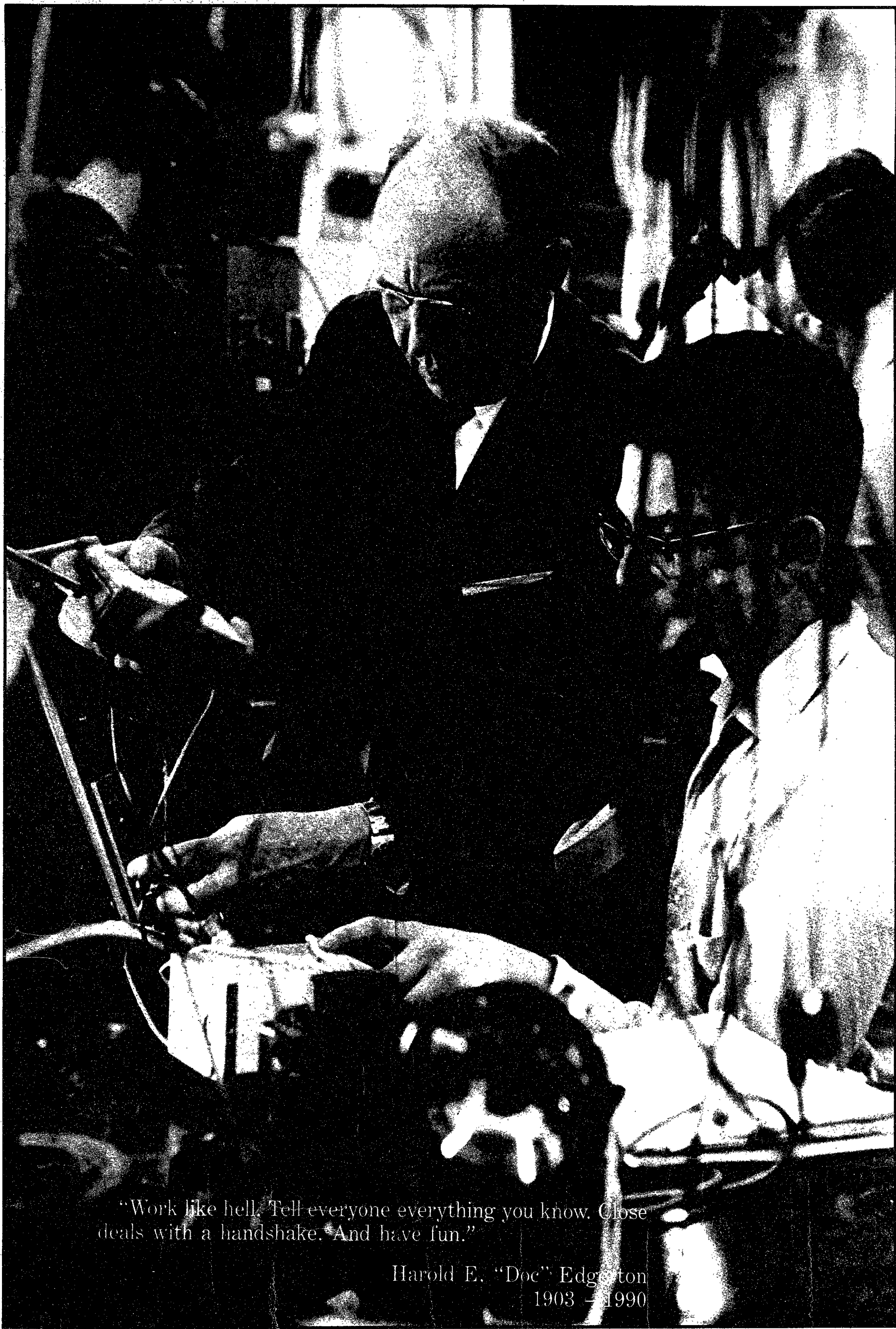


The Year in Review

February 6, 1990



"Work like hell. Tell everyone everything you know. Close deals with a handshake. And have fun."

Harold E. "Doc" Edgerton
1903 - 1990

MIT seeks new leader as Gray resigns

By Reuven M. Lerner

Corporation and faculty search committee members spent the better part of 1989 looking at possible successors to President Paul E. Gray '54, who announced last March that he will step down on July 1 of this year to become chairman of the MIT Corporation. Gray will replace David S. Saxon '41, who is retiring.

Saxon immediately announced the appointment of Carl M. Mueller '41 as chair of the Corporation presidential search committee. The faculty chose a presidential search committee of their own, chaired by Professor Robert M. Solow. Though the faculty committee is technically only an advisory group, the two committees have been meeting and working together during the entire search process, according to members of both groups.

The Corporation is expected to approve the committees' choice at its March meeting.

Solow said that the committees have received over 200 suggestions for candidates. Of these, a large number went through initial interviews. The search committees have reportedly met with people from MIT, from other universities, and from industry. One committee member said that many more candidates are "from outside, but that is because there are many more people outside."

Members of both committees have repeatedly denied the existence of a "short list," or a final list of candidates from which the final choice will be selected, but other sources within MIT claim that such a list already exists. One committee member acknowledged that they are no longer looking at new candidates, but are narrowing the field from within one set of candidates. Committee members refused to confirm or deny the candidacy of individuals.

According to members of the faculty committee, input has been sought from all members of the MIT community. A forum held on Dec. 20 provided a medium for those on the search committee to update the community on their progress to date, and to field questions from the audience. Many of the people in attendance expressed dissatisfaction with the selection process, and criticized the lack of student participation.

There was also a great deal of concern about MIT's connections with the Department of Defense. Students and faculty alike criticized the closeness of the two bodies, and one student went so far as to say that MIT had "no social conscience."

Prominent candidates leave the race

There is a great deal of uncertainty even now concerning possible candidates, due in large part to the resignations of two of the most likely candidates.

Professor David S. Baltimore '61, a Nobel laureate and director of the Whitehead Institute for Biomedical Research, announced in October that he had accepted the presidency of Rockefeller University, a biomedical research center in New York City. Baltimore had been considered a leading candidate in part because of his prominence in the scientific community and for his administrative skills.

Provost John M. Deutch '61 had been considered the most likely candidate until he announced two weeks ago that he would not become the next president, but would instead return to academic life after resigning from his post on June 30.

Deutch's aggressive management style and his many years of experience as an administrator have placed him on short lists for leadership positions around the

country. During the entire presidential search here at MIT, there have been numerous reports of Deutch's candidacy for the presidency at Johns Hopkins University in Baltimore and at Carnegie Mellon University in Pittsburgh. Deutch was in fact one of two finalists at Hopkins until he pulled out of that search in the middle of January.

The provost's aggressiveness has often been regarded as both a liability and an asset. One faculty member remarked that "resentment [of Deutch] is at a fairly high level and is felt by high numbers of faculty."

Deutch's controversial tenure as provost has been marked by a major initiative on educational reform, the hasty 1988 dismantling of the Department of Applied Biological Sciences, and intimate involvement with national defense interests.

It is still unclear exactly who the remaining candidates are, both within and outside of MIT. *Science* magazine reported last month that candidates included Dean Eastman; a vice president at IBM; James F. Gibbons, dean of engineering at Stanford University; Donald Kennedy, president of Stanford; Thomas E. Everhard of the California Insti-



Tech file photo

Provost John M. Deutch '61

tute of Applied Technology; and Nobel laureate Arno A. Penzias, from AT&T Bell Laboratories.

The Boston Globe has additionally mentioned former Secretary of State George P. Shultz

PhD '49, National Academy of Sciences President Frank Press, and Bell Laboratories Executive Vice President Solomon J. Buchsbaum as possible candidates.

Deficit forces tuition hike

By Andrea Lamberti

MIT's budget deficit continued to rise in 1989, prompting the Corporation to approve increases in tuition and the self-help level and to limit faculty salary increases.

These measures will distribute the burden of the deficit among faculty, students, and staff, Provost John M. Deutch '61 said in October.

"If we can adhere to these parameters, the budget problem should be eliminated in a couple of years," said Vice President for Financial Operations James J. Culliton.

The Corporation actions came in response to the recommendations of an ad hoc committee appointed by Deutch to address the budget problem.

The ad hoc committee predicted that its plan would reduce the deficit from its fiscal year 1989 level of \$5.4 million to \$3 million this year. In FY 1991, the committee projected a break-even budget, with a small surplus likely the following year.

Some of the reasons Culliton cited for the continued deficit included the growing need to provide competitive salaries, especially for the faculty, a reduction in the number of overall students, and a lower research base growth.

Other factors enlarging the deficit, according to Culliton, were increased employee benefit

costs — particularly for health care — and increased unrestricted fund support to meet full undergraduate need.

Largest increase in five years

The 7.2 percent increase in tuition for this year was the largest in the past five years. The total increase in tuition, room and board was \$1295, making the total cost of attending MIT \$19,335 this year. Tuition — rising from \$13,400 to \$14,500 — accounted for most of the that increase.

MIT's self-help level, the amount of money a student receiving financial aid is expected to contribute through loans or work-study, grew by \$400 after remaining at \$4900 since the 1985-1986 academic year.

The rise in self-help to \$5300 once again created a gap between the self-help level at MIT and other schools with comparable expenses. According to President Paul E. Gray '54, the Corporation Executive Committee held the self-help level constant during the past four years to allow other institutions to catch up to MIT.

Gray blamed MIT's endowment for the increase in the self-help level. "MIT's endowment is substantial in absolute terms, but it is not large in the context of MIT," Gray said in February.

"In absolute terms, the size of MIT's endowment ranks around seventh. Harvard has the largest

at \$4 billion; MIT has about \$1.2-1.3 billion. However, you must relate absolute endowment to size of institution. [Taking into account the number of faculty members and graduate students], MIT is 20th-30th," he explained.

Gray also said that the "self-help level had to increase," and students should not have expected a permanent ceiling of \$4900. "The increase in the costs [of attending MIT] has to be borne by both families and the Institute," he said.

The decision to maintain a constant self-help level for the past four years was "carried out one year at a time," said Leonard V. Gallagher '54, director of student financial aid. "We were warned each time that it would have to go up the next year."

At an unprecedented tuition forum last February, students asked Gray if he thought the tuition increases would drive qualified students to other schools. Because so many factors are involved in a student's decision to attend a college or university, it is difficult to assess the impact of higher tuition costs, Gray responded.

The distribution by family income across the national income quartiles has been stable, he added. "There has been a steady upward trend in the lowest income quartile, and a downward trend in the highest income quartile," Gray said.

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A 1989 timeline

Feb. 6 The Department of Electrical Engineering and Computer Science announces that it will admit transfer students into the major beginning in the fall of 1989.

Feb. 7 Approximately 625 students, a record-breaking number, enroll in credit courses during Independent Activities Period 1989. The first year of a two-year experimental phase mandated by the IAP Policy Committee to learn about how students spend their time in the month of January ends.

Feb. 10 The Institute commemorates the legacy of Martin Luther King Jr. in Kresge Auditorium. Gregory Chisom G, a PhD candidate in the Department of Mechanical Engineering and a candidate for the Jesuit priesthood, gives the keynote address. President Paul E. Gray '54 also speaks while a small group of demonstrators come to protest racism at MIT.

Feb. 14 Accusing MIT of hypocrisy, former Assistant Professor of Writing Marilyn Richardson claims that while MIT has issued statements advocating a racially integrated faculty, it has taken little action to achieve that end. Richardson asserts that her denial of reappointment to the faculty illustrates this lack of action.





Lisette W. M. Lambregts

Faculty votes to keep P/F

By Prabhat Mehta

The faculty struck down a proposed measure which would have eliminated pass/no-record grading in the second term freshman year, thus ending one of the most important educational reform initiatives to date. The faculty did, however, approve other, less drastic changes in the curriculum — including a tougher minimum passing standard for pass/no-record marking and an addition to the Institute Science Requirement.

At the beginning of the spring term last year, the Committee on the Undergraduate Program presented two reports to the faculty for review: the Committee on the First Year Program's evaluation of the pass/no-record system and curricular flexibility, and the Science-Engineering Working Group's study of science education.

The CFYP report called for the elimination of both pass/no-record grading in the second term of the freshman year and the two-subject pass/fail option available to juniors and seniors. In place of the old system, the committee recommended that students after their first term be able to take one course on a pass/no-record basis per term.

In addition, the plan called for raising pass/no-record's minimum passing level after first term freshman year from a D letter grade to a C. The report also suggested that some of the pass/no-record courses taken after the first term be allowed to satisfy Institute and departmental requirements.

The CFYP argued that second term pass/no-record should be

eliminated because many freshmen used it to take extremely heavy loads, neglecting subjects that serve as the basis for later studies. The committee noted that 45 percent of second-term freshmen took more than 55 units in a recent year while only 12 percent of sophomores did so.

"I don't think that pass/fail should be meant to mask poor performance," said CFYP chair Kenneth R. Manning at open forum in February.

The spreading out of the pass/no-record subjects was intended to improve flexibility in the undergraduate curriculum, which was seen as too rigid and uniform. Committee members hoped that under the plan students would feel easier in taking more time to complete the Science Core requirement, leaving open more options in the freshman year for exploration.

SEWG notes growing importance of biology

The SEWG report called for the development of a two-term integrated course which would combine chemistry, materials science and biology. The course should be added to the Science Core to replace the existing chemistry requirement, the report stated. To offset the extra term, the Science Distribution Requirement should be lowered from three to two courses; the report further recommended.

A desire to include biology in the core curriculum was the primary reason behind the integrated course idea. "During the last 25 years, a revolutionary change in biology has occurred, in which the faculty of MIT has fully participated. . . . It is evident that

the definition of the basics in science has changed to include parts of biology," the SEWG report stated.

