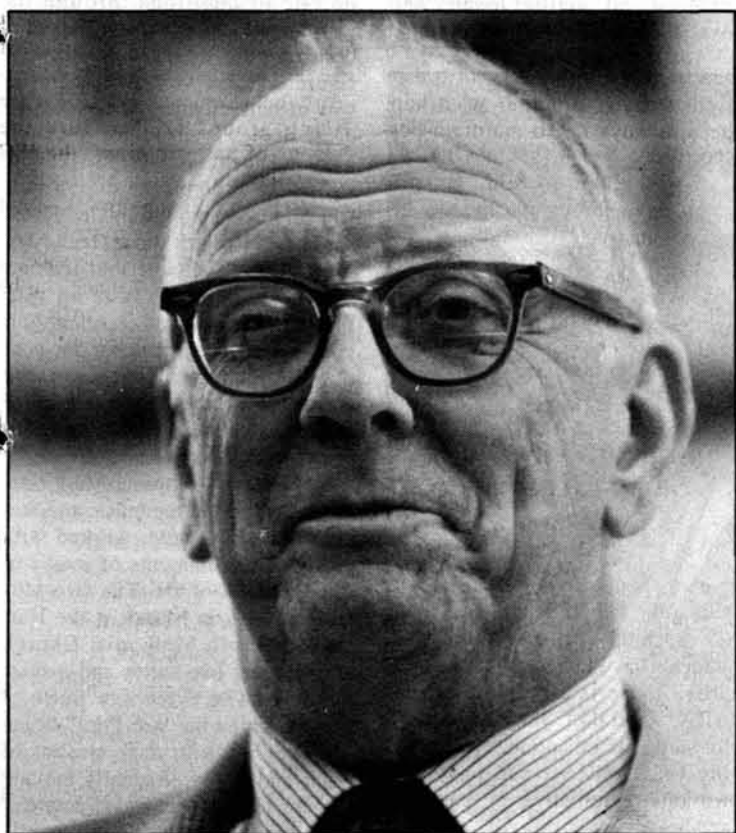
You don't do anything on this campus unless you build a consensus, said Senior Associate Dean for Undergraduate Education and Student Affairs Robert M. Randolph. Randolph was talking about including student representation on an administration committee formulating plans to move undergraduates out of east campus dormitories.

Unfortunately, the workings of Randolph's Strategic Housing Planning Committee and the process that will determine the fate of the east-side dormitories seem to have been planned from the outset to avoid building any kind of a consensus.

Tomorrow, the SHPC is scheduled to make its recommendation about the future of Senior House to the senior administration. The timing could not have been better planned to stymie input from MIT students. In order for any renovations to be made at Senior House next summer, important decisions about the status of the dormitory will need to be made by the end of Independent Activities Period. This schedule severely limits input from graduate and undergraduate students, faculty, and alumni.

Given the short timeline one wonders how much time, if any, the administration would have allowed for community input had *The Tech* not broken the story about the plans four weeks ago. If the SHPC's activities had not gone public, would student groups have been allowed more than a meek protest after a decision had already been made?

If administrators had been more forthcoming earlier, and if they had cooperated fully with students in making their proposals, they would have found student input more useful. They might have even built a consensus. However, it would seem that the planning so far is still geared toward shutting off the student discussion at the very time it would be most beneficial.



Arthur C. Smith

Thomas R. Karlo

23 Eric D. Kupferberg '98 is robbed at gunpoint after completing a transaction at a Kendall Square Baybank automated teller machine.



Helen M. Lin

The Kendall Square Coop

23 In the freshman class elections, Jessica J. Lin '98 is elected freshman class president by the narrow margin of nine votes.

26 This week all students will receive their 1994-95 MIT Card, which enables them to access their dormitories and campus parking lots, purchase meals from Institute dining halls, and check out books from the library.

26 The Massachusetts Bay Transportation Authority introduces three new Crosstown Transit routes that traverse Boston and Cambridge near the perimeter of MIT.

29 The House of Representatives approves a \$200 million cut in the Department of Defense university budget, which will mean a significant loss in sponsorship for the Institute. The Senate will vote on the bill soon.

30 Students report seeing mice in the food-serving and dining areas of Lobdell Court.

October

1 Professor Phillip L. Clay PhD '75, head of the Department of Urban Studies and Planning, is the new associate provost, filling the position vacated by Sheila E. Widnall '60, who was sworn in as Secretary of the Air Force last August.



Thomas R. Karlo

Police investigate an Oct. 17 accident on the Harvard Bridge.

arts

in REVIEW

Many standout performers bring life to an unsurprising year in MIT music, theater

By Scott Deskin

Last year's on-campus performances were, on the whole, not that surprising: There's only so much originality that a performance group can inject into a Gilbert & Sullivan opera or a formula capella show. However, there were more than enough individuals who stood out from the crowd to make these shows enjoyable and memorable. The jazz and classical music ensembles were especially noteworthy, and they continued an exploration of musical range and expression.

Theater

The Musical Theater Guild's Independent Activities Period production of Maltby and Shire's *Baby* was largely an unqualified success. The upbeat and endearing show depicted the lives of three couples who are forced to face some tough questions about their marriages when faced with the prospect of a new baby. The potentially serious material was displaced by an uplifting storyline and supported by a lively, comic score that is hard not to like. The real strength of this production, though, was the enthusiasm of its cast, led by an especially dazzling performance from Jessica Phillips and buoyant choreography.

Even with strong male leads, weak female acting hindered the MTG's fall production of *Guys and Dolls*, the classic musical about bad men and the women who love them. The bad men come out looking quite good, while the good women gave only mediocre showings. Despite a slow middle, the show picked up steam by the end of the second act, giving a semi-satisfactory catharsis to the on-again, off-again performance. The New York gangster setting, along with memorable songs (including "Luck Be a Lady"), skillful choreography, and a voice-cameo by President Charles M. Vest, prevailed in an enjoyable and marginally successful show.

Dramashop's performance of *Spring's Awakening* presented a tale of humanity, maturity, and redemption. A sometimes brutal and perverse cross between *Catch-22* and *A Separate Peace*, it treated life, death, and sexual coming-of-age with both poignance and stark cynicism. It tells the story of the experiences of pubescent schoolboys in 19th century Germany and their experiences with their feelings and sexual desires toward the opposite sex and each other. Under the direction of Michael Ouelette, and highlighted by several affecting performances, the play unflinchingly exposed the fears and frustrations of adolescence.

The Shakespeare Ensemble's production of *Love's Labour's Lost*, under the direction of Kermit Dunkelberg, transformed an encounter by plain-clothes actors onstage into Shakespeare at his bawdy, irreverent best, complete

with modern-day references and instructive gestures to breath new life into the text.

The first major production of the year came from the Gilbert & Sullivan Players' production of *The Foundling*, written by Robert Weingart (conductor) and Mary A. Finn '81 (director). Although *The Tech's* reviewer was not very impressed by this original work, it contained some fine performances and a text that yearns to pursue the G&S tradition. The Gilbert & Sullivan Players' spring production of *The Gondoliers* was a confident return to form. The strong singing and orchestral accompaniment playfully underscored the plot, centered around two young gondoliers who attempt to resolve their relationships with their lovers and at the same time grapple with the prospect of one gondolier assuming the royal throne. High points of the performance included costumes and set design, which

blended nicely into the Venetian setting of the play, and several modern-day revisionist references, such as a modern disco ball during the dance and banquet.

The G&S production of *The Mikado* was also an enjoyable (although dated and racist) parody of the Japanese culture. To be fair, the play does call itself a parody, and as such was meant to provide a humorous look at stereotypes. As such, the story of forbidden love in a land where flirting is a capital offense came through quite well because of some spirited, light-hearted performances by the cast. The play's humor relies upon the fact that true love will triumph over all obstacles, even the seemingly insurmountable decree of the Mikado of Japan. From an entertainment perspective, the musical was funny and colorful and the costumes were gorgeous.

The Shakespeare Ensemble's production of *Titus Andronicus*, perhaps the bloodiest of all of Shakespeare's plays, was a little over two hours of solid entertainment. There were murders, beheadings, hewn limbs, and a rape. The strength of the play, which is emphasized in Kim Mancuso's direction of this production, was not in its sensationalism, but rather in the timeless exploration of man's dual nature of brutality and familial loyalty and love, as well as a lust for political

power. The quotes and poem in the program reminded the audience of the current conflict in Bosnia. The introduction served its purpose, forcing the audience to look for insights into our present world in the bloody spectacle of Titus. The set was simple but inspired, with the floor of the stage made to look like a warped chessboard, an appropriate setting for this play.

Jazz

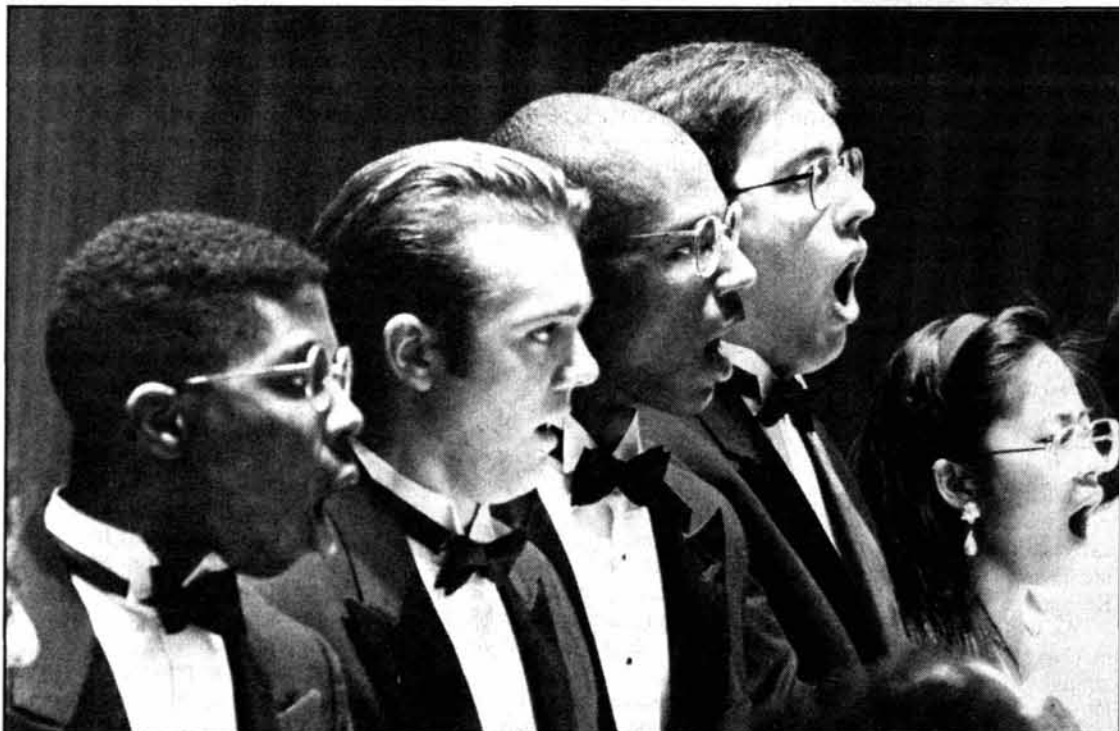
At the New England Collegiate Jazz Festival in March, Phil Woods and the MIT Festival Jazz Ensemble saved the night by injecting some life and thought into an increasingly tired atmosphere. Woods resonated throughout Kresge with a true, confident voice and brilliant technique. But, unlike the soloists of two previous groups, his playing never seemed overdone. He blew his horn with the cool confidence and articulation of a supremely experienced artist.

Even with the spotlight on Phil Woods, the MIT Jazz Ensemble supported Woods with skill and sophistication. In Woods' "Quill," Susie Ward and Josh Goldberg '96 gave impassioned saxophone solos that came from their hearts. And with "Variation on a theme by Jimi Hendrix; Manic Depression," the group managed to capture a whole palette of emotions through its instruments. As the piano played a drunken ostinato, we could picture a figure dancing in circles in some sort of hallucinatory state. Melancholy rubbed against furor and aural mania. The winds layered a hauntingly serene ambiance over a violent solo by Damon Bramble '97.

The Aardvark Jazz Orchestra will prove to anyone that it is no mere "ensemble." It is an odd instrumental mix of classical and jazz, but it all contributes to the goal of orchestral colors. That is what the Aardvark is about: these mature musicians concern themselves with sound.

Bandleader/composer Mark Harvey, a lecturer in the music and theater arts department, worked with more primal elements of music to create works of art. The two-plus hour concert in March at the Harvard-Epworth Methodist Church consisted of two suites and a short encore. "The Firewave Suite: a Meditation on the War Peril" began the evening with dark washes of color and sound, gradually moving into the regular beat and structure of more typical jazz.

The second piece on the pro-



Thomas R. Karlo

Members of the MIT Concert Choir sing during the finale of November's performance of Joseph Haydn's *The Creation*.

1 The Graduate Student Council resurrects the grocery shuttle to bring students to LaVerde's Star Market in Medford. The shuttle will run every Saturday in October as part of a trial period to determine the demand for the shuttle.

3 It is announced that Arthur C. Smith will resign from his position as dean for undergraduate education and student affairs at the end of the current academic year. Smith, the first such dean, served in the position for five years.