Professor Anthony P. French, a member of SEWG, went as far as to say that "it would be a crime" to graduate without any exposure to modern biology.

SEWG suggested a two-stage plan for implementation of the integrated sequence. The group hoped that the course would be finally adopted by the 1991-92 school year.

Although students and faculty in general concurred on the growing importance of biology, (Please turn to page 8)

Introduction

Today marks the 110th year of publication of *The Tech*. We include this, the fifth annual *Year in Review* supplement, to provide a comprehensive review of the issues and events of the past year.

The past year may well be remembered as a time when MIT concluded a period of major change and prepared for the challenges of a new decade. A fitting symbol of the new era will be the inauguration of MIT's 15th president in July. Questions of MIT's role in society will have to be addressed as the Institute searches for direction in a post-Cold War world. Defense department cut-backs and federal budget constraints will undoubtedly put a dent in MIT's large government grants, forcing a review of research goals.

In part, that review has already begun. Critics of MIT's links with industry ignited a debate which went to Congress in June. Paul Gray was "ambushed" there by questions of technology transfer to foreign companies involved in the Industrial Liaison Program. David Noble, one of the most outspoken critics of the Institute's links with industry, continues his three-year tenure suit, claiming that he had been rejected because of his views.

A larger issue of concern to those involved in the presidential search has been MIT's future role in public affairs. The MIT Commission on Industrial Productivity completed a book in May calling for a new emphasis on science and technology in education. Stemming from a growing concern over American competitiveness, recommendations of this nature will likely generate considerable discussion.

Closer to campus, the end of an era was marked by the conclusion of debate on key educational reform measures and a retreat from admissions liberalization.

Attention has shifted to housing — likely to become the most important and volatile issue in the next few years — and the mounting deficit and tuition problems. With the specter of a Justice Department anti-trust investigation looming over the heads of administrators from here to Stanford, the problem of bloated tuition costs may soon turn into a battle for financial survival between high-priced universities and near-broke parents and students.

Singular events also played an important part in shaping the year that was. Nobel laureate David Baltimore '61 announced that he would leave his position as head of the Whitehead Institute to become president of Rockefeller University. Hundreds of activists participated in two marches on Washington, DC, in support of a woman's right to choose.

But perhaps the most emotional and painful event of the year was the death of MIT's beloved professor, Harold E. Edgerton SM '27. His pioneering technological accomplishments and his contribution to the education of the many hundreds of students who passed through his laboratory and classes are immeasurable.

The staff of *The Tech* hopes that this issue will help you to better understand these and other stories of the past year and prepare you for the next.

Prabhat Mehta

FHC calls for housing changes

By Niraj S. Desai

A controversial recommendation to house all freshmen in dormitories provoked sharp debate in the fall about the future and objects of MIT's residential system.

At the heart of the debate was the question of whether the present method of residence selection contributes to a sense of community at the Institute and to the university's intellectual objectives.

The Freshman Housing Committee answered that it does not, and the FHC's November report called for the most substantial change in MIT's housing system since 1966.

The committee urged that incoming freshmen be dispersed throughout the dormitory system by being preassigned to specific dormitories and rooms.

Students would be able, under the FHC plan, to pledge independent living groups and sororities or make a choice among dormitories only towards the end of the first year. They would move into their new living groups with the start of the sophomore year.

Critics immediately jumped on the FHC's analyses and recommendations, saying that choice in residence selection is a unique and valuable part of MIT's undergraduate education. Many also questioned whether the plan would be worth the damage that would likely be done to ILGs, especially all-male fraternities.

Though its report prompted a reexamination of MIT's residential policy, the FHC plan seemed to lose momentum by year's end, with the chances for

implementation of most of its recommendations appearing dim.

Indictment of residential system

Charged in September 1988 with studying the impact of residence life on the undergraduate experience, the FHC returned a strong indictment of the present residential system.

While MIT prides itself on the diversity of its student body, the housing system encourages undergraduates to segregate themselves to an extent, the FHC found. Freshmen, asked to select a living group within their first few days at MIT, do so on the basis of "preexisting tastes and values rather than a direct experience of MIT life and exposure to its ideals and values." The result is

(Please turn to page 9)

Feb. 17 Christopher F. Coon '90 appears on the Morton Downey Jr. television show as a representative of the North American Man-Boy Love Association, a controversial group which advocates relationships, including sexual ones, between men and boys. Coon says his appearance was a hack intended to attack "the show, the host, and the format."

March 3 At a meeting of the MIT Corporation, President Paul E. Gray '54 announces that he will resign his position in July 1990 to become chairman of the MIT Corporation. Chairman David S. Saxon '41 announces his retirement at the same meeting. The Corporation forms the Committee on the Presidency to search for Gray's successor.

March 14 House Bill 4809, written by MIT chemical engineering graduate student David L. Wagner, is heard by the Massachusetts Legislature's Joint Committee on Taxation. The bill seeks to exempt research assistantship and fellowship stipends from a state tax on graduate stipends enacted in July 1988.

The Corporation also approves increasing tuition, room and board by \$1295 to \$19,335 for the academic year 1989-1990, the largest increase in the last five years.

March 15 Paul L. Antico '91 and Andrew P. Strehle '91 are elected president and vice president of the Undergraduate Association. Voters in the UA elections support a social responsibility pledge at Commencement and second-term freshman pass/no-record grading.

March 16 Texas billionaire H. Ross Perot deplores the nation's economic state and lays out his personal philosophy in front of a standing-room-only crowd in 54-100.

March 23 The Institute admits the Class of 1993, whose mean science and math scores on standardized tests are higher than those of students admitted the year before. This announcement comes four months after MIT Physics Professor Anthony P. French released a study showing that the fraction of admitted students with math scores in the highest ranges fell from 65 percent in 1968 to 38 percent in 1987.

XL added to help frosh in fall term

By Irene C. Kuo

A new fall-term program was appended to Project Interphase as a result of a compromise reached by Dean for Student Affairs Shirley M. McBay, faculty members, and students on May 23. The creation of Program XL came four days after 50 students conducted a demonstration on the steps of 77 Massachusetts Avenue to voice opposition to the original program proposed by McBay.

Student representatives said the dispute over Interphase, a summer program which provides newly admitted minorities with academic and social preparation, arose from a breakdown in communication between the administration and students. Too often administrators assume that if students are not complaining, they are satisfied, said Edward L. Jones '89.

Motivated by concern about low grades and graduation rates among minority students, McBay originally proposed that students remain in their Interphase study



Students protest proposed changes to Interphase on the steps of 77 Mass Ave.

Lerothodi-Lapula Leeuw/The Tech

groups throughout the first term while taking a prescribed set of courses: Calculus I (18.01), Physics I (8.01), a non-writing humanities class, and an undergraduate seminar. Students who did not participate in the fall term phase of the program would not receive 12 units of writing credit that the others would.

The proposed program came under criticism from former Interphase participants who disliked the rigid fall term require-

ments and worried that the study groups would "fragment" the minority community.

In contrast, Program XL is voluntary and open to all freshmen, though had it been oversubscribed (it could accommodate 60 students), priority would have gone to Interphasers and other underrepresented minority students. It is administered by the Office of Minority Education.

"Program XL has fewer re-

(Please turn to page 6)

Justice Department launches investigation of universities for anti-trust violations

Prompted by public concern over the rising costs of education at America's top private universities, the Justice Department launched an investigation of 55 universities and colleges — including MIT — for possible anti-trust violations.

Last fall, the Justice Department began a study of the process used by the universities to make admissions and financial aid decisions for evidence of price-fixing and collusion to keep tuition artificially high.

The department has remained silent about exactly what it is looking for in its investigation, or what it intends to do if any conclusive evidence of collusion is secured.

According to James J. Culliton, vice president of financial operations at MIT, the investigation is "scary" because none of the schools involved "have any idea what the Justice Department wants with them."

Like several of the other schools under investigation, MIT has run a budget deficit for the past few years. MIT maintains that the deficit is the prime reason for its tuition hikes.

However, in an article in *The Chronicle of Higher Education*, the range of tuitions of many of the schools under investigation was shown to be quite close, with no more than a \$2500 separation between the highest tuition in the group and the lowest one.

The focus of the Justice Department investigation revolves around a 23-school consortium called the Overlap Group. Members of the Overlap Group — including MIT — meet after admissions decisions have been made to compare financial aid packages and other information on students. All 23 schools in the consortium — including the Ivy League — are under investigation.

Like the other institutions under investigation, MIT has had to keep a team of lawyers and hire special employees to sift through financial documents and decide which ones need to be sent to the Justice Department.

Test scores rise in response to concerns

By Andrew L. Fish

In 1989 the MIT Admissions Office selected a freshman class with significantly higher standardized test scores than in previous years. This move came in response to faculty concern about declining student performance, as expressed in a report of the Committee on Undergraduate Admissions and Financial Aid.

CUAFA asked the Admissions Office to place greater weight on standardized test scores and grades, saying that "non-academic activities, talents, and personal qualities should be considered mostly as a means of distinguishing among individuals of comparable academic ability."

Director of Admissions Michael C. Behnke said last spring that the CUAFA report "lent urgency" to the process of "getting the top math and science talent." Indeed, the number of applicants admitted with SAT math scores between 750 and 800 jumped by 224 to 972 students. Such students comprised 51 percent of the accepted pool, as compared to 42 percent last year.

The CUAFA report, issued after a year-long study of the admissions process, said the Admissions Office has been



Georgina A. Maldonado/The Tech
Michael C. Behnke

placing more weight on the personal qualities of applicants in recent years. The report implied that this change has led to "a growing sense among the MIT faculty . . . of a decline in student performance in those subjects that demand the interest and ability to deal with topics in quantitative terms."

The report also recommended greater faculty involvement in the admissions process. Speaking at last May's faculty meeting, CUAFA Chairman Keith D. Stolzenbach '66 said, "We have concluded that the

lack of faculty input . . . has resulted in a situation where the implicit weighting in admissions decisions does not reflect the views of a sufficient number of faculty with regard to what constitutes an excellent applicant for MIT."

This perception was brought into focus in a report prepared by Professor Anthony P. French in 1988. French found that over the past 20 years the freshman class has had a progressively smaller fraction of students with math and science achievement test and SAT scores between 750-800. The CUAFA report revealed that when applicants were grouped into various categories based on their grades and test scores, a similar phenomenon was found — more applicants in the "top" and "high" ranges were denied admission to MIT, especially between 1986 and 1988, the first three years of Behnke's tenure.

The trends noted in both of these studies were reversed this year. The number of admitted students with math SAT scores of at least 750 jumped from 748 to 972, and the mean SAT math score rose 14 points to 741. The number of applicants with "top" or "high" profiles who were rejected dropped

from over 400 to about 225. The report said more emphasis was placed on students' "intellectual promise" this year.

At the May faculty meeting, Behnke explained that complaints from faculty had played a role in the change. "The admission staff picks up signals from the community and tries to act on them," he said.

But Professor Robert M. Fogelson of the Department of Urban Studies and Planning cautioned that the CUAFA report offered "striking conclusions based on interviews with few faculty members." He noted that the committee's "recommendations have great implica-

tions for the future of MIT" and suggested that the faculty should discuss "the proper direction for MIT."

At October's faculty meeting Professor Vera Kistiakowsky stressed that MIT should focus on attracting "diverse, thinking, caring human beings." None of the standardized tests measure the potential to become a good research scientist, she said.

Also, Professor Hartley Rodgers Jr. noted that by using standardized tests, the faculty was delegating part of the admissions process to the Educational Testing Service. With

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Mean Scores of Accepted Students

	1988	1989	Change
SAT math mean	727	741	+14
SAT verbal mean	636	640	+4
ACH math mean	739	753	+14
ACH science mean	681	697	+16
ACH English/foreign language/history mean	636	644	+8

March 23 Stanley Pons and Martin Fleischmann announce in Utah that they have invented a device that achieves nuclear fusion at room temperature. Scientists around the world, including groups at MIT, begin attempts to duplicate the experiment.

March 27 President George Bush nominates Richard L. Schmalensee '65, a professor of economics and management in the Sloan School of Management, to the Council of Economic Advisors.

April 6 Jacques Cousteau speaks at an LSC lecture and participates in the 86th birthday celebration of Institute Professor Harold E. "Doc" Edgerton SM '27. Cousteau describes his involvement in environmental concerns, the development of the double sail — which, he says, is more efficient than the standard canvas sail for sea vessels — and his current expedition, "Rediscovery of the World."

April 9 Over 400 MIT students participate in the March on Washington for Women's Rights sponsored by the National Organization for Women. Elizabeth Ling '89 addresses the crowd of over 300,000 from the steps of the US Capitol. She is the only student representative to speak at the rally. The Association for Women Students, revived in January in response to news of the march, arranged for five buses to take MIT students to the march.

April 11 Peter L. Hagelstein '76, an associate professor in the Department of Electrical Engineering and Computer Science, submits four papers describing a speculative theory on cold fusion to *Physical Review Letters*. MIT applies for patents in connection with the theoretical model proposed by Hagelstein.

April 19 The faculty approves the creation of a two term pilot course in chemistry, materials science, and biology. If successful, the course will eventually be replaced by the one-term chemistry requirement. The addition of biology would be the first major change in the science core in over 25 years.

MIT corporate ties raise concern

By Annabelle Boyd

1989 witnessed growing concern that new corporate ties at MIT were interfering with traditional academic norms and the public interest.

In mid-June, a congressional subcommittee singled out MIT's Industrial Liason Program as a technology transfer operation which was selling the results of federally-financed research to foreign firms.