5 The Student Center is evacuated after a grease fire in Networks sets off the sprinkler system and water floods the transformer room in the basement. The power is shut off, and the building is closed for about four hours. No one is injured.

7 The biology department's new 250,000-square-foot, \$70 million building formally opens this afternoon with a dedication ceremony and dinner.

9 President Charles M. Vest releases his annual report. The Institute must rework its relationship to industry and government in order to "address the challenges of a new era" successfully, Vest writes.

11 The Cambridge Police apprehend a man believed to be the "Baybank bandit." The suspect is accused of robbing six people, including two MIT students, at gunpoint at automated teller machines on the edges of campus and near independent living groups.



Jimmy Wong

A young child has his foot print taken Oct. 13 as part of Crime Week.

3 The Committee on Academic Performance releases a survey this week to collect students' opinions about the current grading system used by the Institute. The survey asks students to rank four possible systems for assigning grades and to explain their reasoning. All proposals would eventually come to a vote at a faculty meeting.

6 The ABC television newsmagazine *Nightline* features the experiences of Cedric Jennings in the Minority Introduction to Engineering and Science program last summer. Jennings, a black high school student from a poor and drug-ridden section of Washington D.C., charges a professor with making racist remarks for advising him that his chances of admission to MIT are not good.

gram, "Passages/Psalms II," was a lighter piece, despite the dark modal colors that permeated most of the improvised passages. Soloists were encouraged to strike out on their own, and they did. Harvey masterfully captured the flow set up by an inspired soloist, bringing in more band members as needed or determining the next composed section to play. Listening was essential to the creation of this music, and everyone was doing it.

Brass Ensemble

In March, the brass ensemble presented a concert in which they moved an audience to both sadness and exultation. The group, directed by trombonist Larry Isaacson, is a standard ensemble with four trumpets, four horns, three trombones, one euphonium, one tuba, and three percussionists. The evening began with Copland's "Fanfare for the Common Man." This piece features dramatic, stark tympani and gong, alternating with a gorgeous fanfare line that is first offered by the trumpets, then by the horns and the lower brass. The ensemble was certainly up to the task, playing the piece with great emotion, excellent dynamics, and smooth phrasing.

After a nice performance of Grieg's "Funeral March," the group played an emotional "Allegretto" from Beethoven's Seventh Symphony. This movement must surely rank as one of Beethoven's most beautiful melodies; indeed, Wagner termed Beethoven's Seventh as "the apotheosis of the dance." Isaacson handed the baton to euphonium player Wayne Baumgartner '96, who did a credible job conducting Arthur Bliss's "Fanfare for a Coming Age," and to trumpeter Brian Blatnik '95, who conducted "Tripartita" by Klaus Roy. Each of these pieces went very well, with each guest conductor getting a good performance from the ensemble.

The dramatic highlight of the night was the closing piece, "Fanares Liturgiques" by Henri Frédien Tomasi. With a unifying musical theme throughout, the four sections depict the annunciation, the good news of salvation, the Apocalypse, and Christ's crucifixion and ascent into Heaven. The ensemble presented the whole piece with the emotion suggested by the subject matter, making this a powerful and moving closing statement.

Concert Band

The word "band" conjures up an image of mediocre musicians playing marches and other simplistic music not worthy of serious musical consideration. The concert band's performance in March, however, makes a fine exception to this stereotype. The band attempted an exciting collection of intellectually and musically challenging contemporary works for wind ensemble, including *Canto III*, a piece by Professor John Bivicchi '44, a faculty member at the Berklee College of Music. Alan Pierson '96 conducted the performance in the Bernstein

tradition, and was as much a visual delight to the audience as a leader to the performers.

The second half of the concert opened with the Mass, a textless five-movement setting of the full *Mass Ordinary* by Adrian Childs '94. The composition was a fascinating combination of ideas gleaned from the composer's study of the Medieval Mass and his use of compositional techniques of 20th century music. For a finale, the band performed "Three Sussex Sketches," by Jeffrey Bishop, for which the orchestration often seemed ineffective and hashed together. As in the first piece, the band was unable to effectively handle some of the most difficult writing. However, with its use of familiar tunes and special effects involving off-stage players and unusual instruments' sounds, it served as a rousing finish to a truly excellent concert.

The concert band was founded by students in 1948 and was joined soon after by Lecturer John Corley, who has been with the group ever since. All along, Corley has remained dedicated to performing works written specifically for wind band, and over the years has commissioned many pieces for the ensemble.

Playing its 45th anniversary concert in Kresge Auditorium on April 30, the band premiered its latest commission, *Fantasy on the Elements* by Berklee composer Silvia San Miguel, as well as a new work by Childs, *Concertino for Piano, Winds, and Percussion*. Although there were some fine moments, both works were encumbered by poor intonation or execution from the band.

The novelty piece on the program was William J. Maloof's *Festive Music for Double Wind Orchestra and Percussion*. It was written for two symphonic bands playing simultaneously; so the concert band split into two groups and streamed up each of the outside aisles in Kresge Auditorium, facing each other in two lines to play the piece. Much of this piece revolves around harmonic or rhythmic conflict between the two bands, creating complex integrated patterns, and a well-integrated performance of this piece was the evening's highlight.

Concert Choir

In April, the concert choir was joined by the MIT symphony orchestra in a performance of Giuseppe Verdi's *Messa da Requiem*. Aside from moments of insecurity from the orchestra, the performance as a whole was musically satisfying and surely one of the most sonically dazzling to grace Kresge's somewhat dry acoustics.

As with his many BSO performances, director John Oliver drew a strong, solid sound from the chorus. Oliver's tempos were quite conventional and did not show any self-conscious signs of "going easy" on an amateur student chorus by slowing down. The chorus proved its



Adriane P. Chapman

The Toons, a joint MIT-Wellesley a cappella group, perform this October.

strength, staying in tune and nicely focused. Led by the soprano, the chorus again absolved itself in another unaccompanied thirty-nine bar section at the tail end of the *Libra me*. For a chorus of its gargantuan proportions, the MIT concert choir achieved an impressive level of tonal homogeneity.

The instrumental portion of the performance was not quite as successful as the vocal contribution. The woodwinds have consistently delivered in their performances and were featured prominently again in the *Requiem*. Despite small intonation errors, their tone as an ensemble remained steady. However, the evening's most painful moment came during the Offertorio. Although Verdi wrote a single melodic line for the cellos, the audience was hammered by a virtual chorus of approximations.

The concert choir gave thoughtful performance of Franz Joseph Haydn's *Die Schöpfung* (The Creation) in November. After being hot-pressed in the spring with Verdi's ultra dynamics and lengthy unaccompanied choral passages, *The Creation* must have been a welcome relief. Except for a slightly laborious "The heavens are telling," the tempos and phrasing were generally pleasing. Most impressive of the evening was deftly-executed phrasing on "Achieved is the glorious work" and "The Lord is great, and great His might."

The instrumental support was adequate for the task at hand, and Oliver's approach was clear-cut and well-defined. Because of the nature theme of *The Creation*, Haydn, known for his good-humored music, amused his audience with plenty of musical references to words in the text. For example, the audience chuckled at the low horn trills which represented a roaring lion. And of course, all heard what a contrabassoon sounds like during Raphael's

"By heavy beasts the ground is trod." The biggest complaint should be lodged against the exceedingly staid harpsichordist, who produced little more than boring broken chords and simple arpeggios. All in all, though, the concert choir maintained a high level of singing and will probably do so for the semesters to come.

Symphony Orchestra

Rose Mary Harbison riveted audiences in March with the symphony orchestra, seizing attention with her violin tone. Her violin brought a seamless continuity to even the least legato of passages. The crescendos for Harbison's performance were composed by her husband, John, who provided two sets for the performer to choose from. John Harbison was imposing his mark; yet, it was striking and attention-grabbing like Beethoven, while providing a natural transition into the music which followed. It went well with the generally avant-garde style of playing of his wife.

The symphony, under guest conductor Craig Smith, was splendid. Percussion was really in top form for a piece by Aaron Copland, brilliantly timed and powerfully evocative. At the other end of the tension scale, we heard a delicately-colored flute solo of some distinction. And then there was that easy-sounding violin pizzicato, the magnetic lilt of the rhythmic dance, and a fiery and precise trumpet solo. All of the orchestra performed well, closely held together by Smith in one of their greatest evenings of music making.

October saw confidence tether the musical potential of the symphony orchestra and its soloist John Ito. The orchestra wavered throughout the night's performance of Walton's *Viola Concerto* and Beethoven's *Symphony No. 6* between poise and musical decisiveness. During the

first movement of the Walton concerto, a weak rapport between Ito and various woodwind soloists suggested the players were not yet fully focused. Even the dubious entrance of the viola's second subject confused the bitter-sweet duality around which the piece develops. However, the last movement remained the players' turning point. Here richness of counterpoint emerged from the ensemble's music-making, especially during the finale's fugal tutti. Quite dramatically, the bold appearance of the bass clarinet solo seemed to reaffirm the players' conviction.

The last half of the evening's program showcased the talents of the woodwinds with Beethoven's *Pastoral Symphony*. Indeed, the players caught much of the rural splendor of Beethoven's evocation of nature. Especially radiant was the interplay between the oboes, flutes, and clarinets; but the violins seemed to bask too much in the lushness of their sound. In throwing off the balance, the violins took much of the bite out of the rustic edginess of the third movement.

Two 20th-century Russian composers were featured in the symphony orchestra's concert in December. Under the direction of conductor David Epstein, they played Sergei Prokofiev's *Piano Concerto No. 3 in C major, Op. 26* and Dmitri Shostakovich's *Symphony No. 5 in D minor, Op. 42*. The soloist in the Prokofiev concerto was Harvard sophomore Sophia Chen. The orchestra (especially the exquisite wind ensemble) fared well with the broad, melodic passages of the Prokofiev, but trouble appeared early in the violins during some of the fast motoric runs that are counterposed against the piano's bravura passages. Chen exhibited acute musical professionalism — occa-

Campus Arts, Page 27



Helen M. Lin

President Charles M. Vest volunteers for the William Tell act at Late Night with Sigma Kappa.

12 Professor Emeritus of Physics Clifford G. Shull shares the Nobel Prize in physics for his development of neutron scattering techniques over 40 years ago. Shull is the fourth member of the MIT physics faculty to win the prize.

12 A serious arson attempt in the 424 suite of Burton-Conner House leads to an emergency dormitory-wide evacuation. Another fire was set in suite 213 shortly after the first one, but it is under control by the time residents return from the evacuation. Campus Police and dormitory leaders respond with security improvements in the building.

13 Another fire attempt is discovered in Burton suite 333 early this morning. The planning of all attempts is similar, with newspaper or other flammable material being spread over a lit electric burner, according to Burton-Conner House President Steven A. Luperchio '95.

13 The Undergraduate Association Finance Board holds a meeting to decide on appeals for funding from dissatisfied or unfunded student groups. Twenty groups request a total of about \$20,000. However, Finboard only makes recommendations for \$1,270, with half of the groups receiving recommendations for no new funding.

14 Another arson attempt is reported in a Burton suite this afternoon. The Campus Police are investigating the series of attempts.

14 Starting today, MIT students can receive free tickets to Boston Symphony Orchestra performances at Symphony Hall. Students must present their ID cards to the box office on the day of the concert, and they will receive tickets unless the concert has been sold out. Associate Provost of the Arts Ellen T. Harris and the Council for the Arts negotiated this unique program with the BSO, where MIT pays an upfront fee for the experimental first year.

Only five movies make this year's Top 10 list, led by *Hoop Dreams*, *Pulp Fiction*

By Robert W. Marcato

As the annual Academy Awards ceremony draws near, avid moviegoers everywhere force themselves to survey the previous year in film. When you look beyond traditional summer fare like *Speed* and *True Lies*, and if you're not overly-nauseated from recent Christmas-season duds like *A Miracle on 34th Street* and *Richie Rich*, your job is not so easy. As always, there were many good performances in 1994, but quality films were rather sparse.

Best films

As sad as it is to admit it, 1994 was an off year on the film scene. Very few movies really got to me, but when they did, they really did. I could not come up with a top 10, but these five could each count twice.

Hoop Dreams

"This film is an epic of hope, pain, struggle, family, and reward." Sounds like a typical critic's description of a great film — but, a documentary?

Yes. *Hoop Dreams* follows the lives of two Chicago high school students, Arthur Agee and William Gates, beginning at 14 with the boys' real hopes of future NBA stardom. The story follows them through the ups and downs brought on by the burdens of high expectations. The film depicts the players' personal lives with gripping intimacy, the camera going further into the home than ever before.

And it's not like watching *Hoosiers*, where you know a happy ending is inevitable. You go through each game, each triumph, each tragedy without the foregone conclusions of victory for the good guys. The film is frightening and gritty and most amazing in that it has all the vivid characters, raw dialogue, and suspense of a great epic. Yet, all the time, you know it all actually happened, and that the filmmakers had as little a clue about what they were getting into as you do when you sit down to watch the movie.

You can't help but be in awe of filmmakers Steve James, Fred Marx, and Peter Gilbert, who it seems moved in with the two families for several years, and then distilled hundreds of reels of film into this masterpiece.

They have no moving music

playing during moments of victory, no slow-motion shots of basketballs tragically rolling out of the basket. The camera is fair and unforgiving, the narration dry and passionless. They never ask you to get emotionally involved in the film. In fact they dare you not to, but you're dragged in nonetheless. It is an affecting experience.

I'm not alone in my praise of the film. Never has a documentary received such critical acclaim. Siskel and Ebert named it as their movie of the year and I found it impossible to do differently. Never has a documentary even been nominated for best picture, much less won the honor, but look to see *Hoop Dreams* accomplish the former and perhaps the latter. It deserves any award that it gets.

Pulp Fiction

Pulp Fiction was the most critically anticipated film in recent memory. From the moment it won the Palm d'Or at the Cannes Film Festival, critics were jumping on its bandwagon at an almost frightening rate. But, hearing a plot summary I wondered what all the excitement was about. I thought, "The weaving of several plots of gangsters and hitmen in the L.A. underworld? Sounds cool, but it's been done

before." It has, but not like this.

Quentin Tarantino is not the hottest name in Hollywood for nothing. He was first noticed for his underground hit, *Reservoir Dogs*, which he wrote and directed, and then the scripts for *True Romance* and this past year's *Natural Born Killers*. Now, with *Pulp Fiction*, Tarantino has shown that he's the goods.

His take on the L.A. underworld is two and a half hours of rip-roaring fun. The dialogue is crackling, the characters enthralling, the acting dazzling, and the plot completely unpredictable. Just when you think you know where you are going, you're trapped in a basement with a couple of rump-wrangling rapists.

Tarantino has shaken up the current course of cinema. He has single-handedly resurrected John Travolta's career and brought back the surf guitar. Any man that can accomplish those two feats after having started as a video store clerk needs to be revered. In an off year for movies, Tarantino and *Pulp Fiction* have done the most to revitalize the film industry.

The Shawshank Redemption

After hearing that this film details a man unjustly imprisoned who suffers in jail but eventually

perseveres and is vindicated, it'd be easy to group *The Shawshank Redemption* with other prison dramas, such as last year's *In the Name of the Father* and the recent *Murder in the First*.

But, *Shawshank* is a level above these two and the others that have preceded it. What raises the film above the norm is the fact that it does not concentrate on the conviction or the vindication, but rather focuses on the struggle and survival of Andy Dufresne (Tim Robbins) while he is in prison, and his friendship with Red (Morgan Freeman).

Robbins and Freeman make the film (see Best Performances). It's touching to watch the personal, heartfelt bond develop between Andy and Red. You follow Andy's every high and low, his every hope and fear. You feel the sorrows of Red's life weighing on him. The two are tough, smart, patient. So is the film. All this makes for one of the most deeply-satisfying movies I've seen. I dare you to try to walk out of this movie without a grin on your face.

32 Short Films About Glenn Gould

There's something about seeing a genius at work. And after watching this enchanting bio-pic about this renown Canadian pianist, you'll have no doubt that genius is what you're seeing and hearing.

Unveiled in a series of 32 dramatic sketches, each accompanied by a Gould recording, the film creates a spellbinding collage of the glories of fame and talent in music, and the downfalls of giving your entire self to it. The film has entrancing rhythm to it that wraps you up in Gould's passions, his intelligence, his obsessions. And the music. If you're not a fan of classi-

cal piano you will be. The film perfectly captures Gould: his music, spirit, and mystical allure.

Vanya on 42nd Street

This film has a great story behind it. Andre Gregory, a well-known stage director, and several actors and actresses over the past several years have been rehearsing the David Mamet version of the famous Anton Chekhov play, *Uncle Vanya*.

It has no popular screen actors in it. Vanya, the lead role, is played by Wallace Shawn, the short guy from *The Princess Bride* who says "Inconceivable!" over and over. They didn't have any objective in doing it. This is just what theater people do for fun.

Then, last year, they called in Louis Malle, a well-known director, and filmed it in two weeks. There are no costumes, no authentic props. It was filmed as a rehearsal in a run-down theater on 42nd Street, hence the name. The result? Gregory and his troupe have created an enthralling and decidedly American take on Chekhov's play. The acting, as you might expect, is flawless, and the subject matter just as thought-provoking now as it was when Chekhov wrote it.

Best performances

Despite the lack of great films, there was no scarcity of great performances. Once again, the majority of the good parts were male. There were some strong female performances, but too often those roles felt like showcases for particular actresses than solid characters in a good story.

Best male performances

Tom Hanks

If you are one of the two people who haven't seen *Forrest Gump* it's worth it to conform just to see its lead actor because, frankly, Tom Hanks is the man.

Watching him slowly work his way up from the television sitcom *Bosom Buddies* to *Big*, we all thought we had Tom Hanks pegged as a primarily comedic actor. But then came *Sleepless in Seattle*, *Philadelphia*, the Oscar, and now this, the next chapter in Hanks' mission to show us that he's the best actor around. And with two Oscars in a row a real possibility, it's hard to argue with him.

Hanks simply creates unforgettable characters with unrivaled sensitivity and deftness of touch. Phrases he utters during the course of this film have entered the public consciousness, become part of our vocabulary. He is a man at the top of his craft and it's something to behold. Enjoy it while you can.

Martin Landau

Playing Dracula has been done, but playing the guy who played Dracula? That's what Martin Lan-



Morgan Freeman and Tim Robbins in *The Shawshank Redemption*.

15 Area college students participate in Project America, a nationwide effort to promote community service. The 700 Boston-area volunteers — 300 from MIT alone — take part in various community services, such as serving lunch at homeless shelters and performing basic maintenance projects at nursing homes.

19 At today's faculty meeting, Dean of the Graduate School Frank E. Perkins '55 makes a motion to establish two new Master of Engineering degrees, one in the Department of Aeronautics and Astronautics and one in the Department of Civil and Environmental Engineering. Votes on the measures are postponed until next month's meeting.

19 Russell S. Light '98 is elected floor leader of the Undergraduate Association Council.

20 The Media Laboratory hosts a symposium called "Digital Expression," featuring artists, including Peter Gabriel and Quincy Jones, scientists, including the founder of Atari, and business and government leaders. The purpose of the day-long event is "to explore the future of creative expression in the face of new technology," according to event organizers. Sen. Edward M. Kennedy (D-Mass.) makes a surprise appearance at the conference's reception.

21 Jerome B. Wiesner, 13th president of MIT and science adviser to President John F. Kennedy, dies of heart failure after an illness of several months. He was 79.

23 MIT makes a good showing at the Head of the Charles Regatta, with one crew in the men's Club Eights event placing first out of a field of 61 boats.

24 The counsel for David M. LaMacchia '95 files a pre-trial motion to dismiss the federal government's case against him. The motion bases its arguments on an incorrect application of the wire fraud law and on constitutional infringements of LaMacchia's rights.



Thomas R. Karlo

Phillip M. Hinz '96 rows in the Head of the Charles.

dau does in Tim Burton's *Ed Wood*, transforming himself into Bela Lugosi, the legendary screen actor and definitive Dracula.

Lugosi is Ed Wood's idol and best friend, starring in most of Wood's infamously horrible films because he is in the twilight of his film career and cannot find other work. The nearly unanimous pick of critics as the Best Supporting Actor favorite, Landau's resemblance to Lugosi is as uncanny as his performance.

Samuel L. Jackson

In *Pulp Fiction*, a movie that shook up the film industry, with a formidable cast including highly-praised performances by John Travolta and Uma Thurman, Samuel L. Jackson is the best of all. In his portrayal of Jules, the evangelistic hit man, Jackson maintains an incredible intensity whether he is reading his victim a passage from the Bible as a prelude to execution or arguing about the intimacy of foot massages.

He shows us that Jules has begun to develop a conscience and reveals the inner conflicts that it causes. Jackson is a true powerhouse, the driving force in a formidable film.

Tim Robbins and Morgan Freeman

The Shawshank Redemption was included amongst my best films of 1994, and what made the film were the performances and the chemistry of these two actors.

In one of Tim Robbins' most multi-layered, sensitive performances to date, he plays Andy, the wrongly-accused prisoner, bringing an intelligence and determination to the role that is hard not to like. And Freeman gave Red, a life-long prisoner, warmth with the deep, mellowing regret brought on by wasted

years. Red is Andy's support. Andy is Red's hope. The two actors are masterful as they bring the friendship along, resulting in one of the best screen chemistries I've seen in some time.

Best female performances

Linda Fiorentino

Fiorentino's performance in John Dahl's *The Last Seduction* brings up an interesting Oscar controversy. She is considered by most to have turned in the best lead female performance of the year, but, unfortunately, the Academy has ruled her ineligible for a Best Actress Oscar because *The Last Seduction* was aired on television (HBO) before it was released in theaters.

The film's backers are petitioning for a change in this silly rule, but if they are not successful, it will be a shame. Fiorentino is brilliantly vicious and cold-hearted as a femme fatale who seduces, double-crosses, abuses, and abandons the men in her life, manipulating them to the point at which they steal and kill for her.

Oscar was going to have enough trouble coming up with viable Best Actress nominees before this favorite was eliminated.

Diane Wiest

Considered by most to be the Best Supporting Actress favorite, Diane Wiest is hilarious in *Bullets Over Broadway*, Woody Allen's most recent film. She plays the egotistical actress, in the later stages of her career, for whom every moment is dramatic, everything a performance even when she's not on stage.

It's a role we've seen before, but her pleas of, "Don't speak! Don't speak!" to John Cusack are enough to put her over the top. She plays it to over-the-top perfection.

Susan Sarandon

It's been a busy year for Susan Sarandon. With acclaimed performances in three films, *The Client*, *Little Women*, and *Safe Passage*, she is bound to get nominated for something. My choice is *The Client*.

Here, she found a role that was perfect for her: a lawyer that takes a young boy's case, and ends up protecting him from the FBI and the mob. Sarandon mixes just the right amount of sensitivity and steel, showing us why, in a year of scarce quality female roles, she managed to get her hands on three. Sarandon is a self-assured, veteran actress who knows what she is doing.

Brooke Smith

Though *Vanya on 42nd Street* is a great ensemble effort, if you had to pick one performance as the best it would be Smith's. Her role as the housekeeper in love for six years with the visiting doctor is the most difficult and subtlest in the film, and she nails it, portraying the plain girl's heartbreaking, dead-end existence painfully well.

The only other film role I know her to have played was the senator's daughter who was kidnapped by Buffalo Bill and thrown in the well in *The Silence of the Lambs*. Pretty obscure, eh? Well, expect to see her around more often.

Jodie Foster

Yes, yes, I know. Playing a wild-child who speaks a language of about 40 words because she's been isolated, living with her mother in the woods for her whole life? It's screaming Oscar! But, a great per-



Tom Hanks is Forrest Gump.

formance is a great performance, and that's what Foster turns in once again in *Nell*. You can say what you want about the movie, but she's amazing.

Performances likely to be overlooked

Meryl Streep

I saw *The River Wild* at one of those free LSC previews, and it just shows that you get what you pay for. As silly as this movie was, Meryl Streep somehow remained classy amongst all this white water, and she totally convinced me that she was as much of a rafting master as the script claimed her to be. She was confident, self-assured and the only thing that kept me from giggling during some of the dramatic sequences.

Maybe an actor or actress's performance in a bad movie is a more telling measure than a performance in a good one. If so, Streep is one of the best.

Rodney Dangerfield

In *Natural Born Killers*, a movie full of psychos, Dangerfield's performance might have been the most disturbing of all. This is probably because his scariest film moment previous to this was doing the Triple Lindy dive in *Back to School*. Seeing him as Juliette Lewis' child-molesting father couldn't be anything but really sick.

Dennis Quaid

Kevin Costner's most recent film, *Wyatt Earp*, bombed hard. It was too bad because no one saw Dennis Quaid.

Supposedly, Quaid became so involved in his portrayal of Doc Holliday, who is supposed to be suffering from a worsening case of tuberculosis, that he lost more than 20 pounds to acquire his emaciated look. It worked, because he is painfully accurate in his portrayal, receiving most of the film's limited praise.

Dennis Miller

In the highly entertaining technothriller, *Disclosure*, Miller plays one of Michael Douglas' head technical associates. Miller's biting wit is perfect for the crude sexual jokes of his power geek character. It is his first film role, and he accounts for most of the movie's laughs, stealing nearly every scene he's in. Look to see Miller on the big screen more often.

Walter Matthau

You'd think that with Tim Robbins and Meg Ryan, *I.Q.* might be a good movie, but the only thing worth seeing it for is Walter Matthau. He plays Albert Einstein with a comic, mug-a-minute style that carries you through this rather flat movie. If you're interested, you'd better hurry. *I.Q.* will be leaving theaters at any moment.



Samuel L. Jackson, John Travolta and Harvey Keitel star in *Pulp Fiction*.

28 After a week of dressing up in costumes and performing in Lobby 10, Stephanie A. Sparvero '96 is declared the Ugliest Manifestation on Campus by the Alpha Phi Omega service fraternity, which sponsors the annual event. A total of \$765.60 was collected this week, and the money will go to Sparvero's chosen charity, the Massachusetts Association for the Blind.

30 MIT Hillel formally dedicates its new Hillel Center in Building W11, the former Center for Advanced Visual Studies building on the corner of Massachusetts Avenue and Amherst Alley.

November

2 Residents of Senior House and East Campus meet to discuss their concerns about the Strategic Housing Planning Committee's proposals to renovate the two dormitories for graduate housing. Following the meeting, nine students form a student committee to represent residents' concerns to the SHPC.