At a hearing on June 13, Rep. Theodore S. Weiss (D-NY), chairman of the Human Resources and Intergovernmental Relations subcommittee, asserted that though MIT's ILP is open to both US and foreign companies, the foreign firms — particularly the Japanese — are its biggest users.

MIT President Paul E. Gray '54 heralded foreign participation in ILP, praising the program as one of the first attempts by a university to link research and commercial applications. He claimed programs like ILP were crucial to education and research at American universities eager to learn about foreign research and corporate practices.

Both men's remarks were made during an ongoing congressional investigation of universities, the National Institutes of Health, and the National Science Foundation. The subcommittee investigated possible conflicts of interest in the relationship between universities and industry. Of particular concern was MIT's exchange of research and technology with foreign companies. Officials at MIT and other universities have argued that technology transfer programs like ILP are needed to improve the productivity and competitiveness of American industry.

Gray said that Weiss' assessment of high foreign participa-

tion in ILP — the largest program of its kind in the nation — was flawed because American companies that do not belong to the program are free to contact MIT faculty members about their research.

Gray argued that the results of all MIT research are in the public domain. "The ILP does not provide exclusive access, privileged access or private access to those results," he said. "it does provide facilitated access."

The 287 corporations participating in the program include 170 American and 57 Japanese firms. Each pays between \$10,000 and over \$100,000 per year for access to MIT research in its areas of interest. Company executives may visit MIT, and participating faculty members may visit company offices. Executives may also receive copies of research published by MIT faculty members and "preprints," copies of papers that have not yet been published.

Faculty participation is voluntary, but those who join receive points, worth \$35 each, for the work they do. A phone conversation with a company representative, for example, is worth 2 points. The points may be redeemed for office furniture, computer equipment, or professional travel. The average amount received by faculty members participating in the program last year was \$665; the average among the 100 faculty members with the highest point totals was \$3600.

Weiss said that ILP records show that of 25 MIT faculty members who received more than \$1 million in federal grants in recent years, 80 percent "had more contacts with foreign corporations than American ones." Weiss recalled that Gray had repeatedly called both for greater federal funding of research and for

stronger business-university ties as ways to help US competitiveness, and he maintained that the establishment of an ILP office in Tokyo proved that the program was working against that goal.

"Are you at all concerned that American taxpayers are paying for research whose results are being sold to (Japanese) industries that will not necessarily benefit the American public?" Weiss asked Gray.

Gray said he was not concerned, and explained that the Tokyo office had been set up not to solicit Japanese firms, but for the convenience of MIT faculty members visiting Japanese member corporations.

"If your concern is the extent to which federally-funded research is exploited by other countries, you shouldn't focus on ILP or programs like it at other universities," Gray told the subcommittee. "You'd have to change the whole context in which university research and graduate education take place and put it under wraps."

Noble tenure trial puts Whitehead in question

One of MIT's fiercest critics with regard to corporate ties is David F. Noble, a former associate professor at MIT who was denied tenure in 1984. Noble claims that the position he took against MIT's ties to the Whitehead Institute for Biomedical Research influenced his tenure review.

Noble filed a suit against MIT concerning his tenure decision in 1986. The ongoing court battle — which has yet to go to trial — has attracted further publicity to the issues which he and the Weiss subcommittee have raised.

MIT, Noble argues, has been selling its base of knowledge and its research capabilities to the pri-

vate interests sponsoring the Whitehead Institute. MIT's resources, he said, were a result of decades of public funding. Since they were bought with taxpayers' dollars, the resources were not MIT's to sell, he argued.

Development of the institute at MIT was proposed in 1981 by millionaire industrialist Edwin Whitehead. Duke University had previously rejected a similar proposal from Whitehead after three years of negotiation. Duke claimed that the relationship between the university and the proposed institute would be of little benefit to the university, while providing Whitehead with valuable access to Duke's personnel and facilities.

In a 1986 book, *Biotechnology: The University-Industrial Complex*, Martin Kennedy outlined the MIT agreement: It called for Whitehead to appoint David Baltimore '61 as the institute's director and to appoint several corporate board members to the institute's board.

Whitehead would provide direction to MIT's biomedical research by appointing 20 MIT biology department members and would own all inventions and intellectual property produced by those members. In return, MIT received a \$7.5 million endowment as well as \$5 million annually until 2003, and \$100 million upon the death of Edwin Whitehead.

As the proposal circulated, many MIT faculty members were critical. But while others complained that the partnership was simply a bad deal, Noble's argument against the institute was far broader: the partnership was a serious violation of the public trust.

Noble summarized his argument in the Feb. 6, 1982, edition of *The Nation*. He wrote that



Tech file photo

David F. Noble

Whitehead "has acquired the prestige of MIT, perhaps the most respected technical institution in the world. It represents an accumulated social investment that could not be duplicated for a thousand times what Whitehead is spending."

Noting that the biology department received substantial government support when the great explosion in biotechnology took place, Noble raised an important public interest question: "Are MIT's resources and reputation, created largely at public expense, really MIT's to sell? In return for money and operating expenses, the Whitehead Institute receives privileged access to — and a fair measure of control over — publicly created resources."

Despite the controversy, MIT agreed to the Whitehead partnership in February 1982.

When a court ruling is finally passed on the Noble tenure case, the issues on which he and MIT disagreed will remain unresolved. But Noble hopes that his case will send a strong message to students and other professors to "fight back — to uphold the principles that historically universities have expressed — freedom of inquiry and diversity of expression."

ARA tries to improve service in wake of strong criticism

By Brian Rosenberg

Last fall, MIT examined and criticized its food services and ARA, the company that provides them. Lawrence E. Maguire, director of housing and food services, labeled ARA's service "unsatisfactory" and an Undergraduate Association committee presented ARA with a list of student complaints. In response, ARA took steps to eliminate the problems and improve its service.

In an October interview, Maguire told *The Tech* that ARA "has not given us the return we expected." At the same time, Alan Leo, ARA's manager for MIT, said that he was "unaware" of any problems with service. Leo is the third manager here in three years, the result of both changes in MIT's food service goals and ARA's internal shakeups.

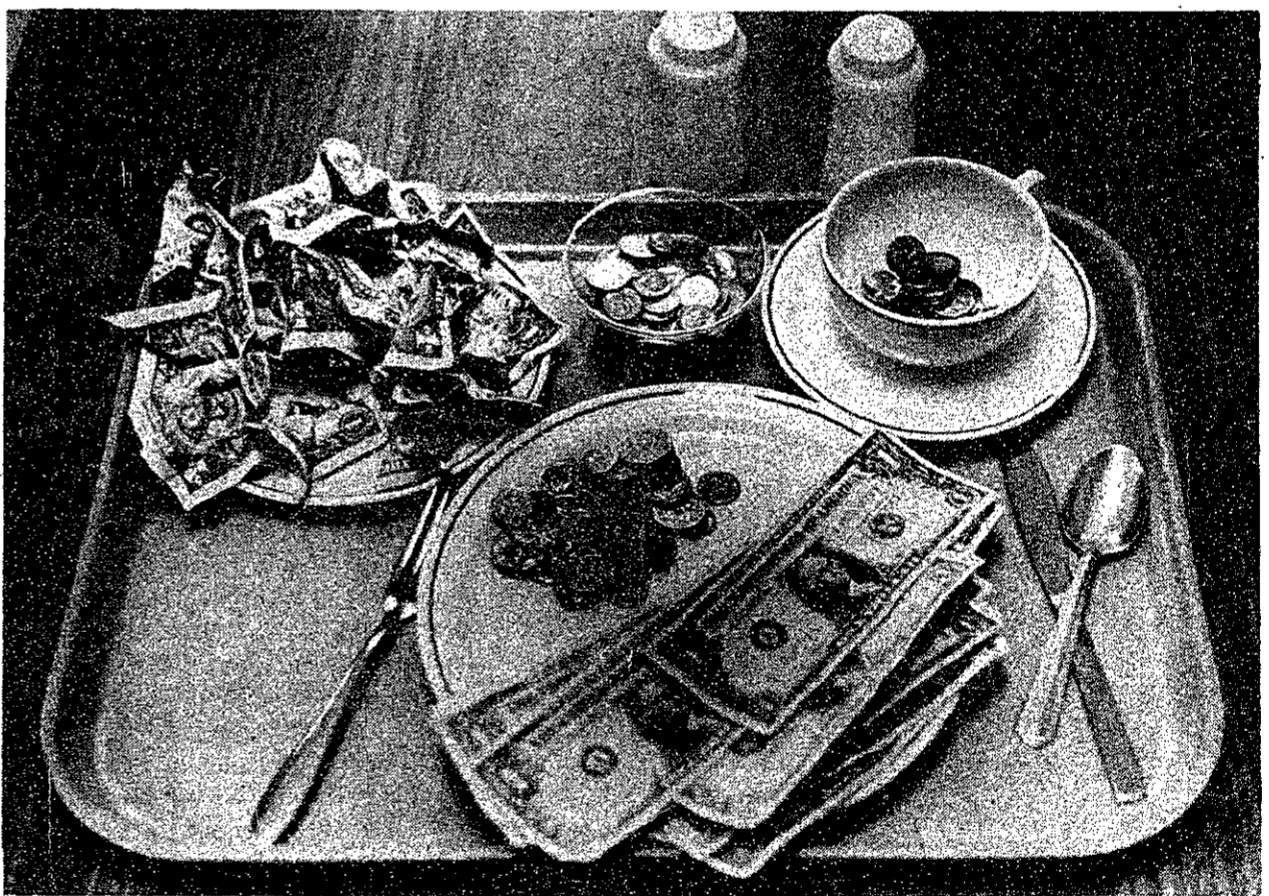
Student complaints became more vocal. MIT students who had worked for ARA told of mismanagement and inefficiency in ARA

operations. Complaints of unsanitary conditions, long lines, and overpriced meals forced UA President Paul Antico '91 to form an ad hoc ARA committee. The committee placed "flame sheets" around campus. The sheets asked the question, "What's wrong with ARA?"

The committee collected and organized the responses into a list of changes to be implemented. They focused on health issues, pricing, service, and quality. Service was the primary subject of the complaints, according to Jennifer Hamel '90, the UA committee's chair.

Hamel suggested that adoption of the changes might be enforced by a UA-sponsored boycott, but students reported improvements within the four-week deadline set by the committee.

The ARA committee also suggested long-range changes, such as introducing competition and re-evaluating the meal plan system. So far, no action has been taken on these suggestions.



Tech file photo

Overpricing, one of the complaints that brought about changes in ARA.

May 1 The National Institutes of Health has reopened an inquiry into a scientific paper published in the journal *Cell* in mid-1986. The paper's authors include Nobel laureate and Whitehead Institute director David Baltimore '61. The inquiry begins less than a week before a two-day congressional hearing is scheduled to also review allegations of scientific fraud in the paper.

May 3 The faculty votes to retain both semesters of freshman pass/no-record grading. The system changes, though, as the definition of a passing grade is raised from a D to a C, and the maximum credit limit for freshmen is lowered by six units in each semester.

May 23 Students propose the creation of Project XL to help first-term freshmen, especially minorities, succeed academically. XL comes in response to proposed changes in Project Interphase, four days after approximately 50 students demonstrated on the steps of 77 Massachusetts Avenue. At a meeting involving Dean for Student Affairs Shirley M. McBay, faculty members and student representatives, Project XL is accepted with some modifications.

June 4 Hundreds of people gather outside the Stratton Student Center in response to the brutal attack on pro-democracy students in Beijing. The demonstration, organized by the Greater Boston branch of the United Association of Chinese Students, draws students from many universities in the area as well as members of the Chinese-American community. Senator John F. Kerry (D-MA) and Boston Mayor Ray Flynn speak at the rally.

June 5 At MIT's 123rd commencement, 1776 seniors and graduate students receive 1945 degrees in Killian Court. President Paul E. Gray '54 asks students to "hold to the values of democracy," a reference to the attack on pro-democracy student demonstrators in Beijing.

Rent control dominates city politics

By Linda D'Angelo

The past year marked significant victories for rent control forces and animal rights activists in the city of Cambridge.

Proposition 1-2-3, a referendum which would have allowed tenants to buy their rent-controlled apartments, was defeated by an approximate 2-1 margin, and the city council gained a 6-3 majority in support of rent control after the November elections.

Over the summer, the council set a nationwide precedent when it approved an ordinance regulating animal experimentation in all universities and private institutions in Cambridge.

Had it passed, Proposition 1-2-3 would have allowed "any tenant who has occupied a rent-controlled unit for at least two years . . . to buy it . . . if the tenant and landlord both agree." This would have modified a 1979 city ordinance prohibiting tenants from buying their rent-controlled apartments without a city removal permit.

Supporters of 1-2-3 contended that the referendum would increase the stock of low- and moderate-income housing available for ownership and pointed to a provision in the referendum which would have established a fund to provide money for affordable housing. Opponents, however, argued that the referendum would have reduced the stock of rent-controlled housing by promoting the conversion of such units into condominiums.

Animal research ordinance approved

The animal research ordinance, approved by the council on June 26, set a national precedent and represented "the first time that any legislature decided that animal research needs greater regulation," said Ken Russell, assistant director of the Cambridge Committee for Responsible Research.

The unanimous approval of the ordinance ended a two year process that began in May 1987 when the city council banned certain animal research procedures commonly practiced in the city's 13 research institutions. The Draize test, used mainly in the testing of cosmetics, was banned, as was the LD50, in which groups of animals are poisoned without anesthesia until half of them die.

This move, "the first time any research procedure had been banned because it was considered cruel and unnecessary," led the CCRR to sponsor the initial ordinance, Russell said. But fearing the promises of MIT and other research institution officials to actively fight the proposal, the activists aborted a move to put it to a referendum on the city ballots.