3 Institute Professor Noam A. Chomsky and scholar Israel Shahak address the issues of Jewish fundamentalism in the domestic and foreign policy of Israel at a forum in 26-100. The pair speaks to a full crowd and meets with opposition from several members of the audience when individuals have the opportunity to voice comments and questions.

4 The federal government responds to pre-trial motions made by lawyers for David M. LaMacchia '95 in early October, opposing the motion to dismiss the case.



Rebecca F. Richkus '97 shows Senior House to administrators Steven D. Immerman and Travis R. Merritt during a December 5 open house.

Old and new artists exploit and fall prey to 'alternative' music wave in 1994

By Scott Deskin

I wish I could say 1994 was a good year for pop music. We are, after all, at the unofficial midpoint of the decade, so the music industry should naturally be more sophisticated now than, say, in 1990. Old artists like Eric Clapton and Neil Young are still active, and middle-aged bands like R.E.M. and Sonic Youth have expanded their listening audiences with some imaginative new efforts. In the wake of Kurt Cobain's tragic suicide, people have been forced to re-evaluate their listening habits. Even the infusion of new bands like Green Day and the Cranberries have been somewhat interesting; but, the sudden godlike ascension of some new "alternative" artists has worried me.

Sure, Sheryl Crow's debut album is diverting, but does she really deserve five Grammy nominations? ("All I Wanna Do" isn't very enlightening, just catchy.) And whatever charm Counting Crows had with their debut album was quickly deflated with an excess of radio hype and MTV airplay — I can't even listen to "Mr. Jones" anymore without thinking I might have to take a sledgehammer to the stereo.

Bands are scoring one-hit wonders left and right, throwing caution to the wind as to where their careers might be in a year or two (remember the Spin Doctors?). Sometimes I think that getting on the cover of *Rolling Stone* for some younger bands or artists may be the kiss of death.

That said, I can firmly say that there were still a lot of good albums released in 1994. With a popular listening market that's still rapidly diversifying — beat-heavy dance tracks and prefab R&B dominated the charts — I can't keep up with all the major developments in rock and pop. On some albums, like Beck's *Mellow Gold*, Sam Phillips' *Martinis and Bikkies*, and Nirvana's *Unplugged in New York*, I withhold judgment as one of "the best" of last year because of personal hesitation.

Therefore, instead of compiling an all-encompassing top 10 list of music, I'll just list a few albums which grew on me with repeated listenings, as well as impressed me enough to consider buying them.

Soundgarden, *Superunknown*

I've been listening to Soundgar-

den since 1991, and a lot has changed since then. Just seeing lead singer Chris Cornell again in the movie *Singles*, wailing the song "Birth Ritual" on stage in all his long-haired, bare-chested glory, reminded me how much his band has matured since then.

I personally liked their previous album, *Badmotorfinger*, which relied heavily on loud, charging rhythms and Cornell's patented screams to make an impression. It did, but some people may not have noticed actual melodies and some clever, disaffected lyrics in the wake of comparisons to Led Zeppelin.

In *Temple of the Dog* (1991) Cornell proved that he could actually sing (and write), collaborating with other Seattle musicians, including Eddie Vedder on "Hunger Strike," as a tribute to Andrew Wood, the deceased frontman for Mother Love Bone, the band that predates Pearl Jam.

With *Superunknown*, the band broke ties to an exclusive heavy-metal tradition. Songs like the scream-laden confusion of "Superunknown" and rhythmic drive of "Spoonman" continue the loud,

in "Spoonman," contributes the eerie melody of "Head Down." Still it's Cornell's show, and he shows a great amount of insight and control on this latest work.

R.E.M., *Monster*

I think I missed the R.E.M. wave the first time around. Songs like "Radio Free Europe" and "The One I Love" sounded fine, but I couldn't bring myself to accept their late-phase limp pop and acoustic weirdness. *Monster* is like a shot at redemption for the band, a wake up call for listeners, and perhaps themselves, to get off their asses and stop wallowing in lush orchestral accompaniment, as well as self-indulgence. They may be the most pretentious band in America, according to a WBCN disc jockey, but at least they're responsive to their audience.

The album is deeper than its catchy singles, "What's the Frequency Kenneth?" and "Bang and Blame," both of which MTV and VH-1 threaten to turn stale. But the rest of the album sounds surprisingly fresh. The songs with characteristically serious themes, such as loss of freedom ("King of Comedy," with the recurring lyric "I'm not commodity") and the confusion of sex ("Strange Currencies," "Crush with Eyeliner"), aren't swept away by pessimism.

Monster, with its distorted power-chord riffing and feedback noises, has provoked accusations that R.E.M. has hopped on the "grunge" bandwagon, but they're just appropriating a sound that best suits the direct nature of the songs. The lyrics are slightly more obscure, and less decipherable, than on previous albums, but no one said that rock 'n' roll has to be concrete to be enjoyable.

Liz Phair, *Whip-Smart*

After a year of stage-fright from touring, media exposure, and time to soak in her success, Liz Phair released *Whip-Smart*, a surprisingly succinct and coherent follow-up to the critically-hailed *Exile in Guyville*. Her new album breaks off into new directions, reasserting female sexual longings without succumbing to their banalities.

Phair's voice isn't very remarkable, but her melodies have a rich,

pop feel to them, and her lyrics are honest and insightful — about love and sex, mostly. It's not just that Phair is willing to drop the occasional expletive into her dialogue with the listener, just to make sure she's not misunderstood; but in each song she tells a little story whose context conjures up a word or a phrase that defies normal conversation.

Phair throws her ball of confusion and emotional angst at the listener in hopes of evoking confusion, and perhaps arousal. On *Guyville*, Phair tied her songs to the challenge of life and love in a male-dominated, both sexually and musically, world. Her new album may at first

To be truthful, about half the songs from the album are ballads, but the messages in each song are pure punk product, much in the tradition of Nirvana's albums. She takes some of her cues for social outrage from female punk artists of the past, like Chrissie Hynde of the Pretenders or Joan Jett. Songs like "Miss World," "I Think That I Would Die," and "Gutless" don't suggest any pop-crossover compromise, either.

One song, "Asking for It," plaintively states, "If you live through this with me / I swear that I will die for you," which may have been part of a larger plea for acceptance from her troubled husband — not that anyone couldn't read some hidden meanings from Love's marriage into the lyrics.

Courtney Love's voice is forceful but not overpowering: Her singing pours forth real emotion and feelings. The album's final track, "Rock Star," is a reaffirmation of her own band's mission in the face of countless, "alternative" rock groups. It will be interesting to see if Love can maintain her intensity without burning out, but for now the critical and commercial wave is upon her, so she might as well make the most of it.

Elvis Costello, *Brutal Youth*

It pains me to say so, but several noteworthy veterans came out with albums this year which hardly saw the light of day. Elvis Costello's *Brutal Youth* was a fine pop effort which saw him reunite with his old backing group, the Attractions, for the first time since 1986.

One of my favorite songs off the album is "This Is Hell," a subtle commentary on a run-down nightclub which could also serve as the creative state of popular music: "My Favorite Things" is playing / Again and again / But it's by Julie Andrews. And not by John Coltrane." The debut single, "13 Steps Lead Down," and the angry wordplay of "Kinder Murder" are both great recapitulations of melodic themes in his earlier work.

The album is closer in spirit to his latter day work (probably from *King of America*, in 1985, onward) than to his new-wave hits of the late '70s, although it's a smart move away from classical music, which was probably an ill-advised venture spurred on by friend and one-time classical composer, Paul McCartney. Costello's classical-music phase is addressed in "My Science Fiction Twin," which shows that he can deflect some criticism, with good humor, toward himself once in a while.

If you're not familiar with his work, this album may not be the place to start: Rykodisc's superb box set entitled *2 1/2 Years* shows the young Elvis raiding airwaves in the late '70s with songs like



power-chord-driven explosion, but "Fell on Black Days" and "Black Hole Sun" exhibit the band's softer, brooding side. "Black Hole Sun" has been noted for its Beatles-influenced melodicism, but the tune belies its dark and disturbing lyrics: "Boiling heat / Summer stench / 'Neath the black / The sky looks dead / Call my name / Through the cream / And I'll hear you / Scream again."

The band's overall sound coheres around Matt Cameron's solid drumming and Kim Thayil's prototypical grunge-like guitar. Bassist Ben Shepherd, whose vocal response to Cornell's wail is heard



seem like a retreat from this premise, for many of her songs draw heavily from simple cultural texts, like nursery school rhymes ("Dogs of L.A." and "Whip-Smart") or rock-poet fantasy ("Supernova" and "X-Ray Man").

However, each song represents another facet of Phair's fascination with the opposite sex, whether it be the slick wordplay of the MTV-hit-bound "Supernova" ("Your lips are sweet and slippery like a cherub's bare wet ass") or the tender multi-tracked vocals on "Nashville" ("I won't decorate my love").

The sentiments that Phair delivers vary widely from song to song, but each idea builds around the central theme of independence and respect. It's not an album for the ages, but another solid step toward Phair's own sexual and commercial epiphany.

Hole, *Live Through This*

Courtney Love must have had one hell of a year. Bracketing the release of her first album, *Live Through This*, was the suicide of her husband, Kurt Cobain, and the death by heroin overdose of Kristen Pfaff, bassist for her band, Hole. The spotlight was suddenly on Love to deliver her punk-rock-derived goods, and she did.

The 12 songs on *Live Through This* are not meant to be comforting: "Doll Parts," a fine song and the album's only breakthrough video/single, is probably the most accessible thing on the album. The lyrics convey a sense of longing and emotional retribution: "Someday, you will ache like I ache."

6 The Undergraduate Association Committee on Student Life meets to organize a response to the administration proposals to renovate East Campus and Senior House and move their residents to west campus dormitories.

12 Students, scientists, and government officials convene at MIT for the weekend for the first Human Genome Project Conference. The purpose of the student-run conference is to improve understanding of the social

and ethical issues raised by human genome research and to formulate policy solutions.

14 Officials from the Planning Office present proposals for adding bicycle lanes to Massachusetts Avenue at a meeting. The office will communicate final proposals to the city of Cambridge within the next few weeks.

25 The federal Office of Research Integrity releases a report finding researcher Thereza Imanishi-Kari guilty of 19 charges of scientific misconduct for allegedly fabricating data in a 1986 *Cell* paper.

December

2 A memorial service for Jerome B. Wiesner, the 13th president of MIT, who died in late October, is held in Kresge Auditorium today. Wiesner died in October at the age of 79.



Thomas R. Karlo

A soldier looks into the crowd during Boston's Veterans Day parade.

18 In the David M. LaMacchia '95 case, oral arguments on two pre-trial motions are made before Judge Richard G. Stearns in U.S. District Court at the federal courthouse in Boston. The defense files two motions: one to dismiss the case and one to suppress evidence.

"Watching the Detectives" and "Pump It Up." Still, *Brutal Youth* is an incisive, clever, and welcome return to form.

Neil Young and Crazy Horse, *Sleeps with Angels*

Neil Young's album, *Sleeps with Angels*, is a personal but enjoyable album that addresses themes of violence and suicide, namely the death of Kurt Cobain, who quoted a Neil Young lyric in his suicide note: "It's better to burn out than to fade away".

Just as the demise of the Sex Pistols prompted Young's superb *Rust Never Sleeps* in 1979, he and his group Crazy Horse tackle the same issues with same ferocity and perspective. It may take a while for the songs to sink in, because Neil the acoustic-based tunesmith is evidence here as much as Neil the animal, proto-grunge rocker.

In songs like "Driveby" and "Sleeps with Angels," Young delicately confronts death and the fragile nature of life itself. These themes culminate in the album's centerpiece, "Change Your Mind," a 15-minute guitar ballad that doesn't

feel like one. In an open letter to Cobain, Young offers this touching advice:

When you get weak,
and you need to test
your will
When life's complete,
but there's some-
thing missing still
Distracting you from
this must be the one
you love
Must be the one whose
magic touch can
change your mind
Don't let another day
go by without the
magic touch

At the other end of the emotional spectrum is "Piece of Crap," a personal, but tongue-in-cheek, attack on all things over-marketed and valueless. It easily beats the work of one of Young's contemporaries, Eric Clapton, in its originality and daring; by contrast, Clapton's *From the Cradle* is a crisp workup of old blues songs, expertly performed by Clapton and his ace studio musicians, and much less affecting. Yet



Clapton is still topping the charts, enjoying more widespread acceptance and popularity than during the "Clapton is God" era of the late '60s. Go figure.

Pearl Jam, *Vitalogy*

After Pearl Jam's two previous platinum-plus albums, you might think success would've gone to their heads. Not so; frontman and de facto spokesman Eddie Vedder is as

principled and hardworking as ever, both in the crusade against Ticketmaster and in performing.

I liked their first album, *Ten*, but I sensed that their skyrocketing popularity around the time of their second album, *Vs.*, inflated their stature in the world of rock music. As such, I expected *Vitalogy* to be a pretentious scattering of ideas: That's partly true, but the ideas manage to stick together quite well. Even Vedder's 32-page booklet doesn't seem overblown — compared to the contents of the album itself.

Vitalogy is more or less a collection of songs that contemplate mortality and, perhaps, getting old too soon. As the album's paperback packaging and antiquated booklet both indicate, the band cleverly exploits marketing scheme to its own advantage, to make a statement about the near-demise of vinyl. In fact, "Spin the Black Circle," one of the amped-up anthems from the album, metaphorically works better as a tribute to vinyl

than as a reference to shooting up with heroin: "See this needle / See my hand / Drop, drop, dropping it down / Oh so gently." Two ballads, similarly titled "Nothingman" and "Better Man," deal with different relationships from male and female perspectives, respectively, in a poignant manner.

As always, Vedder gets the most attention, and he leaves his mark all over the album. Aside from his characteristically rich vocals and fuzzy lyrics, he contributes "Bugs," a strange, accordion-backed rant about coping with insects, real or imagined, and "Pry, To," a one-minute throwaway in the tradition of the Beatles' "Wild Honey Pie" (from their *White Album*). Similarly, the band draws inspiration for its last track, "Stupidmop," from the Beatles' "Revolution No. 9."

It's too early to suggest that the members of Pearl Jam are indulging too much, aiming to become a post-grunge era Fab Five, but I think that *Vitalogy* is everything Vedder wanted it to be: vibrant, tuneful, and alive. But for lush, crowd-pleasing anthems, I'll still listen to *Ten* first.

MIT campus arts continue tradition

Campus Arts, from Page 23

sionally accommodating the orchestra — and still managed to showcase her technique and keen musical insight.

As Prokofiev had written the concerto for himself, the demands placed on the soloist are a sensitive ear for clarity and a no-nonsense feel for rhythmic vitality. Typical of Shostakovich, the *Symphony No. 5* contains many passages of stark textures and jagged melodies, where the strings reach into the highest

registers. Despite a rough start, the whole orchestra was able to pull together for the marvelous third movement, excellently shaped with great intensity. Unquestionably the most exciting sounds came from the brass section which played fantastically, most notably the trumpets. The last section of the final movement seemed intentionally appended specifically for the brass players.

Premiere Orchestra

Steve Reich's *Tehillim*, the first non-premiere work by the Premiere

Orchestra, was conducted by Alan E. Pierson '96 in May. Music and Theater Arts Lecturer Pamela Ambush, who coached the Premiere Orchestra singers, also sang high soprano as a member of the West Germany premiere and the studio recording of *Tehillim*. Although *Tehillim* is Reich's most traditional (i.e. chromatic, engaging, and non-repetitive) work, it still reflects the simplicity and directness of minimalism. The music, set to the text of four Hebrew psalms, was written for four singers and an orchestra. As Reich composed it, *Tehillim* has an intricate and enjoyable rhythm, but in Kresge, the six percussionists could barely be heard over the amplified string instruments. This lost rhythm was really the performance's only major shortcoming. The opportunity to demonstrate the strange appeal of polyrhythm, so deftly employed by Reich, was lost.

Choreographed dancers accompanied the music of the Premiere Orchestra. At some times, the dancers didn't match the mood or tempo, making the choreography seem irrelevant. The music should have been only a background to dancing that blended emotionally or thematically with the piece. At no time could the dance have been interpreted, even loosely, to say: "The heavens declare the glory of God/The sky tells of His handiwork" (Psalm 19). On the whole, the precision of the performance reflected the hard work and talent of the musicians, and Reich's musical ideas were commu-

nicated clearly. Reich's indeterminate and ethnic-sounding harmonies, and the unpretentious beauty of minimalist music, were impressive.

Chorallaries and Logarithms

The Chorallaries' annual "Concert in Bad Taste" lived up to the usual crude and melodic expectations. At times, they seemed to lapse into a repeat of their performance from the previous year, with LSC parodies and Top 10 lists. Aside from taking aim at Tonya Harding, Nancy Kerrigan, and former Associate Dean James R. Tewhey, they exploited the John and Lorena Bobbitt story with blood-stained boxer shorts, part of the 1994 Chorallaries merchandise, which figured prominently throughout the program.

Perhaps the best television-based skit was a pseudo-homage to the last season of "Star Trek: The Next Generation." The skit featured the crew of Picard's Enterprise face-to-face with villain William Shatner, who threatens the crew with relentless bad acting and his (in)famous rendition of "Lucy in the Sky with Diamonds." The formal conclusion of the show, necessitated the traditional MIT theme, "We Are the Engineers," as well as the two encores performed were identical to those from last year: "Cab driver in New York" and "Necrophilia Down by the Graveyard." The sheer catchiness of the tunes, playfulness of singer-audience interaction, and polish on the Chorallaries' Wall of Sound were good enough to earn these two encores the loudest applause of the evening.

The Logarithms, who interrupted the bad taste concert, had their own chance to shine a week later. Their concert was up to their usual standards of melody and humor, but contained few surprises.

After some guest performances from the Smith College Notables and the Wellesley Tupelos, the Logs took the stage presenting a mixed bag of a capella entertainment, with the spotlight on TV theme songs, barbershop tunes, and pop songs. The first comic interlude was the presentation of the "Top 10 Headlines Least Likely to be Seen in *The Tech*," a collection of such impossibilities as number five: "MIT Student Pays Tuition with Coop Rebate." The number one item was, "LCA & GAMIT Host Homophobia Conference." We were flattered with such attention. A very nice, well-arranged lullaby followed.

The potential highlight of the evening, Queen's "Bohemian Rhapsody," fell short of expectations when the Logarithms strayed from the original. McCormick again had the spotlight and let people down with a very square performance. Freddie Mercury is an imposing act to follow, but McCormick's choice of precision over passion was poor. The transposition of the mock opera section down into the range of normal male voices was also disorienting. After closing with the traditional "Arise All Ye of MIT/Take Me Back to Tech," the Logs returned to rowdy requests for encores. Their versions of the Indigo Girls' "Gallileo," and Depeche Mode's "Somebody" were serviceable, and both arrangements were of the usual high quality expected from the Logs; but they were too usual, which may be a complaint on the Logs' whole set. On both their new CD and in the performance, the Logarithms acquitted themselves with their usual professionalism, but there were no surprises and very few twists on the same familiar themes.



Sharon N. Young-Pong

The Dramashop performs *Spring's Awakening*.

2 Campus and Cambridge police are called in to deal with a group of 50 to 100 rowdy non-MIT residents who tried to join an informal post-party reception at Chocolate City. The incident follows an annual fund-raising party thrown by Alpha Phi Alpha fraternity Friday night.

2 Three MIT students are named Marshall scholars: Danielle C. Goodman '95, Lik Mui '94, and Jeffrey M. Tomasi '95. The British Marshall scholarships allow American citizens who have recently graduated from a four-year university to study at a school of their choice in the United Kingdom, with all expenses paid.

4 A deliberately-set fire prompts a dormitory-wide evacuation of MacGregor House. A burning roll of toilet paper filled J-entry with smoke and resulted in the evacuation.

4 The Asian American Caucus, a new student group, sponsors a symposium on anti-Asian violence called "A Legacy of 'Isolated Incidents.'"

5 A pair of computer problems disrupt service of the campus network and the Athena Computing Environment. The problems slowed the system to a crawl, according to an Athena consultant.

5 To communicate their concerns about the Strategic Housing Planning Committee's work, Senior House residents host an open house for over 25 administrators and faculty.

7 Another case of attempted arson occurs in a Burton-Conner House suite kitchen early this morning. The Campus Police and the Cambridge Fire Department are investigating the incident.

8 The Undergraduate Association Finance Board Chairman David Lee '95 resigns, the second Finboard chair to resign in as many years.

8 The Interfraternity Council Judicial Committee decides to place the fraternity Delta Tau Delta on community relations probation after neighbors' complaints prompted a hearing before the Boston Licensing Board.

28 A federal court judge dismisses the case against David M. LaMacchia '95, who had been indicted last April on the criminal charge of conspiracy to commit wire fraud. In a decision expected to have important legal ramifications, District Judge Richard G. Stearns rules that although his conduct was questionable, LaMacchia broke no law.

Field hockey wins its first NEW-8 tourney, ranks 4th in region

Sports Roundup, from Page 32

Better team results could have been desired for the first season under the helm of coach Eric Solleé, but there were a handful of outstanding individual performances. For such a time, five of the losses were decided by five bouts or less, including 13-14 heartbreakers to Brown University and the University of North Carolina.

Keith Lichten '95 in the épée and René Despinos in the sabre each qualified for the NCAA championship. Lichten and Hurst in the sabre each emerged as victors of the New England championship, where MIT finished third.

Women's Fencing

Record: 3-13-1

Captain: Wanda Chin '97

Most Valuable Player: Chin

Despite attaining a losing record in regular dual meets, the Engineers managed a third place finish in the New England Intercollegiate Women's Fencing Association championship in the foil. The team also won the title in the épée, in the first year of competition in that weapon. The épée squad was selected to perform at the NCAA Championship as a demonstration sport.

At the New England Championship, Katherine Fricks G placed third in the épée, and Amy Hwang '97 finished fifth in the foil.

Field Hockey

Record: 15-5

Captains: Catherine Mangion '95, Meera Saini '95

Most Valuable Player: Katherine Merrilees '97

Four-year Letter Winners: Mangion, Carla Oshiro '95, Saini

The team had its best season ever in 1994, winning its first ever NEW-8 Tournament title. The Engineers were also ranked as high as fourth in the NCAA Division III Northeast Region.

In the championship game of the NEW-8 Tournament, the Engineers used an early goal to defeat Babson College, 1-0. A week later, the two teams met again in the semifinals of the ECAC championship. This time, Babson prevailed, but only when penalty strokes were used after two scoreless sudden-death overtimes to settle a 0-0 tie.

In the same season, Katherine Merrilees '96 became the first-ever MIT All-American in field hockey and was named to the College Field Hockey Coaches Association Division III third team. She was also voted NEW-8 Player of the Year, and head coach Cheryl Silva was named NEW-8 Coach of the Year.

Goalkeeper Laura Walker '97, named the team's Most Improved Player, recorded a .932 save percentage, 12 shutouts, and conceded only eight goals in 20 games, all in her first year in goal. Stephanie Maifert '98 contributed eight goals to the team, earning her the title of the team's rookie of the year.

Football

Record: 4-5

Captains: Nick Bollweg '95, Andy Carnell '95, Corey Foster '95, Andy Phelps '95



Thomas R. Karlo

Rebecca Milham '94 breaks past her defender in a game against Mount Holyoke College.

Most Valuable Players: Bollweg, Foster, Carnell

Four-year Letter Winners: Neil Best '95, Bollweg, Carnell, Foster, Phelps

The Engineers were forced to play their first few games without running back Jose DeLeon '97, who suffered a wrist injury. They were hard-pressed to improve on, or even repeat their stellar performance of the previous season. Before DeLeon's return, the team had managed only a meager 1-5 record.

After DeLeon returned to the field, the team easily won three of its last four games, including a 48-0 Homecoming rout of Curry College. It was the second largest win in MIT football history.

Quarterback Alix Sgouros '95 finished his career with a number of Institute passing records including

yards gained and completions. Nick Bollweg was a first team All-Conference selection in the Eastern Collegiate Football Conference for the second consecutive year, while Corey Foster, Trent Redman '97, and DeLeon were second team All-Conference selections.

Andy Carnell led the defense, having recorded over 100 tackles as linebacker. Carnell and Mike Butville '98 were all conference picks while Chris Yanney '97 received honorable mention. Scott Vollrath '96 was the ECFC punting champ, which earned him a first team All-Conference title.

Golf

Record: 15-8, fall and spring

Captain: Frank Popp '94

Most Valuable Players: Popp, Tom Kawamoto '96

Four-year Letter Winners: Popp

The golf team recorded its 21st consecutive winning season, the longest streak of any Institute team.

The only senior on the '93-94 team, Frank Popp '94, closed out his collegiate career on a high note. In his last varsity match, he ousted the captain of Northeastern University on the fourth hole of the sudden death playoff to give MIT a one-stroke win.

Phil Tracadas '95 finished 12th of 80 golfers at the Massachusetts Intercollegiate Championship. During the following summer, Popp and Tracadas represented MIT in the Irish-American University Golf Program in Ireland.

In the fall of 1994, the team placed third at the CAC tournament and the Bowdoin Invitational Tournament. Oliver Burland '98 gave the best performance from a newcomer at the CAC tournament, and received the CAC Rookie of the Year award. MIT finished the season with a 35th-place finish in the

New England Intercollegiate Golf Championship.

Men's Gymnastics

Record: 1-9

Captains: Chris Ellefson '95, Scott Lazerwith '96

Most Valuable Player: Ellefson

Four-year Letter Winners: Manny Jaime '92

Coach Fran Molesso claimed that this team had the most talent of any he had coached at MIT. However, a difficult schedule, including many Division I opponents, did not make this level of talent apparent. At the ECAC championship, MIT set a team record, with a mark of 215.15, and did so without placing a performer in the top eight of any single event. At the meet, MIT broke five records for team scoring on the individual apparatuses.

The Engineers qualified for, and competed in the 1994 National Championship at Denton, Tex., where they finished sixth. Five members were named USA Gymnastics National Scholar-Athletes. The team was later awarded the status of national academic team champion for boasting the highest grade point average in the nation.

Women's Gymnastics

Record: 0-10

Captains: Beth Chen '94, Stephanie DeWeese '95

Most Valuable Player: Tasi Chiarenza '97

Four-year Letter Winners: Kimberly Conwell '94

The women's gymnastics team faced the stiffest competition of any sports team at MIT, reflected in the no-win record. However, like many of the other teams, there were some notable individual feats.