These events, coupled with a "tremendous outpouring from Cambridge citizens and students," led Mayor Alfred Vellucci

to appoint a Blue Ribbon Committee on Laboratory Animals (BRC). John M. Moses, the chair of MIT's animal care committee, served on the BRC with Animal Legal Defense Fund president Steven Wise and veterinarian Stuart Wiles, who was appointed to the panel as an agreed-upon neutral arbiter.

The recommendations of the BRC formed the basis for the legislation, which required the appointment of a commissioner of laboratory animals to "oversee the care and use of animals" by performing unannounced inspections. The ordinance further specified that the CLA should "possess an understanding of animal welfare, physiology and psychology," yet not be "aligned with an anti-vivisection or research institution."

Under the ordinance, all universities and private institutions in Cambridge are required to register with the CLA and provide him with information such as the "number and species of animals used" and the "result of all federal and state inspections concerning animal care and use in the previous year."

As the "representative of the public," the CLA would also "bring information back to the public," according to Russell. This reporting feature would "provide assurance to the city that the requirements were being adhered to" as well as provide a vehicle for any questions raised by the public, according to a statement by MIT spokesman Ronald P. Suduiko last July.

Lastly, the ordinance made all institutions in Cambridge subject to federal and state regulations. Previously, privately funded institutions which did not use cats, dogs or primates in their research were excluded from these regulations.

While the ordinance heightened public awareness of the issue, it will not result in any major changes in the regulation of MIT laboratories, Suduiko said. In the past, animal research at MIT has been monitored by an animal care and use committee, which conducts a monthly review of animal research proposals and facilities. And since it is federally funded, MIT has always been subject to annual federal and state inspections, Suduiko said.

New council elected, Wolf chosen as mayor

Of the nine members elected to the city council, Alice Wolf, Francis H. Duehay, Walter J. Sullivan, William Walsh and Sheila Russell were incumbents. The remaining members, in order of number of votes received, were Ed Cyr, Ken Reeves, Jonathan Myers, and Timothy Toomey.

The newly elected city council contained a 6-3 majority in favor of rent control (Walsh, Russell and Sullivan are the three members who have been critical of the current rent control policy). In



Tech file photo
The animal research ordinance approved by Cambridge this past summer affects universities and other city institutions that use animals in laboratory testing.

recent years, the policy had survived by a 5-4 vote.

The election marked a decisive victory for the Cambridge Civic Association, a liberal pro-rent control group which secured its first city council majority since 1972. CCA actively opposed Proposition 1-2-3 and endorsed six of the elected councilors. According to pundits, strong CCA support was a result of the many "tenant" voters who came to the polls expressly to vote against the referendum and, while there, voted for the candidates who supported rent control.

The election of Reeves, the only black representative on the new council, allayed concerns about the lack of minority representation on the council. Sandra Graham, who served as the only minority representative on the council for 18 years, did not seek reelection.

Reeves, a Harvard College graduate and lawyer who ran unsuccessfully in the 1985 council election, was the only minority representative to win a seat. He had been considered the front-runner because of his support from Harvard students, blacks in the church community, tenants and white liberals.

On Jan. 1, Alice Wolf was elected mayor of Cambridge by a 6-3 vote of the city council. A 19-year veteran of Cambridge politics, Wolf served four terms on the school board, with one as chairperson and another as vice chairperson. She was also vice mayor under former Mayor Alfred Vellucci.

Wolf is the 25th mayor and second woman to be chosen under the city's Plan E charter. Under the charter, the city council chooses a mayor from its members to serve in a largely ceremonial capacity, while a hired city administrator wields most of the power. The mayor's job includes

assigning committee posts and chairing city council meetings.

Rent control, a "very important issue," will be Wolf's main focus. She promised to "keep it a strong system," hoped the city would "not have a decrease in affordable housing," and called attention to the opening of three affordable housing units in Cambridge.

Wolf also urged MIT to look into the issue of low-cost housing itself, calling it "an ongoing problem that MIT has to relate to." Noting that "MIT has land to put housing on," Wolf said she would not oppose the construction of new housing if it would not interfere with other Cambridge residents.



photo by Joan Albert
Mayor Alice Wolf

Program XL established after dispute over Interphase changes

(Continued from page 4)
restrictions and complements everything that exists at the Institute," Yonald Chery G said. "It takes advantage of campus resources, so that students will be hearing talks on topics ranging from nutrition to study skills to the meaning of an MIT degree."

Participants this past year were encouraged to take no more than 54 units, of which six came from XL. They met four hours a week, under the guidance of a "facilitator," as well as regularly with their advisors to discuss their academic progress and career interests. Discussions involving distinguished minority role models were also offered throughout XL.

Participants could have enrolled in two optional seminars offered in conjunction with the program. A mathematics seminar (18.091) helped students taking calculus master the subject and

could be substituted for the XL math study group. The Expository Writing (21.730) seminar was open only to students who had participated in Project Interphase and completed the writing component of the summer program.

Reflecting revisions made in Interphase under Professor Arthur P. Mattuck, the program's faculty coordinator, XL sessions encouraged individual participation and skills in oral presentation.

Interphase, which celebrated its 20th anniversary in 1989, underwent some revisions.

Student representatives expressed misgivings about the removal of chemistry from the curriculum, but said that they would examine the performance of Interphasers in the fall term chemistry subjects in order to gauge the effect of their exclusion from the summer session.

June 13 A congressional subcommittee investigates the practices of MIT's Industrial Liaison Program. The inquiry is part of a review of technology transfers involving federally-funded research to private industry, and evaluates the risks and benefits of public-private relationships in hospitals and universities. The subcommittee singles out ILP as one technology transfer program that is selling the results of federally financed research to foreign firms.

June 26 The Cambridge City Council approves an unprecedented measure to regulate animal research in the city's academic and research institutions. An appointed commissioner of laboratory animals will oversee all research involving vertebrates at MIT and Harvard, as well as 11 other institutions.

July 13 The MIT CRAY-2 Supercomputer facility opens its doors to the MIT community. The machine is part of a five-year, \$100 million effort to supercomputer research between MIT and Cray Research. Under the plan, the Institute joined a regional computer network and began efforts to join a grid for IBM, England on the National Science Foundation's national high-speed supercomputer network.

July 17 Professor of Music John H. Harbison, winner of the 1987 Pulitzer Prize for musical composition, receives a \$305,000 fellowship from the John D. and Catherine T. MacArthur Foundation. Harbison is the eighth person affiliated with MIT to win one of the "genius grants."

Sept. 11 Ellen T. Harris assumes the newly-created position of associate provost for the arts. Her appointment comes nearly two years after the Ad Hoc Committee to Review the Arts, chaired by Professor Paul L. Joskow, cited the need for a senior official to take charge of the arts at the Institute. Harris will coordinate arts efforts at MIT and work as an advocate for the arts.

Baltimore to head Rockefeller

By Reuven M. Lerner

For Whitehead Institute Director and Nobel laureate David Baltimore '61, 1989 marked the end of a controversial and difficult period, and the beginning of a bright new future at the helm of a prestigious research institution.

Allegations of fraud have surrounded the biology professor ever since a paper he co-authored appeared in the journal *Cell* in 1986. The paper, which discussed changes in the production of antibodies in genetically altered mice, depended on data collected by Thereza Imanishi-Kari, an associate of Baltimore's. Margaret O'Toole, a member of Imanishi-Kari's research team, was unable to duplicate her superior's results, but was told that the differences were insignificant. The paper published in *Cell* contained not only Imanishi-Kari's contested data, but some results written by Baltimore based on the data.

O'Toole claimed that Baltimore was obstructing her attempts to correct errors, and threatened to publish a rebuttal.

On Nov. 18, 1988, Baltimore and his colleagues published a letter of correction in *Cell*. The letter described "incidences of misstatement" in the original article, but added that they did

"not affect the conclusions of the paper."

MIT, Tufts University, and the National Institutes of Health soon began investigations to determine whether the errors had been made deliberately. Both the MIT and Tufts committees declared Baltimore innocent of fraud.

The NIH released its report last February. It too found "no evidence of fraud, conscious misrepresentations, or manipulation of data" in the article. The committee attributed the errors to a lack of "understanding and communication."

The House Subcommittee on Oversight and Investigation, which had been looking into institutional responses to charges of scientific fraud, became interested in the Baltimore case, and asked the paper's authors to testify in mid-February. Secret Service investigations suggested that dates and data in the scientists' notebooks were changed in several places. Alfred Kildow, a Whitehead spokesman, said that the examinations did not "relate at all to the data in the *Cell* paper."

Concern spread among scientists and legislators about the use of outside agencies to monitor fraud in science. An aide to the

House subcommittee said, "I'm not sure we're in favor of legislative solutions to the problem. It's in the institutions' best interest to police themselves before the federal government steps in." The investigation also left unclear what junior scientists should do if they disagree with the findings of their superiors.

MIT, Rockefeller consider Baltimore for presidency

Baltimore was widely considered a candidate to replace President Paul E. Gray '54, who announced his resignation last spring. Speculation continued through October, when *The Boston Globe* described him as the "principal rival" to Provost John M. Deutch '61 for the job. The article also said that Baltimore "is applauded by many faculty members who feel that he stood up for science against an assault of politicians." Kildow denied the rumors, saying that the MIT presidential search "is not really a factor in [Baltimore's] mind."

Less than one week later, Baltimore put all speculation to an end by accepting the presidency of Rockefeller University in New York City. Baltimore had declined a previous offer from the biomedical research institution,



Lisette W. M. Lambregts/The Tech

David Baltimore '61

but changed his mind after their Board of Trustees voted unanimously to offer it to him again.

Baltimore described his decision as "very difficult," and added that "the remarkable success of the Whitehead Institute and my own eventful and enormously satisfying career at MIT, now in its 21st year, caused me to think long and hard about this opportunity."

But not everyone was excited about Baltimore's move. Some members of the Rockefeller faculty were upset that they had not been told of the offer before Baltimore had announced his acceptance. Other faculty figures worried that negative publicity would

follow Baltimore to Rockefeller.

The last class that Baltimore taught at MIT, AIDS: Scientific Challenge and Human Challenge (7.00/15.60J), discussed the biological and sociological problems associated with the AIDS virus, a subject which Baltimore has spent considerable time researching. Baltimore revealed his opinions on many issues relating to the disease, including his satisfaction with current FDA testing procedures for new AIDS drugs and his concern for teenage girls prostituting themselves in order to buy crack. He warned that a large number of men and women involved in this activity will eventually contract AIDS.

Cold fusion claims disputed

By Niraj S. Desai

Soon after two University of Utah researchers announced a breakthrough in the decades-long quest for fusion energy, scientists worldwide — including several MIT teams — rushed to repeat their experiments. But in the following weeks, hopes for "cold fusion" greatly diminished and the claims of Martin Fleischmann and Stanley Pons were largely discounted.

In late March, Fleischmann and Pons told a press conference that they had achieved nuclear fusion at room temperatures with a relatively simple apparatus.

The announcement immediately caused an international sensation, holding out as it did the promise of a clean, limitless source of energy. Fleischmann and Pons went so far as to assert that, if commercialized, their technique could produce enough heat and electricity virtually to eliminate oil, coal and nuclear power.

The initial reaction in the scientific community was one of skepticism, but research laboratories throughout the United States and in foreign countries sought to confirm the results. Their efforts were hampered, however, by the reluctance of Pons and Fleischmann to release details of their experiment.

The lack of independent confirmation did not deter the Utah team and their university from pressing Congress for financial



Tech file photo

Associate Professor Peter L. Hagelstein '76

support for the cold fusion research. At an April 26 hearing, the two researchers and University of Utah President Chase Peterson called on the Congress to appropriate \$25 million to commercialize the purported discovery.

This prompted Associate Professor Ronald G. Ballinger SM '82 to charge the University of Utah and others with stampeding the scientific review process. He called on the Utah researchers to make their experiments public.

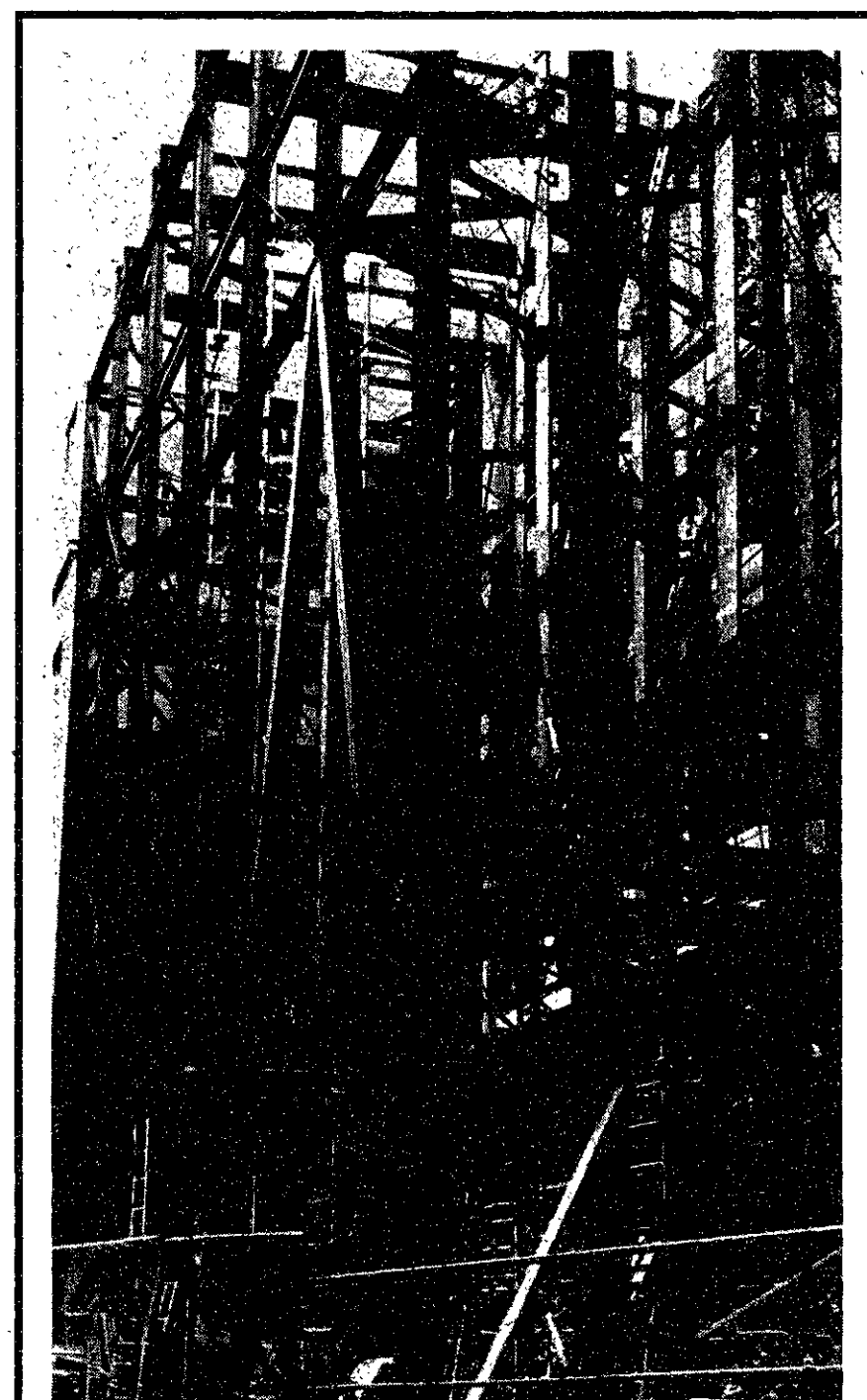
Even as experimentalists failed to confirm the Pons/Fleischmann results, Associate Professor Peter L. Hagelstein '76 worked out a theoretical explanation for cold fusion. He submitted four papers describing his theory to *Physical Review Letters*, and MIT applied for patents in connection with his theoretical model of cold nuclear

fusion.

But by early May, the failure of independent teams to repeat the cold fusion experiment all but ended the initial excitement over cold fusion. MIT scientists were among the most vocal critics of the method.

Plasma Fusion Center Research Scientist Richard D. Petrasso said that PFC researchers had dealt a heavy blow to claims of cold fusion, failing to find evidence that a nuclear process was at work. No other MIT teams detected signs of nuclear fusion in the Pons/Fleischmann method either.

Despite indications in the fall that there may be some basis for the cold fusion process, most of the scientific community has by now dismissed the cold fusion controversy as an example of pathological science.



William Chu/The Tech

Construction of the addition to the Rotch library began in October of 1989.

Sept. 18 A memorial program in Kresge Auditorium marks the passing of 100 days since the June 4 massacre in Beijing's Tiananmen Square. The evening, sponsored by the Greater Boston Area Chinese Student and Scholar Solidarity Association, pays tribute to those who died and urges the public to continue its support of the struggle for democracy in China.

Sept. 19 Proposition 1-2-3 author and local realtor Frederick Meyer presents his petition to force the city of Cambridge to put the disputed proposition, which would allow tenants to purchase their rent-controlled apartments, on the Nov. 7 city ballot.

Sept. 29 Nobel laureate David Baltimore '61 is offered the presidency of Rockefeller University, a biomedical research and teaching institution in New York.

Sept. 30 MIT Campus Police arrest four men after a shooting incident in the campus parking lot behind Kresge Auditorium. A Boston man, Dana Elam, 18, pulled a revolver on Laroy Harding of Cambridge, and when Harding tried to push the gun away from his face a shot was discharged, witnesses said. There were no injuries or MIT students involved in the incident, according to Campus Police reports.

Oct. 2 Rape Awareness Week begins at MIT in an attempt to raise the consciousness of the MIT community on the issue of rape. Jointly sponsored by the Association for Women Students and the Rape Awareness and Prevention Program, the awareness week includes activities such as a men's forum designed to raise men's awareness of the questions involved, a panel discussion following the forum, a self-defense class, a dance, and a movie.

Oct. 4 MIT announces a \$5.4 million deficit for fiscal year 1989. An ad hoc committee appointed by the provost proposes measures to reduce the deficit over the next two fiscal years, including an increase in tuition and a reduction in salary increases.

Oct. 11 The MIT Corporation adopts an unprecedented resolution saluting Colombian President Virgilio Barco '43 for his "courageous leadership of Colombia during a time of formidable change."

After debate, P/F stays

(Continued from page 3)
 many faculty members feared that the sequence would end up a loosely defined survey course. "I really don't think it can all be done in two terms," said Professor of Chemistry Daniel S. Kemp last spring.

Mark S. Wrighton, also of the chemistry department, said, "There has been a tradition at MIT that core subjects are an introduction to the discipline." He felt that the integrated course might fail in providing adequate depth of coverage.

Some students also found fault with the course, noting that it would further restrict the curriculum.

In spite of the criticism, the faculty approved a gradual implementation of the integrated sequence, and last fall over a hundred members of the Class of 1993 expressed interest in Chemistry (SP01), a pilot version of the course. The three departments administering the course will evaluate the success of SP01 and its spring counterpart, SP02, in order to assess the desirability of turning them into a core requirement.

CFYP proposals blasted, P/F elimination dies

The CFYP plan received an overwhelmingly negative response

from the student body and generated an intense debate among the faculty. At campus-wide forums, students continually blasted the proposal to eliminate second term pass/no-record. At East Campus, Sarita Gandhi '90 called the CFYP's reasoning that a student only needs one term for academic adjustment "laughable."

The Undergraduate Association moved slowly at first, citing "reservations" about the proposal but offering no substantial challenge. But with an April vote nearing and the results of a referendum taken in mid-March indicating a 72 percent approval rating among students for second term pass/no-record, the UA Council adopted a resolution to make a concerted effort to save the status quo. Efforts included a petition drive, increased communication with faculty members opposed to pass/no-record elimination, and publicity efforts aimed at bringing students to the faculty meetings.

Meanwhile, faculty members in favor of and opposed to the pass/no-record system squared off on the issue over a series of four faculty meetings.

Many supporters of pass/no-record argued that there was insufficient evidence as to whether students abuse the current system. "The evidence that fresh-

men [abuse pass/fail] is exceedingly flimsy," stated Professor James T. Higginbotham at the April 19 faculty meeting.

Others cited pass/no-record's role in easing pace and pressure and helping students of varied backgrounds work to eliminate differences they might have upon entering the Institute. "A full year of pass/no-record grading has for a long time served a humane purpose. . . . Let it be," said Undergraduate Academic Support Office head Travis R. Merritt.

Those who sought to limit freshman pass/no-record argued that students have indeed been abusing the system. More generally, some argued that allowing students choice in taking courses on pass/fail allows them to strategically avoid harder subjects or to "get them out of the way" by overloading during the freshman year.

"It sends a very wrong message to freshmen," said Professor John L. Wyatt Jr. '68, one of the most vocal critics of pass/no-record.

Claude R. Canizares, a member of CFYP, criticized the argument that students needed more time to adjust to the academic and social pressures of college life. "Everyone agrees that there is a hard adjustment in the first term, but then there is a hard ad-



Lisette W. M. Lambregts

justment at many universities where there is no pass/fail."

As the voting date approached, several proposals for amending the CFYP plan were presented. One, co-sponsored by Wyatt and Professor William T. Peake '51, called for even further restriction on pass/fail grading. It was narrowly defeated by a vote of 66-51 at the April 19 faculty meeting.

The protracted debate on April 19 forced the faculty to postpone a vote on the proposals. A special meeting had to be arranged for May 3 to resolve the matter.

At that meeting, the faculty approved a revised proposal which preserved pass/no-record for second term freshmen.

The proposal also raised the minimum passing grade in pass/no-record to a C; lowered the freshman credit limit to 54 units in the fall and 57 in the spring, and redesignated the junior/senior pass/fail option to pass/no-record — thereby allowing all students who take non-graded classes to eliminate them from their records in the event of failure.

CUAFA urges higher test scores

(Continued from page 4)

students of such educational promise, this delegation has some risks, he said.

The CUAFA report said "faculty opinions about student performance are mixed." The committee found that about half of the faculty the committee consulted expressed no major concerns with students' academic performance and have detected no troubling changes over the long or short run. But the other half "was less positive and expressed varying degrees of concern."

Specifically, instructors in the mathematics and physics core subjects said they have lowered the level and slowed the pace of their subjects in several instances to accommodate a "decline in academic performance," the report said. Concern was also expressed by faculty teaching upperclass subjects, especially in the School of Engineering.

CUAFA found less evidence of departmental perceptions of a decline in the performance of their majors.

The report said many faculty did not perceive a decline in students' academic ability, but rather a lessening of the "intensely focused interest in engi-

neering and science which once characterized nearly all MIT undergraduates." It said that while students were still majoring in engineering and science, they were more likely to distribute their intellectual energies more evenly between technical and non-technical subjects. One mathematics instructor quoted in the report said his students were just as bright but not as interested in the subject as students were five years ago.

Diversity should be maintained

While CUAFA said that more emphasis should be placed on grades and test scores, it endorsed efforts to increase the representation of women and underrepresented minorities in the student body.

Both nationally and at MIT, standardized test scores have been found to underpredict the academic performance of women. For this reason, even though women admitted to MIT have lower average standardized test scores than men, CUAFA found that the academic performance of women over four years is not statistically different from that of men.

CUAFA said that MIT admits all underrepresented mi-

nority students who will be able to succeed at the Institute. The report expressed concern about the "individual experiences of minority students who may find it particularly difficult to succeed at MIT," but offered no suggestions to change affirmative action policy. It did note that support services for minority students have not expanded at the same rate as the minority population, creating a possible mismatch between "expectations and resources."

Gray cautions against damaged self-confidence

At the end of the faculty's May discussion of the CUAFA report, President Paul E. Gray '54 noted that the discussion of declining performance has given some underclassmen, especially freshmen and sophomores, the sense that they were "the worst class ever admitted." But "the actual situation in no way supports that self-doubt," he said.

Gray believed there was "some impairment in the self-confidence of large numbers of our students" and he urged the faculty to make it clear to students that they were qualified to be at MIT.

The Year in Review

A supplement to The Tech

Tuesday, February 6, 1990

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The Tech

Oct. 12 Thomas R. Cech, chemistry professor at the University of Colorado at Boulder, wins this year's Nobel Prize for Chemistry. Cech learns of the award shortly before giving a lecture at MIT for the Biology Undergraduate Student Association. Cech, who shares the prize with Yale professor Sidney Altman '60, worked at MIT as a post-doctoral fellow under Professor Mary Lou Pardue before moving to his post in Colorado.

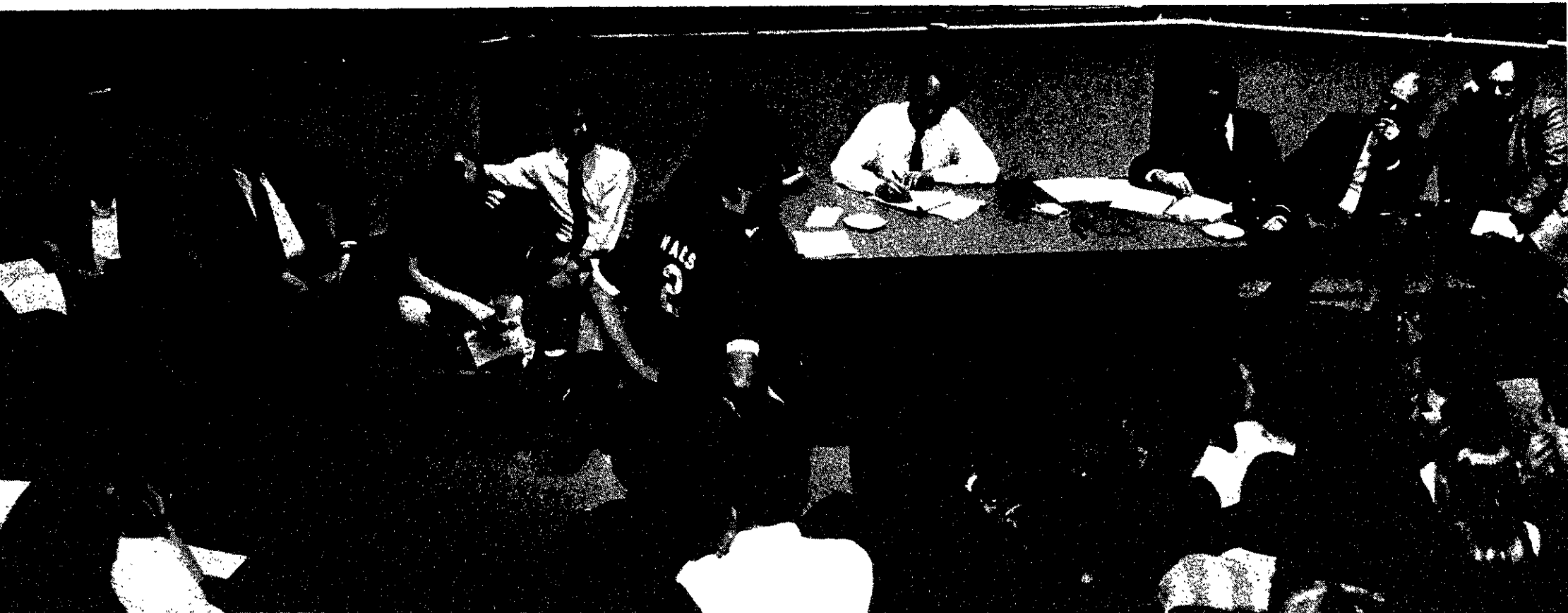
Oct. 17 The board of trustees of Rockefeller University announces that David Baltimore '61, Whitehead Institute director and Nobel laureate, will become the sixth president of the biomedical research center on July 1, 1990.