Catherine Rocchio '97 and Tasi Chiarenza '97 both earned All-America honors at the National Col-



Thomas R. Karlo

Forward Jill Depto '97 scores a goal in a game against the Harvard Business School.

1993-94 Straight "T" Awards

The Straight "T" is the highest award given for athletic performance at MIT. The team Straight "T" Award is awarded to any team which wins a regional (New England, Northeast, or Eastern) championship or qualifies for a national tournament.

Individual Winners

Kamilah Alexander '96: Women's Volleyball, Eastern Regional Division III All-Star Team

Irfan U. Chaudhary G: Squash,

Second Team NISRA All-America

Carla-Anastasia M. Chiarenza '97: Women's Gymnastics, Division III NCGA All-America on uneven bars

Ethan Crain '95: Men's Cross Country, Division III All-America; Outdoor Track, National Division III Champion 1500 meters

Jesse L. Darley '95: Men's Cross Country, Division III All-America

Pareen Dhalla '95: Women's Volleyball, Eastern Regional Division III All-Star Team

Stacey Dozono '97: Women's Volleyball, Eastern Regional Division III All-Star Team

Janis Eisenberg '98: Women's Cross Country, Division III All-America

Rebecca Hill '95: Women's Soccer, Second Team All-New England

Katherine Merrilees '97: Field Hockey, Division III All-America

Jay A. Muelhoefer '94: Men's Tennis, New England Division III doubles champion; NCAA Division III All-America in doubles

Javier A. Nazario '95: Water Polo, First team Division III All-America

Matthew H. Robinson '94: Indoor Track, Division III All-America in pole vault

Sheila C. Rocchio '97: Women's Gymnastics, Division III NCGA All-America in uneven bars and all around

Nicholas L. Tsai '94: Men's Tennis, New England Division III dou-

bles champion; NCAA Division III All-America in doubles

John L. Wallberg '96: Indoor Track, Division III All-America in 35 lbs. weight throw

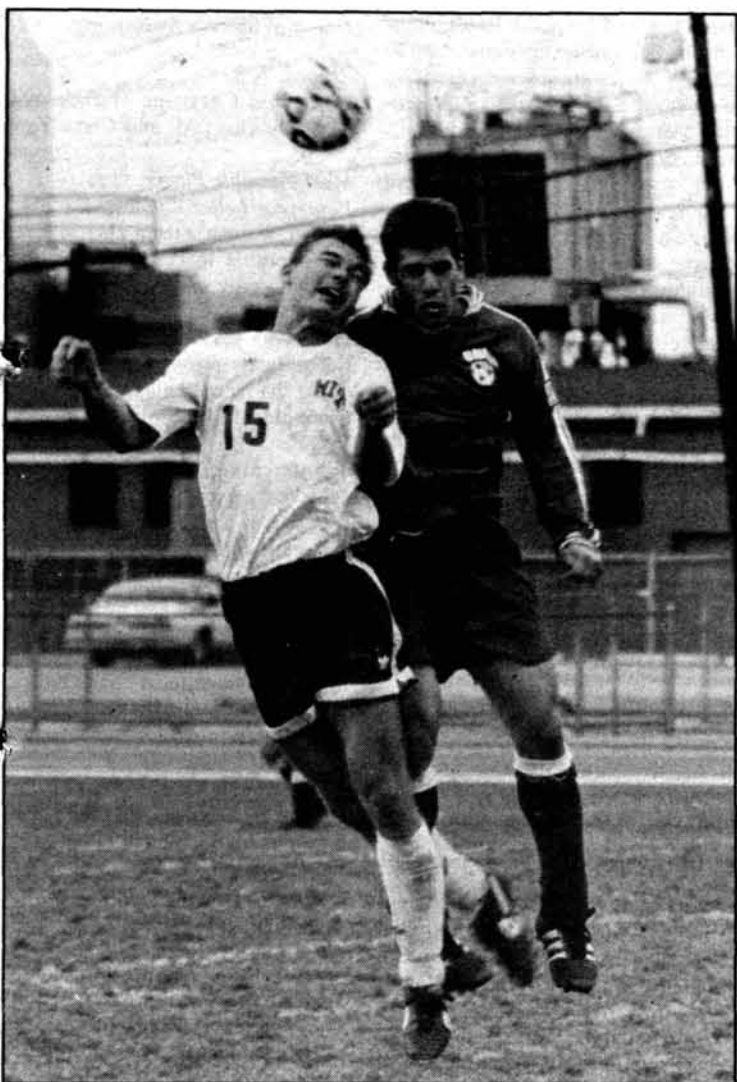
Team Awards

Men's Cross Country: NCAA Division III Championship qualifiers

Men's Gymnastics: USA Gymnastics National Collegiate Championship qualifiers

Women's Volleyball: NCAA Division III Championship qualifiers

Men's Heavyweight Crew: Heavyweight Open Four with Coxswain at the Intercollegiate Rowing Association Championships, silver medal



Thomas R. Karlo

Douglas MacIvor '98 heads the ball during a game against Union College. The team finished 6-8-1 for the season.

legiate Gymnastics Association Division III Championship. Rocchio received honors for her performances in the all-around and on the uneven bars, while Chiarenza was recognized for her results on the bars. Janet Sollod '96 joined the pair in qualifying for the championship.

MIT hosted the ECAC Division III Championship, where the Engineers earned their highest team scoring mark of the season. At the meet, Rocchio won the balance beam competition and placed third in the floor exercise. In her championship performance on the beam, Rocchio also set an Institute record.

Both Rocchio and Chiarenza were named ECAC Gymnast of the Week during the season, and each set Institute records in individual event.

Men's Ice Hockey

Record: 8-8-3
Captain: Nick Pearce '94
Most Valuable Player: Pearce
Four-year Letter Winners: Jason Biederman '94, Pearce

Before the season, the team had set its sights set on qualifying for the post-season New England Collegiate Hockey Association Championship Tournament for the third consecutive year. The players, however, would not know they had qualified until the very last night of the regular season: In a make-up game against Southern Connecticut

State, the league-leading team, the Engineers pulled off an exciting 7-6 win and earned a berth in a tournament.

Unfortunately, they would lose to the same team in the semifinals of the tournament, 3-2. The team ended the first semester of the '94-'95 season undefeated, with a 5-0-2 record.

Women's Ice Hockey

Record: 11-8-1
Captain: Carol Boudreau '94
Most Valuable Player: Susie Wee G

Men's Lacrosse

Record: 6-7
Captains: Ryan Blanchette '94 and Chris Berg '95
Most Valuable Player: Blanchette
Four-year Letter Winners: Blanchette

The Engineers experienced strikingly different results between conference and non-conference play. They achieved a 6-3 record in the Pilgrim League and had a chance at the conference title until the final league game. The same team also dropped four non-league contests by a combined score of 63-23.

Ryan Blanchette and Chris Berg '95 were named to the Pilgrim League All-Star Team. Blanchette and Tom Nowalk '94 were each named to the New England East-West Senior All-Star Game. John Hoctor '96 was a Pilgrim League Player of the Week.

Women's Lacrosse

Record: 5-5
Captain: Allison Marino G
Most Valuable Players: Helen Azrin '94 and Rebecca Milam '94

The women's lacrosse team seemed to be the mirror image of the men's lacrosse team: the same results, only backwards. Outside the NEW-8 conference, the team was quite successful, but within the conference, it was only able to win one of five.

The sole conference victory was a 10-8 defeat of Smith College. Smith later bounced back to defeat the Engineers in the first round of the NEW-8 tournament, 16-9.

The only loss outside the conference occurred in the finals of the Elms College tournament, where the Engineers lost to New England College, 10-9 in overtime. Catherine Mangion '95 and Jen Chank '95 were selected to the all-tournament team.

Pistol

Record: 2-9
Captain: Antony Donovan '95 and Jason Zhu '95
Most Valuable Player: Kyle W. Blasch G

Four-year Letter Winners: Blasch
The team made extensive travel as usual, because few local schools field varsity pistol teams. Most of the losses came to the service academies that made up most of the team's schedule.

Despite the losing record, MIT still managed to qualify for the National Collegiate Pistol Championship in three different guns: the air, standard, and free pistols. There, the Engineers finished seventh, eighth, and 10th, in their respective events.

Alice Wang '97 qualified as an individual in the ladies' sport pistol. She improved from a 10th place result at sectional to a sixth-place finish at nationals.

Rifle

Record: 15-10
Most Valuable Player: Dorian Balch '94
Four-year Letter Winners: Balch

Consistent performances from one meet to the next led to continued success for the Engineers in 1994. The highlight of the season was a repeat victory of the Mid-Atlantic Conference Championship. The previous year, MIT defeated DePaul University in a postal match

(targets and scores are exchanged through mail to cut down travel time and expenses) to win the title.

This time, the two teams met in person for competition. MIT prevailed again, in a close matchup. Dorian Balch and Chris Sartor '97 were named to the '93-'94 all-academic team.

Varsity Sailing

Record: Win-loss records are not kept
Captain: Adam London '95
Most Valuable Player: Doug DeCouto '97

In the '93-'94 season an inexperienced squad was unable to maintain the national ranking of 19th that MIT had attained at the end of the season before.

Doug DeCouto '97 and Jeff Brock '97 competed against some of the best freshman sailors in the country at the New England freshman championship, and came away with a third-place finish.

Throughout the fall of 1994, the team experienced a variety of successes. MIT finished eighth out of 15 schools at the New England sloop championship. Representatives of the team gathered top-five finishes at numerous competitions that followed.

The same weekend MIT hosted the Smith Trophy, which featured 25 schools, the largest field of any regatta in the country. Elaine Heal '95, with Yoko Kusumoto '97, and Adam London, with Anna Michel '98, led the Engineers to a fourth-place finish.

Various team members captured victories at the Cape Cod Open and in the Brandeis Bowl Regatta.

Women's Sailing

Record: Win-loss records are not kept
Captain: Elaine Heal '95
Most Valuable Player: Danielle Ames '96

The women's sailing team held onto the Olympians' Trophy, given at the New England sloop championship, for the second straight year in the '93-'94 season.

Danielle Ames took the A division of the women's Division III Intersectional and placed fifth out of 34 entries in the New England single-handed championship. Ames and Elaine Heal '95 combined to finish second out of 12 in the women's division of the Horn Trophy. Ames, Heal, and Patricia Schmidt '96 teamed up to claim the Olympians' Trophy.

In the fall of 1994, the team of Ames, Heal, Schmidt, and Yoko Kusumoto '97 finished eighth in the nation.

At the Atlantic Coast Championship, the team finished sixth in a field that featured 12 of the top 15 teams in the nation. Ames and Kusumoto came in fourth place.

Ames also posted a third-place result in the New England single-handed championship, to end up with an individual ranking of ninth in the nation.

Men's Skiing

Record: Win-loss records are not kept
Captain: Wesley Sherman '95, James Albee '95
Most Valuable Player: James Albee '95

Women's Skiing

Record: Win-loss records are not kept
Captain: Katherine A. Trauth G
Most Valuable Player: Trauth
Four-year Letter Winner: Trauth

Men's Soccer

Record: 6-8-1
Captain: Raja Jindal '95, Alan Love '95

Sports Roundup, Page 30



Thomas R. Karlo

John Mueller '94 beats the tag at third base in a game against Worcester Polytechnic Institute. The Engineers swept the doubleheader and also won seven of their last 10 games.

1993-94 Convocation Awards

The following awards were presented at the May 4 Institute Awards Convocation.

The Pewter Bowl Award: is presented annually to a female senior who has shown the highest qualities of inspiration and leadership in intercollegiate athletics.

Winner: Marion A. Casserberg '94 (women's basketball)

The Admiral Edward L. Cochrane Award: presented annually to a male senior who

has shown the highest qualities of humility, leadership and inspiration in intercollegiate athletics.

Winner: Nicholas J. Pearce '94 (hockey)

The Betsy Shumacher Award: presented annually for excellence in athletic competition to a female undergraduate.

Winner: Kamilah Alexander '96 (volleyball)

The Howard W. Johnson Award: presented annually to the male senior athlete of the year.

Winner: Matthew H. Robinson '94 (track and field, football)

The Malcolm G. Kispert Awards: presented annually to the male and female scholar/ath-

letes of the year.

Winners: Valerie P. Tan '94 (tennis/biology), and Jay A. Muelhoefer '94 (tennis/mechanical engineering)

The Harold J. Pettegrove Award: presented annually in recognition of outstanding service to intramural athletics.

Winner: Craig A. Andera '94

1993-94 Department Of Athletics Awards

The following awards are presented annually by the Department of Athletics in conjunction with the Varsity Club and the MIT Alumni Association.

The Gold Awards: presented for the highest degree of student leadership and service in the administration of any level of athletics at MIT.

Winners: Craig A. Andera '94, Jesse L. Darley '95, and Dionne E. Chapman '94

The Varsity Club Awards: presented annually to the outstanding male and female freshmen athletes of the year.

Winners: Sheila C. Rocchio '97 (gymnastics), and José L. DeLeon '97 (football)

Men's and women's soccer fall victim to several one-goal losses

Sports Roundup, from Page 29

Most Valuable Player: Joe Wenisch '96

Four-year Letter Winners: Love, Dave Roberts '95, Paul Mashikian '95

The team finished just short of a .500 record for the fourth consecutive season. MIT won the first game of the season, but fell victim to a number of one-goal losses, and only once was able to win two consecutive games.