Oct. 20 The MIT Police Association takes a four-month labor dispute public, distributing flyers and speaking with community members in front of Building 7 during MIT's first Family Weekend.

Nov. 9 The Freshman Housing Committee recommends that all freshmen be housed on campus in dormitories, and that rush for independent living groups be postponed until the spring term. The recommendations, if implemented, would represent the most substantial change in MIT's housing policy in more than two decades.

Nov. 12 Approximately 300 MIT students join over 150,000 demonstrators in the nationwide "Mobilize for Women's Lives" rally in Washington, DC. The rally in front of the Lincoln Memorial is one of the many activities across the country on this day in support of a woman's right to choose a legal abortion.

Nov. 13 Cambridge city election results are released with a decisive victory for rent control forces and those who favor neighborhood preservation. Proposition 1-2-3, which would have allowed tenants in rent-controlled housing to buy their units, was defeated by a margin of 2-1, and the city council gained a 6-3 majority in support of rent control.



Douglas D. Keller/The Tech

Students speaking out at an open forum held by the Freshmen Housing Committee in November.

FHC looks at MIT housing

(Continued from page 3)

that students choose to live among and build friendships with people like themselves rather than seeking out other elements in the community, according to the FHC report.

At the same time, the FHC questioned whether Residence/Orientation Week constitutes an appropriate introduction to the Institute. The week is dominated by residence selection and little time is left for an introduction to academic life and traditional orientation matters, the FHC said.

Moreover, having residence selection, especially fraternity and sorority rush, during R/O Week means that students "begin MIT with an inherently inequalitarian experience." Rush forces freshmen to compete with one another for the approval of upperclass students, and subjects those who do not receive bids to feelings of failure, according to the FHC report. "At a university, the relevant basis of evaluation and achievement is intellectual, not social; the ideals are democratic, not exclusionary. . . . Having been admitted to MIT, freshmen should begin college as equals."

Its proposed changes in the residence system would, the FHC argued, broaden undergraduates' experiences by providing a first year in which they would be exposed in their living groups to a diverse selection of the student body. At the same time, by removing residence selection from orientation week, the FHC plan sought to eliminate problems the committee had identified in R/O Week.

The committee also recommended studying possible changes in programs, faculty involvement, and in student governance in the dormitory system

in order "to enhance quality of life and to increase support, especially for freshmen."

For its recommendations to be fully implemented, the FHC said the Institute would need to acquire additional undergraduate dormitory space — between 350 and 500 beds.

A barrage of criticism

Soon after its November release, the FHC proposal ran into strenuous opposition which seemed to make implementation of its main recommendation on freshman housing unlikely.

Faculty members generally reacted negatively to the plan when it was discussed at the November faculty meeting. Associate Professor James L. Kirtley '67 said he was "caught by surprise" by the housing report, and called it a "lousy idea."

At a late November open forum attended by more than 200 people, many students attacked the housing report's findings and recommendations. Rather than increasing diversity and interaction, the proposal would simply take away the choice students currently enjoy in residence selection, the students charged.

"One of the reasons why I selected MIT was because of the housing system," Jason B. Slibeck '91 told the forum audience. He said that he was "treated like an adult."

Others challenged the FHC's premise that the current system fosters isolation and limits diversity. "It's very open here," one student said.

Many students claimed that R/O Week reduces stress by giving freshmen "unfettered days to look for housing." One person felt that moving rush to the spring would extend the burden of looking for a place to live.

The Undergraduate Associa-

tion added its voice to the clamor against the proposal by issuing a statement labeling the FHC's main recommendation that all freshmen be housed on campus as "untenable to MIT undergraduates."

Members of the ILG residential system — 27 fraternities, five coed houses, and one all-female house — especially reacted with concern to the FHC report. ILG members feared that many fraternities would not be able to bear the financial strain of losing their freshman membership.

The FHC acknowledged that its proposal would have serious detrimental effects on ILGs. Committee chair Mary C. Potter speculated that the percentage of undergraduates housed by ILGs would go down from 30 percent to 25 percent.

But the FHC argued that a decline in the size of the ILG system would not be inconsistent with the lower number of male students in the MIT student body in recent years.

Working groups formed

Provost John M. Deutch '61 appointed two working groups after the release of the FHC report. One, chaired by Associate Provost Samuel J. Keyser, is studying ways to improve undergraduate life in the dormitory system.

The other is examining in detail the practical problems of transition and implementation should a final decision be made to move to a system where freshmen live on campus.

A group of students, wanting more input in the process, formed the Student Housing Working Group towards the end of the year. The SHWG plans to examine problems in the present residential system and recommend independent solutions.

Recommendations of the Freshman Housing Committee

1. For the freshman year, it is recommended that all students be housed on campus in dormitories.

a) Freshmen would be distributed through the dormitories so that they would live with upperclass students. Freshmen would be preassigned to a specific dormitory room, and (where applicable) roommate.

b) Rush for independent living groups and sororities would be deferred from the residence selection and orientation period (R/O) now at the beginning of the freshman year to the spring term, with students who join ILGs moving into them at the beginning of the sophomore year.

c) Freshmen who plan to remain on campus for the sophomore year would rank-order their choices for dormitory space throughout the dormitory system, and a lottery would resolve competing choices. The system should be designed to encourage students to change dormitories (allowing them to move with one or several friends/roommates).

2. R/O would become Orientation. It is recommended that Orientation be refocused on . . . assuring a student's well-being, security, and sense of "being in the right place," the generation of intellectual excitement, an introduction to academic opportunities and the freshman curriculum, provision of practical information about student life and co-curricular activities, an introduction to community life and norms, an introduction to the larger community beyond MIT, and orientation for parents.

3. To respond to a range of problems in the present residential system, particularly in the dormitories, it is recommended that changes in programs, in faculty involvement, and in student governance in the residential system be considered and initiated. These changes should be designed to enhance quality of life and to increase support, particularly for freshmen.

4. Recommendations for implementation

a) Dormitory space totaling about 350 beds would be required to house the freshmen who would otherwise live in ILGs.

b) A transition period should be planned to minimize adverse effects on the ILGs and to smooth out the shift from freshman-year to sophomore-year pledging.

Nov. 14 Six MIT students and an MIT lecturer are arrested for trespassing during an exercise in civil disobedience held in the Boston office of Sen. John F. Kerry (D-MA) to protest military aid to El Salvador's right-wing government. Six Harvard students and a Tufts student are also arrested.

Dec. 4 President Paul E. Gray '54 announces that Colombian President Virgilio Barco '43 will be the speaker at MIT's 124th commencement on Monday, June 4, 1990.

Jan. 1 Cambridge City Council chooses Alice Wolf, a 19-year veteran of Cambridge politics, to be the 25th mayor under the city's Plan E charter. She becomes only the second woman chosen for the office.

Jan. 4 Harold E. "Doc" Edgerton SM '27, Institute professor emeritus of electrical engineering, dies after suffering a heart attack. Edgerton, whose work with stroboscopic light redefined photography and the scientific applications of the strobe, spent 60 years at the Institute as both a student and a professor. He was 86 years old.

Jan. 15 After being considered for the presidency of Johns Hopkins University, Provost John M. Deutch '61 withdraws from consideration. Deutch was one of two finalists selected by the search committee from 300 applicants.

Jan. 23 Provost John M. Deutch '61 announces that he will not be MIT's next president and that he will step down as provost on June 30. Deutch tells the Academic Council that he believes the next president should have the opportunity to name a new provost. He plans to return to teaching and research in physical chemistry and on public policy issues after five years as the Institute's chief academic officer.

The Year in



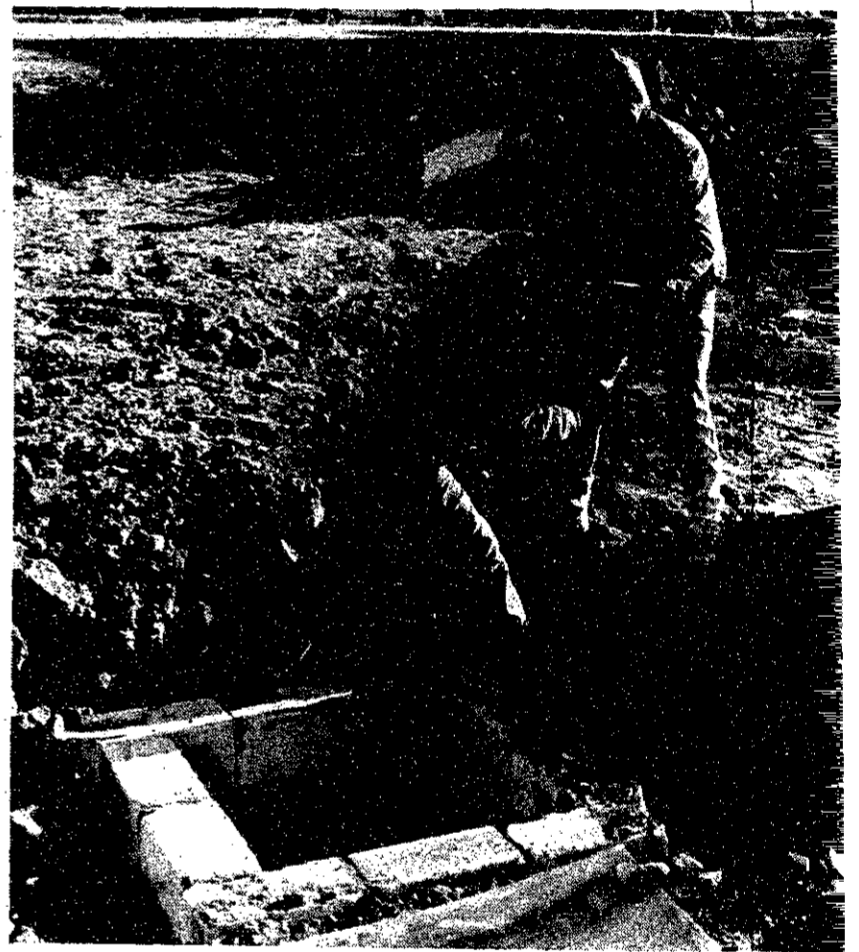
Andy Silber

I've been
 a pain in the neck.
 It served the needs for many a year.
 Now it lies beneath the grass.
 And fewer needs have dared to pass.
 Physical Plant has closed it down.
 And now the needs must walk around.
 I G T f p p

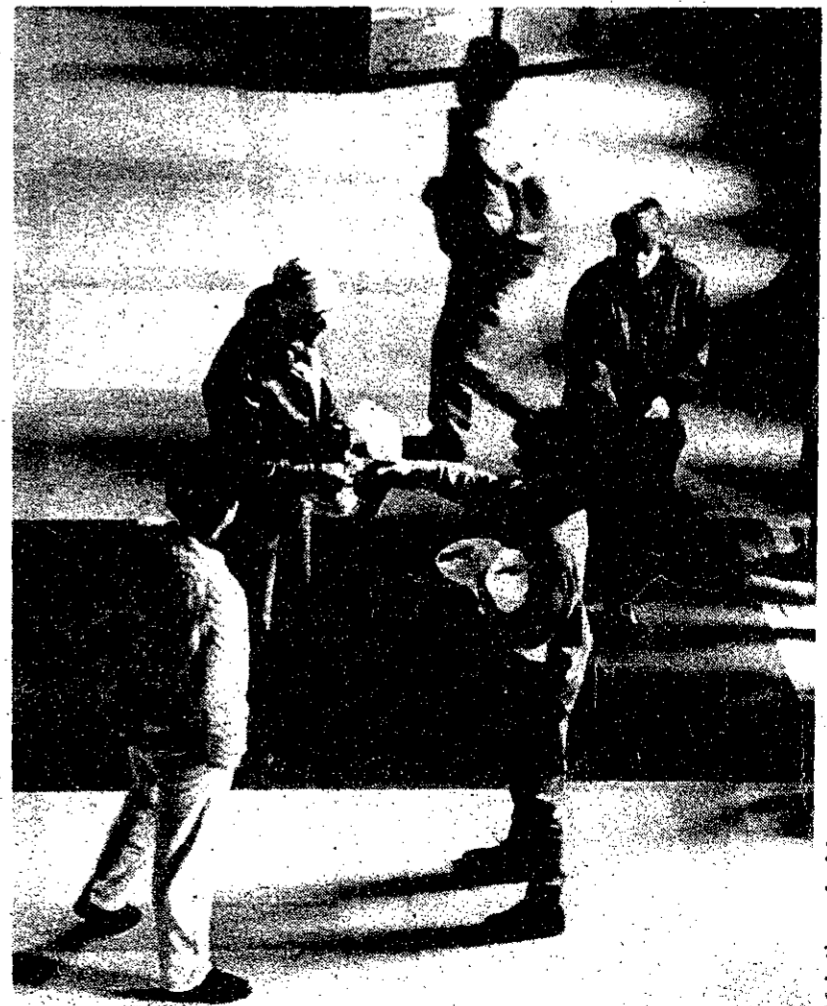
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William Chu