Joe Wenisch earned a selection to the CAC All-Conference first team. Sam Pearlman '96 and Dave Roberts '95 were also named to the CAC All-Conference team.

Women's Soccer

Record: 8-8-1

Captains: Emily Brown '96, Becky Hill '95

Most Valuable Player: Hill

Four-year Letter Winners: Deb Gustafson '95, Hill

The women's soccer team started the season off well, winning six of its seven games, but then fell victim to a handful of one-goal losses. The Engineers went into the NEW-8 Tournament as the fourth seed, where they defeated Wheaton College, 4-2 and then lost to Babson College, also by a score of 4-2.

Co-captain Emily Brown was named to the NEW-8 All-Conference team for her defensive skills, while co-captain Becky Hill was named NEW-8 Conference Player of the Year, for her team-leading scoring performance. Hill was also the Institute's first women's soccer player to be selected to the regional All-America team.

Softball

Record: 12-6

Captains: Dionne Chapman '94 and Colleen Kaiser '94

Most Valuable Player: Kaiser

Four-year Letter Winners: Chapman, Kaiser

Colleen Kaiser, who pitched all 18 games, proved to be an invaluable contributor to the team. Delivering a 12-6 pitching performance, and a batting average over .450, Kaiser was named a first team NEW-8 all-star. The Engineers advanced to the semifinals of the NEW-8 tournament, where they fell to WPI, 3-1. WPI handed the Engineers half of their losses, as it swept the Engineers in two one-run games of a doubleheader earlier in the season. Errors were a factor in MIT's losses: The team committed 21 errors in six losing games.

Dionne Chapman, who maintained a .419 batting average, was named to the academic All-America third team.

Squash

Record: 8-12

Captain: Saffroadu Yeboah-Amankwah

Most Valuable Player: Irfan Chaudhary G

Four-year Letter Winners: Chaudhary, Yeboah-Amankwah

The squash team earned a ranking of 15th in the nation and produced its third All-American in the past four years — Irfan Chaudhary, named to All-America second team.

The team could have easily finished with a better record had one or two matches gone the other way. The Engineers suffered four consecutive 4-5 losses to end the season, including three defeats at the team championship.

MIT sent 13 swimmers to the

Men's Swimming

Record: 2-8

Captain: Ted Achtem '95, Brian Dye '96, Sherrif Ibrahim '96

Most Valuable Player: Achtem

Four-year Letter Winners: Vijay Lathi '94, Alan Liu '94

The team struggled in dual meets after losing many key members to graduation the previous year. A lack of divers also gave some free points to opponents.

MIT sent 13 swimmers to the

New England Division III Championship, and finished eighth out of 20 teams. The Engineers delivered top eight finishes in a handful of individual events, and in all of the relays.

Ted Achtem produced impressive results at the New England Championship, making his selection as most valuable swimmer easy to justify. At the meet, he finished second in the 400-yard individual medley, third in the 100-yard individual medley, second in the 200-yard backstroke, and fifteenth in the 100-yard freestyle. His performances also broke his own Institute records in the 200-yard backstroke and 400-yard IM.

He was also a member of the sixth-place 400-yard freestyle relay team, and the 800-yard freestyle relay which finished fifth.

Achtem was the only MIT swimmer to qualify for the NCAA Division III Championship.

Women's Swimming

Record: 1-8

Captains: Christine Harada '94, Holly Goo '95, and Clara Yang '95

Most Valuable Player: Goo

Four-year Letter Winners: Harada

The women's team also suffered considerable losses to graduation. But with only one member graduating in 1994, the Engineers return to the '94-95 season with added experience and improvement.

At the New England Division III Championship, despite not placing anyone in the top 10 in swimming events, many of the Engineers achieved personal best times. For a few, it was a way to close out their collegiate careers in style.

Off the diving boards, Deb Gustafson '95 led the way for MIT. Gustafson, who either won or finished high at most of the dual meets, finished 10th in the 1-meter springboard, and fifth in the 3-meter springboard.

Men's Tennis

Record: 8-13, spring and fall

Captain: Jay Muelhoefer '94

Most Valuable Player: Muelhoefer

Four-year Letter Winners: Muelhoefer, Mauricio Lomelin '94

The netmen struggled through most of the spring, as they lost to most of their New England rivals. They were able to finish the spring on a high note by winning three of their last four matches.

Jay Muelhoefer qualified for the NCAA Division III Championship in singles, and also was joined by Nick Tsai '94 for the doubles tournament. The duo reached the semifinals, was ranked fifth in the nation, and won All-American honors. Muelhoefer earned his third consecutive All-America selection.

The team that returned in the fall was less experienced, finishing 2-3 in dual meets.

MIT's domination of the Rolex New England Championship came to an end as all singles and doubles representatives lost early. MIT had always fielded a doubles champion in the tournament before Geoff Lanyon '98 and Dan Wang '97 lost in straight sets to the top-seeded team from Williams College in the first round.

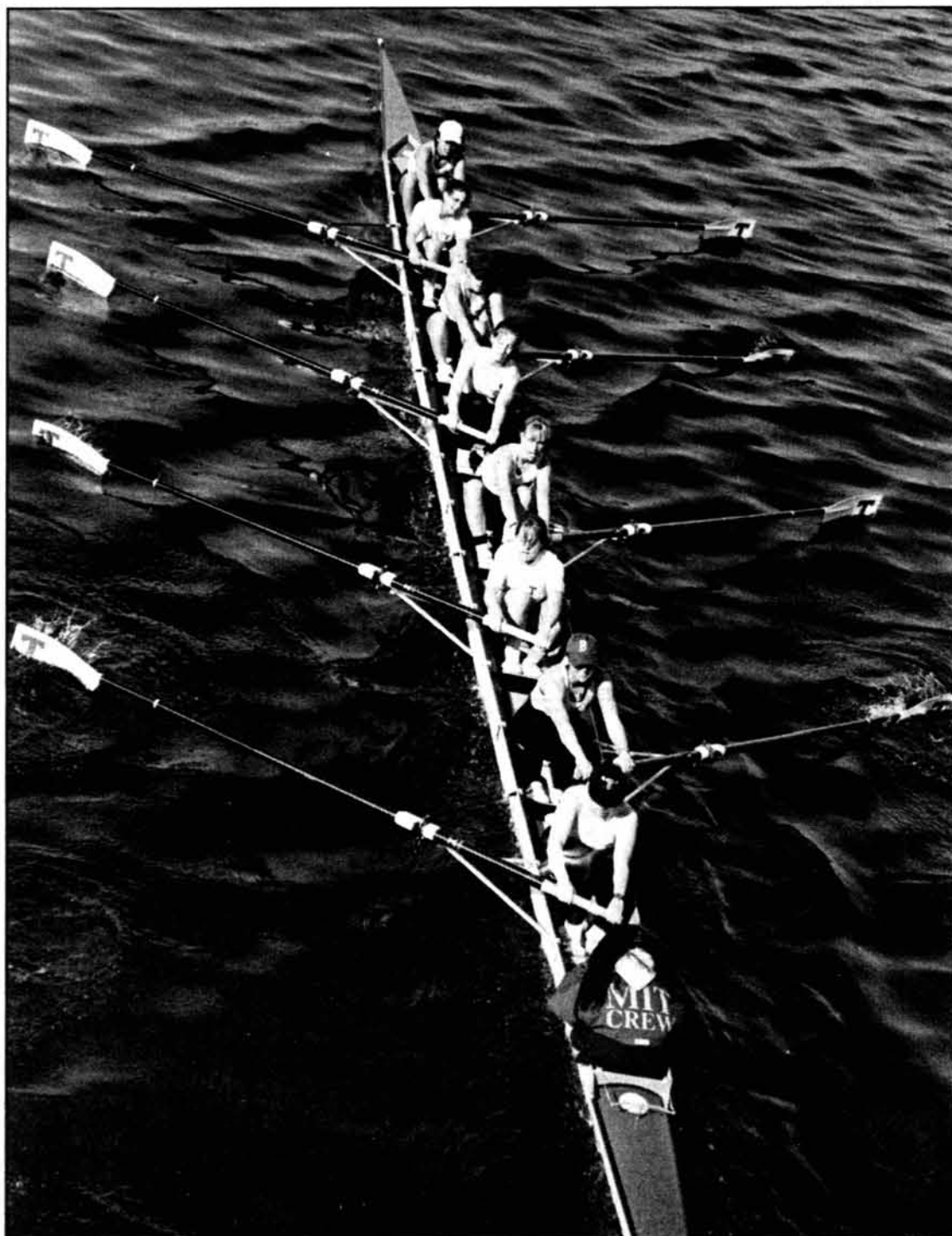
Women's Tennis

Record: 4-11, spring and fall

Captain: Carol Matsuzaki '95

After a fairly successful fall season in 1993, the team went 0-4 in the spring of 1994. A single point was the margin of defeat in three of the four losses for MIT. At season's end, the doubles pair of Matsuzaki and Valerie Tan '94 delivered the best individual performances, finishing fourth in the East Region of the Intercollegiate Tennis Association.

The following fall, the Engineers finished fourth in the NEW-8 Conference, with a 4-3 record, but were winless against non-conference opponents. The team placed 11th out of 27 teams at the New England Championship.



Jonathan Li

The women's varsity eight rows to a win against Boston College, University of Massachusetts at Amherst, and Tufts University. Women's crew won its second consecutive NEW-8 Championship and the Smith Cup.

1994 National Scholar-Athlete Awards

Jeffrey J. Breedlove '94: Division III Wrestling Coaches Association

Dionne E. Chapman '94: GTE CoSIDA Softball third team

Christopher J. Ellefson '95: USA Gymnastics

Corey J. Foster '95: GTE CoSIDA Football first team

Manuel E. Jaime G: USA Gymnastics

Scott E. Lazerwith '95: USA Gymnastics

Catherine J. Mangion '95: Intercollegiate Women's Lacrosse Coaches Association

Jay A. Muelhoefer '94: GTE CoSIDA At-Large (tennis) first team

Carla L. Oshiro '95: Intercollegiate

Women's Lacrosse Coaches Association

Geoffrey M. Phillippe '95: USA Gymnastics

Valerie P. Tan '94: GTE CoSIDA At-Large (tennis) third team

Chikyung Won '94: USA Gymnastics

1994 Team Academic Awards

Men's Gymnastics: National Association of Collegiate Gymnastics Coaches Men's Team Champion

Men's Outdoor Track and Field: United States Track and Field Coaches Association All-Academic Team

1994 NCAA Postgraduate Scholarship Awards

Corey J. Foster '95: Football

Brooks C. Mendell G: Other Sports (Baseball)

1994 Prince Intercollegiate Tennis Association Scholarship Award

Valerie P. Tan '94

1994 All-America Honorees

Carla-Anastasia M. Chiarenza '97: National Collegiate Gymnastics Association Division III on uneven bars

Irfan U. Chaudhary G: National Intercollegiate Squash Racquets Association second team

Ethan A. Crain '95: NCAA Division III

Cross Country, NCAA Division III Outdoor Track and Field

Jesse C. Darley '95: NCAA Division III Cross Country

Janis H. Eisenberg '98: NCAA Division III Cross Country

N. Katherine Merrilees '97: College Field Hockey Coaches Association third team

Jay A. Muelhoefer '94: NCAA Division III Tennis Doubles

Matthew H. Robinson '94: NCAA Division III Indoor Track and Field in Pole Vault

Shella C. Rocchio '97: National Collegiate Gymnastics Association Division III on uneven bars, National Collegiate Gymnastics Association Division III in all around

Nicholas L. Tsai '94: NCAA Division III Tennis Doubles

John L. Wallberg '96: NCAA Division III Indoor Track and Field in weight throw.

First singles player Matsuzaki was voted NEW-8 Player of the Year, an impressive feat for someone who had played tennis competitively for less than three years. She achieved a regional ranking of 22nd in singles, and teamed up with Miranda Fan '95 to finish 11th in doubles.

Third doubles team Lily Koo '97 and Bobbi Kommineni '97 joined Matsuzaki in being named to the All-Conference team.

Men's Track and Field, Indoor

Record: 18-1

Captain: Dan Corcoran '94, Matt Robinson '94

Most Valuable Player: Robinson

Four-year Letter Winners: Corcoran, James Kirtley '94, Elliott Mason '94, Robinson

The team remained undefeated for the entire season until the final meet, a four-way competition that included nemesis Williams College. The Ephs were the only ones who could stand in the way of the Engineers capturing the Quad Cup title, and managed to do so.

Matt Robinson and John Wallberg both qualified for the NCAA Division III Championship, and both came away with All-America honors. Robinson, who had won his sixth New England Division III pole vault title, placed second at the national competition, with a varsity record of 16 feet, 3-3/4 inches. Wallberg placed sixth in the 35-pound weight throw.

The Engineers were able to produce two other New England Division III champions — Matt Sandholm '96 in the 200 meters and Ethan Crain '95 in the 1500 meters. Crain also set a new varsity record in the 5000 meters at the All-New England Championship, finishing with a time of 14 minutes, 49.38 seconds.