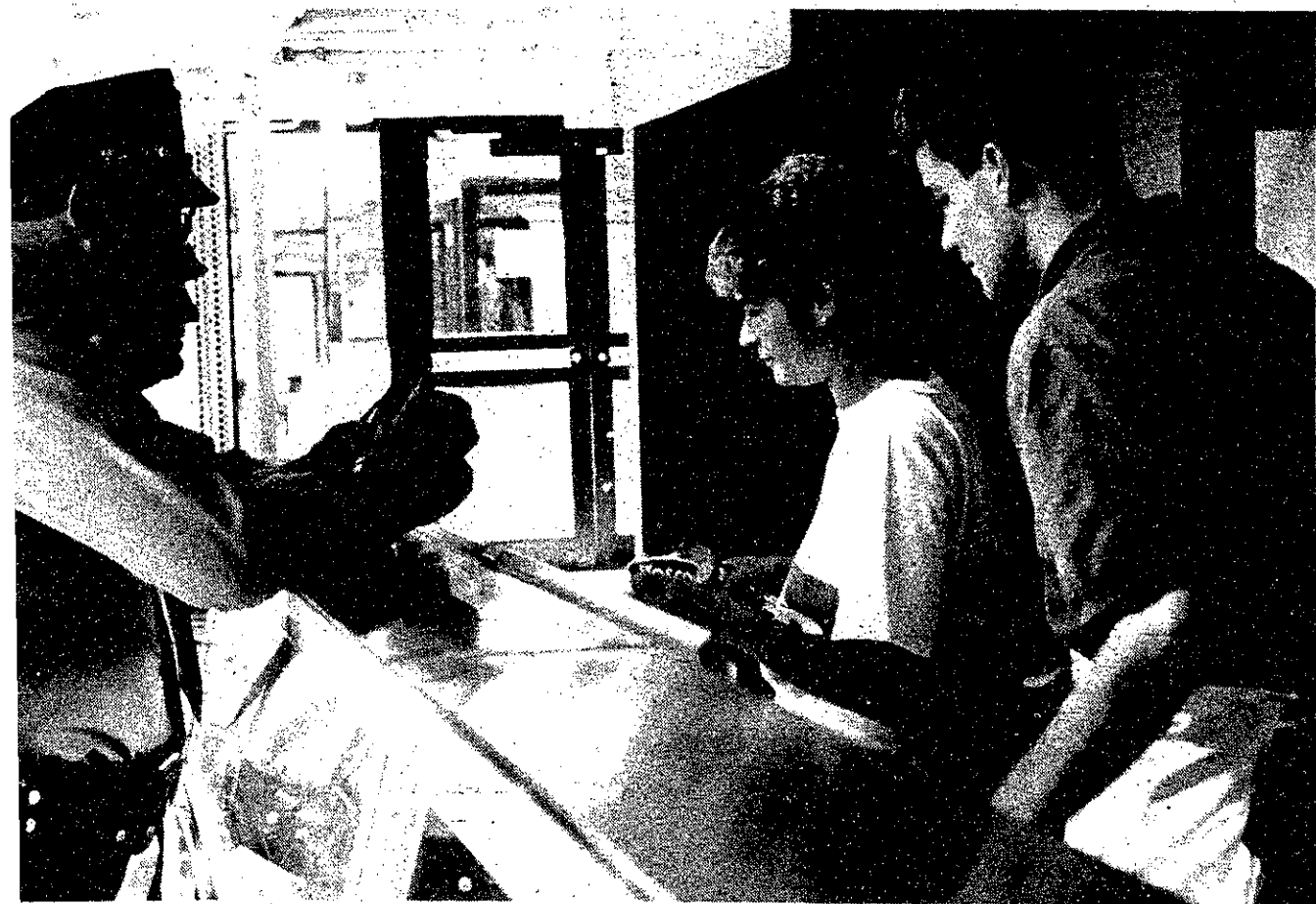


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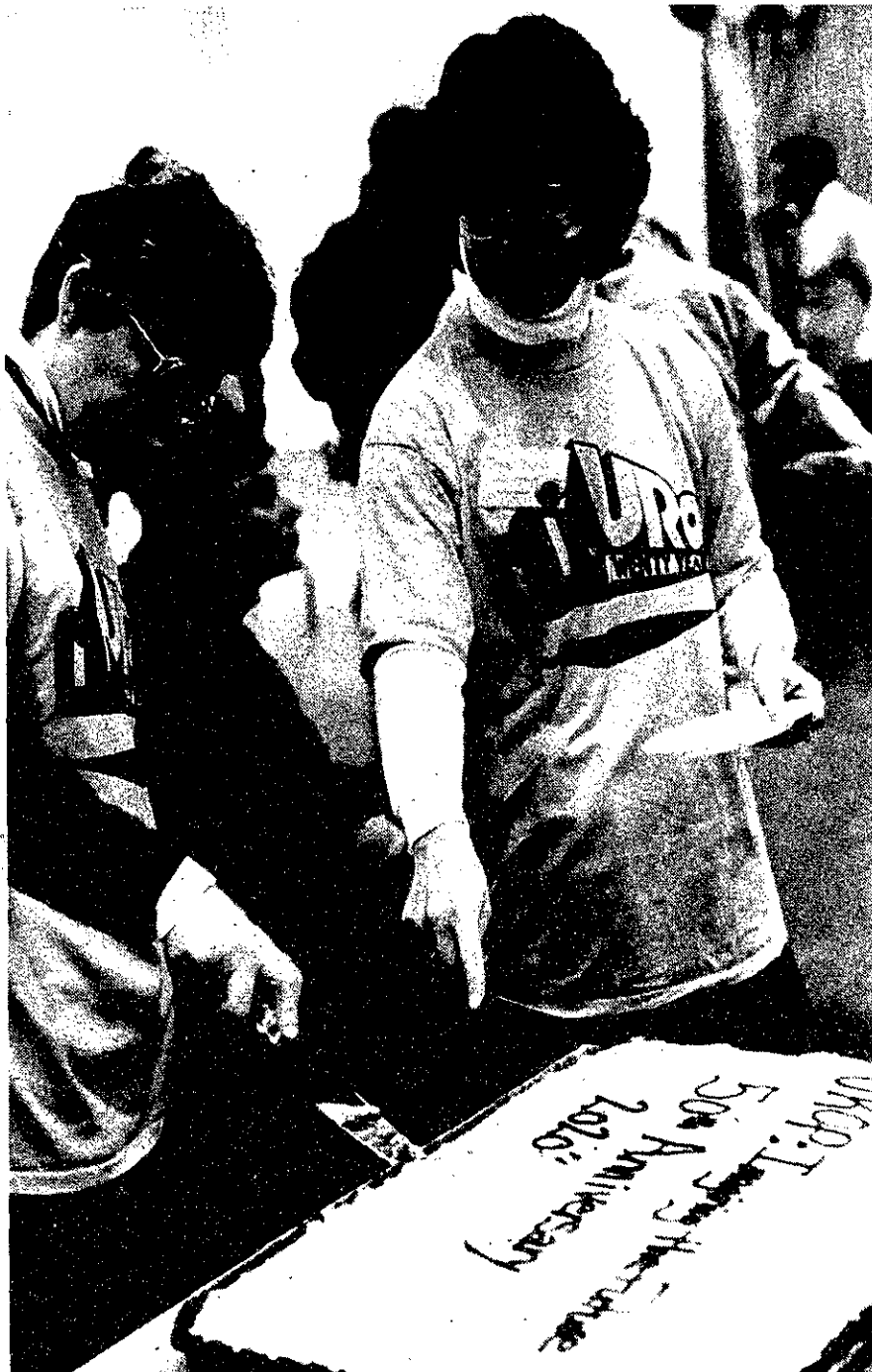


Kristine AuYeung

Pictures



Ken Church



Kristine AuYeung



Georgina A. Maldonado

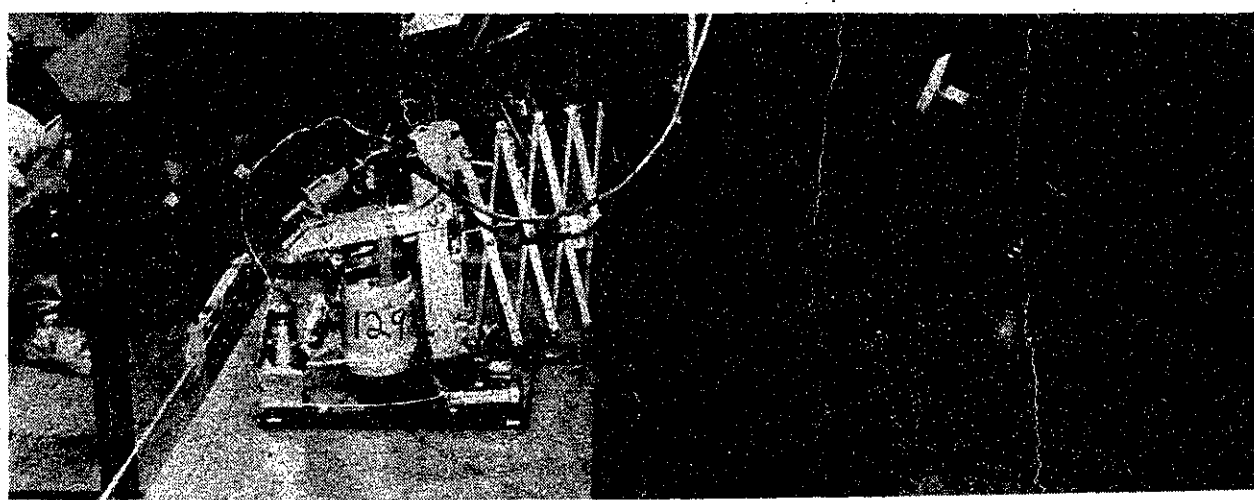
Sarath Krishnaswamy



Joyce Ma



Lisette W. M. Lambregts



Mauricio Roman

The Year In Theater



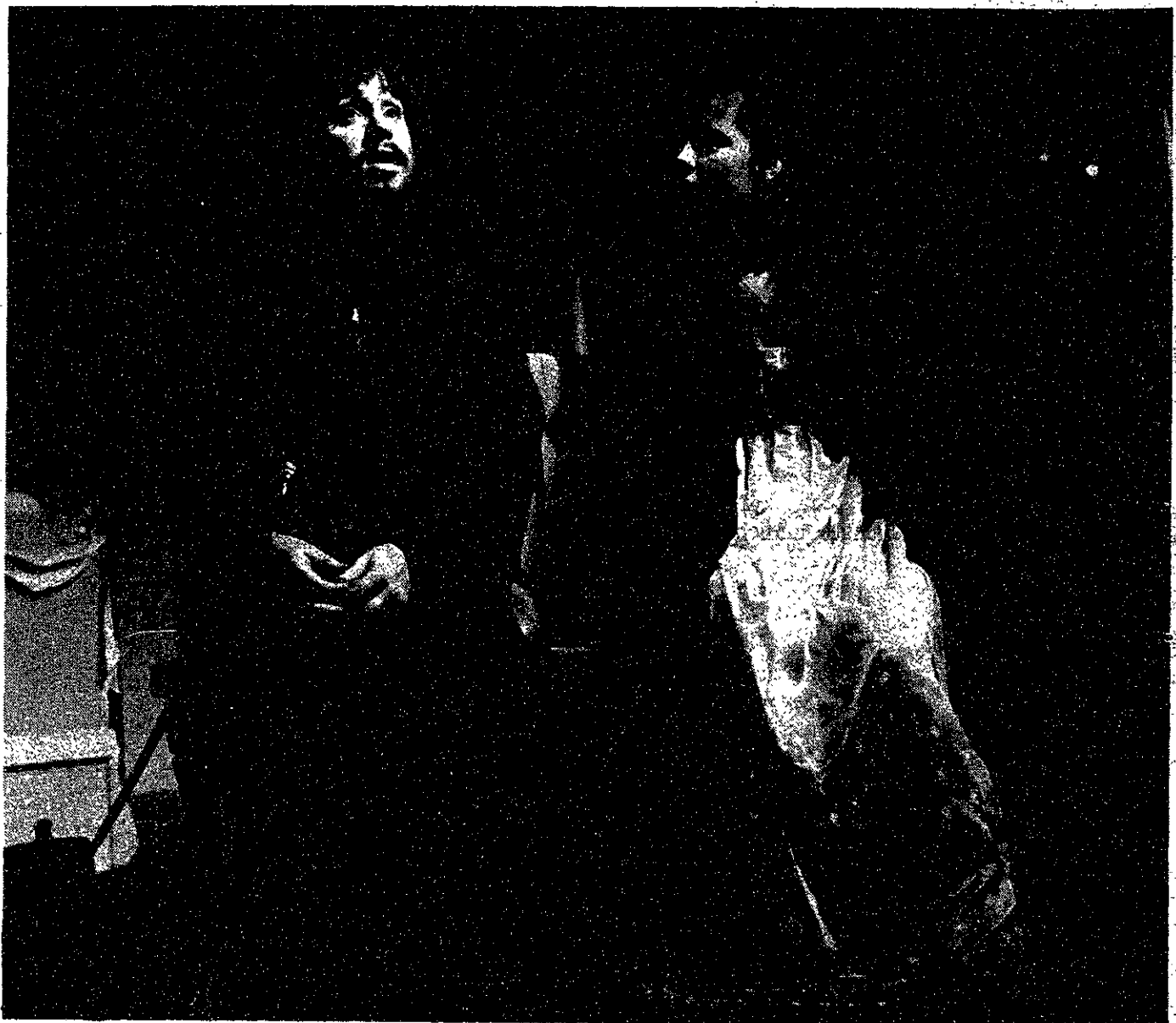
The Gilbert and Sullivan Players staged a delightful *Sorcerer*.



Young lovers Seymour Krelborn and Audrey in MTG's production of *Little Shop of Horrors*.