Men's Track and Field, Outdoor

Record: 3-2

Captains: Jay Chiang '94, Dan Corcoran '94, Matt Robinson '95

Most Valuable Player: Ethan Crain '95

Four-year Letter Winners: Chiang, Kirtley, Kevin Knoedler '94, Robinson

The team lost many of its indoor point scorers to injury, and was not able to do as well in the outdoor meets. The Engineers lost to Tufts University by four points and to Springfield College by seven points.

The Engineers produced a national champion in Crain, who captured the 1500-meter title at the NCAA Division III Championship. Matt Robinson and John Wallberg also qualified for nationals, but Robinson could not attend, and Wallberg did not place.

Women's Track and Field

Record: 0-3

Captain: Teresa Chang '94, Agnieszka Reiss '95

Most Valuable Players: Marjorie Delo '95, Kristin Ratliff '96

MIT played host to the inaugural NEW-8 Championship in the sport. Although the Engineers finished last as a team, there were a number of remarkable individual perfor-



Thomas R. Karlo

Above: Tight-end Troy Gayeski '97 runs for a touchdown during MIT's 22-8 victory against Western New England College. The Engineers finished with a 4-5 record.

Right: Patricia Schmidt '96 hikes out over the edge of her Laser during the women's single-handed regatta. The women's sailing team won the Olympians' Trophy for the second consecutive year.

mances. At the meet, Ratliff broke her own Institute record in the discus to secure first place. Jen Boyle '96 tied the school record in the shot put to win that event. Reiss added another victory for the Engineers with a first-place finish in the 1500-meter race.

Men's Volleyball

Record: 7-17

Captains: Koji Asari '96, David M. Lehman '97

Most Valuable Players: Satoshi Asari '93 and Chris Chong '94

Four-year Letter Winners: Asari

The men's volleyball team competes on a Division I schedule, which features rather stiff competition. The quality of the opponents was a major factor behind the Engineers' losing record. The Engineers also experienced losing streaks to begin and end the season — a four-game skid early in the season, followed by six consecutive losses at the end.

The greatest success for the team came at the Eastern Invitational Volleyball Association Tournament, held at Vassar College. MIT won four matches and dropped only one on the way to winning the consolation bracket.

Women's Volleyball

Record: 29-8

Captains: Paireen Dallah '95, Robin Smith '95

Four-year Letter Winners: Dhalla, Colleen Johnson '94

The Engineers were successful in tournament play, reaching the finals of every tournament that they competed in. Consistent performances gave them the top ranking in the NCAA Northeast Region, which they held for most of the season.

Although MIT compiled a 6-1 record in the conference, and was the top seed in the NEW-8 Tournament, it suffered an upset to Smith College in the semifinals. Despite the loss, it was still given a bid in the NCAA Division III Championship for the first time since 1990. In the regional subsection of the tournament, the team lost in the first round to Eastern Connecticut State University.

Kamilah Alexander '96 led the individual performances, earning several tournament and post-season honors. She was the MVP at the Hall of Fame Classic and was named to all-tournament teams at

events at MIT and Bates College. Alexander was voted player of the year for the second time in the NEW-8 Conference, and was also named to the All-Conference team and the New England All-Region team. Paireen Dhalla was selected to the all-tournament team at the Bates tournament and the ECSU Invitational Tournament, and was also named to the New England All-Region team.

Men's Water Polo

Record: 6-16

Captain: Javier Nazario '95, Evan Weis '96

Most Valuable Player: Nazario

Four-year Letter Winner: Nazario

The team faced numerous Division I opponents, a major factor behind its losing record. However, the Engineers finished 3-1 against Division III competition.

The Engineers finished in sixth place in the Eastern Water Polo Association North Division and reached the finals of the Division III East Court Tournament. At the latter event, they lost to Johns Hopkins University, the same team that defeated them the previous year.

Javier Nazario was named to the first team Division III All-Region team for the second consecutive year. Fellow Engineers Matt Lau '97, David A. Brandenburger '95 and goalie Brian Fitch '96 were named to the second team all-region.

Women's Water Polo

Record: 3-5

Captains: Cheryl Klepser G, Clara Yang '95

Most Valuable Player: Klepser

The team's improvement was evident by its change in results in tournaments. MIT went 0-2 in its first tournament, followed with a 1-2 finish at the Harvard Invitational Tournament, then ended with a 2-1 record, as the host team, in the Women's Water Polo Non-League Championship. The final tournament, a 7-4 defeat to Harvard, was

the lone loss for MIT, but a change from a 17-2 setback the preceding week.

The team lost only one starter to graduation, and will enter the '94-95 season with high hopes of qualifying for the regional championship.

Wrestling

Record: 8-6-1

Captains: Jeff Breedlove '94, Andy Phelps '95

Most Valuable Player: Breedlove

Four-year Letter Winners: Breedlove

The matmen maintained their streak of winning seasons since 1980, a string that has lasted throughout Tim Walsh's tenure as head coach. During the '93-94 season, they experienced alternating winning and losing streaks. At the beginning of 1994, the team lost three consecutive meets, but then following by winning three straight. The team then split its final six matches.

The Engineers performed well at the season-ending New England Division III Championship. Drew Rideout '95 placed second in the 128-pound class, while Chandler Harben '95 placed third in the 190 lbs. class. Jeff Breedlove '94 in the 167 lbs. division, and Chris Kantner '97 in the 158 lbs., both earned sixth-place results.

The most remarkable single victory came at the Northern New England Tournament. There, Harben defeated the eighth ranked Division III wrestler in the nation to steal the title.

Breedlove was named to the NCAA Division III Wrestling Coaches Association Scholar-Athlete team for the second consecutive year.

At season's end, the team was awarded the New England Sportsmanship Award by the New England Wrestling Referees Association.

Special thanks to Roger Crosley, sports information director.



Thomas R. Karlo

Naomi Stone '96 moves the ball downfield during a match against Colby College. The women's soccer team won six of its first seven games, but finished 8-8-1.

sports in REVIEW

Strong team, individual efforts highlight the year in athletics at the 'Tute

By Daniel E. Wang

The sports seasons of the past year were dominated by several strong teams and outstanding athletes. Women's sailing and women's volleyball had strong showings, as did the field hockey and men's gymnastics team. In individual achievement, 11 MIT students were named All-Americans, including Jay Muelhoefer '94 for his third consecutive year. Join us for this look back on the highs and lows of the past year in Institute athletics.

Baseball

Record: 15-14
Captains: Brian Christensen '94, Jon Gass '94, John Mueller '94

Most Valuable Player: Mueller
Four-year Letter Winners: Brooks Mendell '93, Christensen, Gass, Mueller, Jeffrey Olson '94, Daniel Sabanosh '94

Last spring, despite achieving their third winning record in the last five years, the Engineers were unable to return to defend the title in the Eastern Collegiate Athletic Conference Tournament they won the previous year. The team showed improvement at the end of the season by winning seven of its last 10 games.

Two players received All-Conference honors in the Constitution Athletic Conference. Jeff Olson, with a .469 batting average in conference play, was selected to the first team, and named Baseball

Scholar Athlete of the Year. Pitcher Rob Lepard '95 was named to the second team All-CAC. Despite a 1-3 record in the conference action, he recorded an earned run average of 1.80.

Lepard, Brian Christensen, and Jon Gass were named to the GTE CoSIDA academic all-district second team.

Men's Basketball

Record: 7-17
Captain: Nikki Caruthers '95
Most Valuable Player: Caruthers

The hoopsters improved on two previous 5-19 seasons, finishing the '93-94 season with a 7-17 record. The Engineers could have achieved better results had point guard Caruthers not missed a few games because of an injury.

Center Keith Whalen '96 highlighted individual performances, leading the team in scoring and rebounding. His efforts earned him a spot on the CAC second team.

The team did not lose anyone to graduation, and the starting lineup returned to the '94-95 season with added experience. The Engineers overcame a slow 0-3 start to finish the first semester of the '94-95 season with a 3-3 record.

Women's Basketball

Record: 10-14
Captain: Mari Casserberg '94
Most Valuable Player: Casserberg

Casserberg passed two major milestones this season. She became the second player in MIT women's basketball history to score over

1,000 career points. She later surpassed Maureen Fahey '90 to become MIT's all-time leading female scorer.

The Engineers also gained an impressive third place finish at the Catholic University Coca-Cola Classic in Washington, DC. The team rebounded from a six-point loss in the first round to capture the consolation game. Kristin Ratliff '95 and C.J. Doane '95 were named to the all-tournament team.

The team traditionally opens the season with the Engineer Tip-Off Classic, held at home. It went into the '94 edition hoping to defend the championship gained a year ago. MIT came close, but was edged out in the final by Salve Regina University, the same team it met in the title game last year.

Men's Heavyweight Crew

Record: 3-6
Captain: Lorin Theiss '94
Most Valuable Player: Neeraj Gupta '94
Four-year Letter Winners: Theiss, Gupta, Dan Dunn '94

The team struggled throughout a season which featured conditions which were less than ideal for rowing. The Engineers faced strong Harvard and Princeton crews in the Compton Cup, and traveled to the compete in the Cochrane Cup against Dartmouth and host Wisconsin. However, they were unable to come away with a win against any of their opponents.

The highlight of the year came at the end of the '93-94 season when

an MIT crew rowed to a second place finish at the Intercollegiate Rowing Association Regatta in Syracuse, NY. The crew consisted of Charley Abel '97, David Spielvogel '95, Victor van Berkel '96, Dunn, and coxswain Anand Raghunathan '96.

Early in the following season, the team successfully competed in various meets. At the Head of the Ohio regatta, the Engineers won two bronze medals in the three events there. They also fielded a third-place boat at the Head of the Connecticut Regatta, and later captured five medals at a New Hampshire meet.

A week later, members of the team emerged victorious in the Club Eight division of the Head of the Charles Regatta.

The triumphant crew was Franz Busse '95, Chris Putnam '96, Jeff Tomasi '96, Adam Cotner '96, Toby Ayer '96, Lorin Theiss G, John Singer '95, and Nate Crosswhite '95, with Peter Yao '95 as coxswain.

Men's Lightweight Crew

Record: 1-7
Captain: Robert Bergan '94
Most Valuable Player: Greg Campbell '94

The team's most remarkable feats came near the end of the season with a win over the Coast Guard Academy and a third place finish in the Petite Final of the Intercollegiate Rowing Association Regatta.

Adverse wind conditions on the day of the meet with Coast Guard forced a change in the format to a best of three four-minute races. The Engineers split the first two races, but captured the decider to win the meet.

At the IRA event in Syracuse, N.Y., the Engineers beat Pacific Lutheran College in a sprint over the last 100 meters, to capture third place.

Women's Crew

Record: 10-1
Captain: Megan Jasek '94
Most Valuable Player: Jasek

Four-year Letter Winners: Jasek

The Engineers had one of their most successful seasons ever, winning a second consecutive New England Women's Eight Championship and the Smith Cup for overall performance in the regatta.

The team's only loss came early in the season, when rival Boston University won by a scant seven seconds. After defeating all subsequent opponents, the varsity easily captured the NEW-8 title, coming ahead of Wellesley College, the second-place finisher, by 12 seconds. Similar performances by other crews earned MIT the Smith Cup.

In the fall, the team had a successful day at the Head of the Charles Regatta, followed with a victory at the MIT Invitational.

Men's Cross-Country

Record: 7-0
Captain: Jesse Darley '95
Most Valuable Player: Ethan Crain '95

Four-year Letter Winners: Darley

Led by Jesse Darley '95 and Ethan Crain '95, the harriers qualified for the National Collegiate Athletic Association Division III national championship and ended up ranked 10th in the nation. Crain and Darley had worked together as a team throughout the regular season, and continued to do so at nationals. As a result, Crain finished ninth and Darley placed 10th; both also earned All-America honors.

The team was consistent in its performance, usually dominating their opponents. The Engineers won the CAC Championship for the fourth consecutive year, putting five runners in the top seven places, and defeating the next best team by 35 points.

Crain was the individual champion, and was named to the All-Conference team. Darley, Dan Helgeson '97, Josh Feldman '97, and Arnold Seto '96 joined Crain on the All-Conference team.

In addition, the runners finished second at the New England Division III championship, and were named Team Academic All-America for the first time ever.

Women's Cross-Country

Record: 7-2
Captain: Agnieszka Reiss '95
Most Valuable Player: Janis Eisenberg '98

Four-year Letter Winners: Marjorie Delo '95, Evelyn Kao '95, Reiss

The highlight of a successful season for the team was a third consecutive victory at the Engineers' cup, where MIT runners took 10 of the top 15 positions. The team also finished fourth at the UMass-Dartmouth Invitational, and was narrowly edged by the host team at the Wellesley Invitational.

Janis Eisenberg, in her first season of intercollegiate competition, won the NEW-8 Championship, and achieved the rare feat of being named both NEW-8 Runner of the Year and NEW-8 Rookie of the Year. She qualified for the NCAA Division III Championship as an individual, and finished 34th to gain All-America status. She is the first MIT woman to attain such status in cross country.

Marjorie Delo joined Eisenberg on the All-Conference team by finishing fifth at the championship.

Men's Fencing

Record: 5-14
Captain: Mark Hurst '94
Most Valuable Player: Hurst
Four-year Letter Winners: Hurst, Rene Despinos '94



Helen M. Lin

Ann Torres '96 attempts a goal as the field hockey team beats Clark University 2-0. The field hockey team won its first ever NEW-8 tournament title and was ranked as high as fourth in the NCAA Division III Northeast Region.