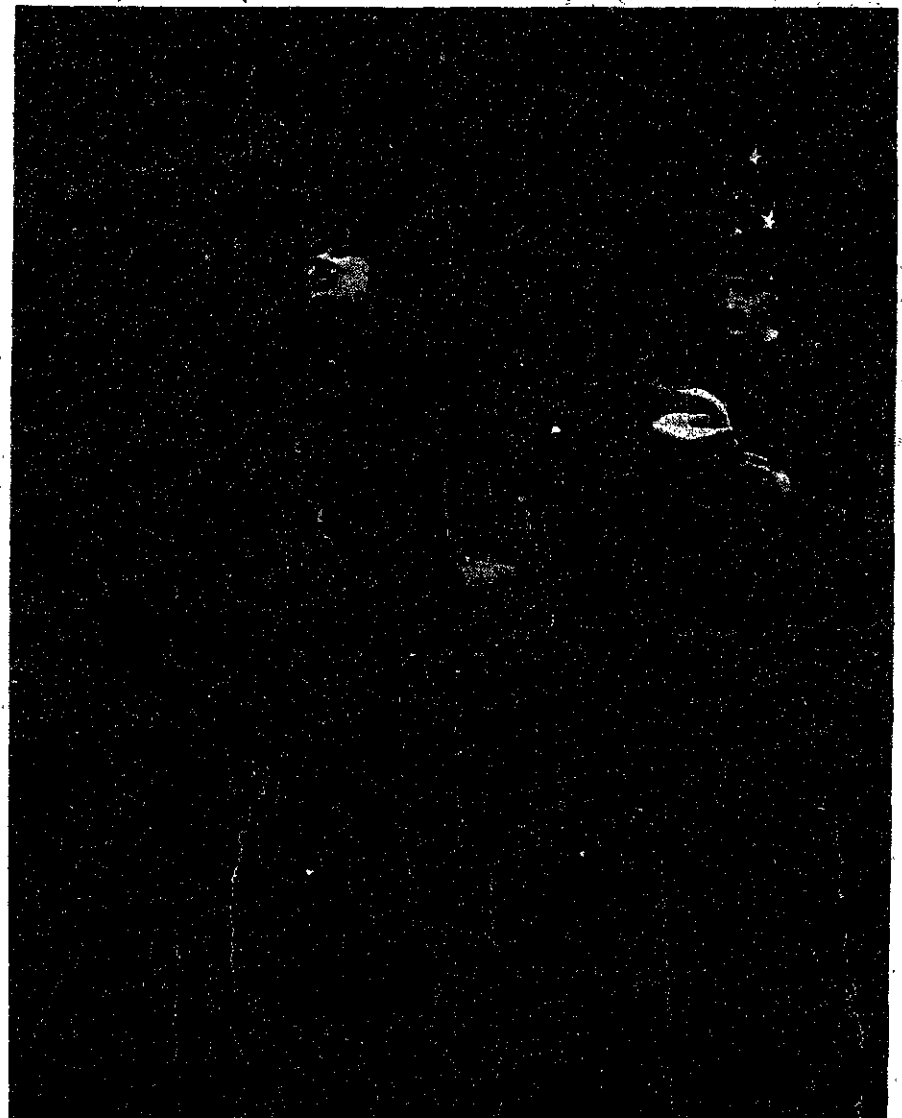
Harry Teplitz '91 as Malvolio (*Twelfth Night*) in an evening of works in progress by the Shakespeare Ensemble.



Dramashop's *Arms and the Man* featured Jennifer Duncan '91 as Raina and Jonathan Amsterdam G as Bluntschli, her "chocolate-cream soldier."



A gentle poet was the embodiment of aesthetic beauty in the Gilbert and Sullivan Players' *Patience*.



A bewitching moment in the Dramashop Spring production of *Parts*.

By Michelle Perry, Kristine Au Yeung, Annabelle Boyd, and Debby Levinson

What follows is our "lucky" thirteen — 13 movies of the past year we all enjoyed. They are listed in alphabetical order.

Batman

More than just a cinematic treatment of a comic book hero, *Batman* brought depth and stark realism to both its main character and its futuristic setting. Director Tim Burton's dark fable about a man whose obsession with his parents' murder forces him to vent his anger through becoming a vigilante had all the power of a Wagnerian epic. As tortured millionaire Bruce Wayne, Michael Keaton delivered the finest performance of his career, but it was Jack Nicholson's maniacal Joker who stole the show.

Born on the Fourth of July

Oliver Stone's gripping reprisal of the life of Vietnam war veteran Ron Kovic explores the price the Vietnam war extracted from a generation. Tom Cruise's brilliant, bitter portrayal of Kovic gives the film enormous visceral impact. In depicting the gut-wrenching transformation of Kovic from eager young soldier into crippled head of Vietnam Veterans Against the War, Stone has created his most complicated, powerful film to date.

Dead Poets Society

Although this was billed as a vehicle for Robin Williams, it was really newcomer Robert Sean Leonard who was the star of this drama about achieving personal independence. Williams plays John Keating, a boarding-school English teacher whose loose-limbed lecturing style and philosophy of *carpe diem* — Latin for "seize the day" — inspires his students to challenge authority and learn to think for themselves. Leonard, who plays Keating's eager pupil Neil, is full of a refreshing youthfulness that promises great things from him in the future.

Do the Right Thing

Spike Lee's controversial third film challenges audiences to recognize the deep-seated nature of racism in American society. *Do the Right Thing* is wonderfully non-committal; it is not a preachy film. Instead, it employs theatre-like techniques and real-life ambiguity to make its audience re-think and re-define racism.

Drugstore Cowboy

Gus Van Sant's clever film traces the exploits of Bob Hughes, a drug addict who supports his habit by knocking off drugstores with his girlfriend Diane. Matt Dillon does a fabulous job with the character of Bob, playing him as a sensitive, cocky thief who hides his worst fears under a thick layer of bravado. Kelly Lynch is equally impressive as the rebellious, doomed Diane. Through its gentle humor and innovative photography, *Drugstore Cowboy* tenderly addresses the human frailties that push dope into veins.

Glory

Edward Zwick's tribute to the heroic 54th Regiment of the Massachusetts Volunteer Infantry, the first black regiment recruited in the North for the Civil War. A fine performance by Matthew Broderick in his first mature role. Denzel Washington deserves an Acade-



Denzel Washington plays Trip in Edward Zwick's *Glory*.



Princess Ariel with her friends Sebastian the crab and Flounder in the Disney film *The Little Mermaid*.

my Award nomination for his supporting role as a runaway slave who joins the 54th.

Indiana Jones and the Last Crusade

A fitting conclusion to the Indiana Jones trilogy. Who better to play the adventuring archaeologist's father than the ever-so-macho Sean Connery? Plenty of action to keep the audience on the edge of its seat, plus a very interesting love triangle between father, son, and a mutual friend. The lovely ride into the sunset indicates that Spielberg is serious about not doing a fourth; perhaps the box office receipts will help to change his mind.

The Little Mermaid

This time the princess who falls in love is a mermaid. Ariel, King Triton's youngest daughter, longs to become human after rescuing the handsome Prince Eric from drowning during a storm at sea. Villainous Ursula the seawitch tricks Ariel into trading her voice for the chance to fulfill her wish. The true Disney idealist is not disap-

cuts and blatant propaganda, it's an excellent primer on how bureaucratic ignorance and red tape can unwittingly cause human suffering. The filmmaker's efforts to garner an interview with General Motors chairman Roger Smith in the hopes of convincing Smith to tour Flint, Michigan, where GM layoffs of almost 30,000 workers nearly turned the city into a wasteland, are both sad and funny. Over a scene showing the closing down of AutoWorld — an indoor theme park devoted to the car industry and designed to help rejuvenate Flint, Michigan's floundering economy — Moore dryly comments: "Some people don't like to celebrate human tragedy on vacation." And though the film's viewpoint is decidedly one-sided, the story it tells about the downside of the Reagan era is a necessary one delivered in a palatable way.

A Taxing Woman 2

More biting in its satire, the sequel to *A Taxing Woman* is not only better than the original, it is the best film Jap-



The War of the Roses stars Kathleen Turner and Michael Douglas as a couple whose divorce becomes an exercise in destruction.

pointed though, for once again true love conquers all (with help from Sebastian, the singing Calypso Crab who easily the film's best character). With *The Little Mermaid*, Disney continues to prove that its forte lies in making fairy tales come to life.

Pelle the Conqueror

Adapted from the first of four volumes of an epic by author Martin Andersen Nexø, *Pelle the Conqueror* is intelligently made and stands out as a fine example of luxuriantly unhurried storytelling. The film stars Max von Sydow and Pelle Hvenegaard as Lasse and his young son Pelle, who come to Denmark with the hope of being hired as cheap labor for the harvest season. The pair finally find work and begin to eke out their harsh existence on the appropriately named Stone Farm. Superbly directed by Bille August, *Pelle the Conqueror* neither obscures nor romanticizes its subject and leaves the viewer hungering for more at the end.

Roger & Me

Michael Moore had never made a film before *Roger & Me*, and while his inexperience shows in the movie's rough

ness director Juzo Itami has made in his career. The plot spans religion, taxes, corporate finance, bribery and politics in a probing view of contemporary Japanese social realities.

War of the Roses

A horrifyingly funny black comedy from the twisted mind of Danny DeVito. The story of the birth, life, and death of the Roses, played by Kathleen Turner and Michael Douglas. As told by a divorce lawyer (DeVito) to a potential client, it is the story of a fairy tale courtship, a bitter marriage, and an inexorable plunge into the darkest pit of despair and hatred. Creative cinematography enhances the emotional rollercoaster ride.

When Harry Met Sally...

Nora Ephron's witty script and Rob Reiner's careful direction were a strong foundation, but it was really the interplay between Billy Crystal and Meg Ryan that made this movie the success it was. The humor of antagonism that turns to friendship and slowly matures and blossoms into love made this one of the happiest movies about relationships seen in 1989.

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The Year In Music



By Debby Levinson,
Marie E. V. Coppola,
and Annabelle Boyd

ASLEW OF NEW, YOUNG BANDS emerged in 1989; sadly, most — like Skid Row and the Bullet Boys — were sub-mediocre heavy metal groups. Pennsylvania experienced a brief moment of fame with the Ocean Blue (now involved in a high-profile tour with the Mighty Lemon Drops) and the 10,000 Maniacs-ish Innocence Mission. But the two best newcomers of the past year were definitely Toad the Wet Sprocket, a folk-rock group from Santa Barbara, and Poi Dog Pondering, a seven-piece band specializing in folk tinged with Caribbean rhythms and Talking Heads-style lyrics. Toad, who released their first album, *Bread and Circus*, on an independent label just after singer Glenn Phillips' graduation from high school, managed to attract the attention of CBS Records. They so impressed the label that they were allowed to re-release *Bread and Circus* without any re-mastering or further production.

Poi Dog Pondering, on the other hand, gained exposure through a summer tour with Robyn Hitchcock and Winter Hours. Their mixture of ska, folk, Hawaiian, and any other musical style they could appropriate was an engaging one. Their self-titled debut album was equally charming.

Lured by the promise of very large ticket sales and merchandise tie-ins, the Rolling Stones and the Who re-formed and started touring. These tours were by far the most profitable of the year — perhaps even of the decade — a depressing fact considering that both groups practically took out full-page ads in *The New York Times* declaring that they were only in it for the money. Yet while the dinosaurs returned to walk the earth (and stalk the dollar), some younger groups fell by the wayside, at least temporarily. Guns 'n Roses broke up for about four days after lead singer W. Axl Rose walked off the stage during a concert, citing drug and alcohol abuse by band members as the reason for his discontent.

Rappers Public Enemy are also in a state of flux. After firing "spokesman" Professor Griff (controversial for his racist and anti-Semitic remarks), Public Enemy broke up in protest to what they considered hostile industry reaction to outspoken black groups such as themselves. Public Enemy is set to release their latest album, *Fear of a Black Planet*, in late February.

The only group of last year who seemed to have broken up definitively was Government Issue, one of the most popular punk bands in the country. The band gave a jam-packed farewell performance at Washington, D.C.'s 9:30 Club and has di-

vided itself into splinter groups. (Lead singer John Stabb's Weatherhead seems to be the only one with any real potential, however.)

Local music had another banner year with the release of the Pixies' *Doolittle* and the Throwing Muses' *Hunkpapa* and the signing to major labels of Heretix and the Raindogs. *Doolittle's* aural assault brought the Pixies the national attention they deserve, with Black Francis spitting out his cynical lyrics over the hardcore crunch of "Monkey Gone to Heaven" and "Wave of Mutilation." The popularity of Throwing Muses' sinuous "Dizzy" helped push them along a successful U.S. tour. And perennial favorites Heretix and the Raindogs used their newfound major label support to release, respectively, *A. D.* and *Lost Souls*.

* * * * *

This is hardly a definitive list; these are merely our personal preferences for the top 20 albums of 1989. They follow in alphabetical order.

THE TWO BEST ALBUMS OF 1989...

Bob Mould — *Workbook*

When Hüsker Dü imploded, fans and critics alike mourned the death of one of the most introspective, philosophical hardcore punk bands around. And since Hüsker also had the reputation of being one of the nation's most abrasively hardcore bands, former lead singer Bob Mould surprised everyone by releasing *Workbook*, a relatively acoustic album that still managed to pack a powerful lyrical punch. Fed on the venom surrounding the Hüsker split, the songs on *Workbook* seethe with Mould's bitterness and regret about the breakup. Yet the album's strength lies not in its acidic nature, but rather in the nature of its more sensitive, emotional songs — "See a Little Light" and "Heartbreak a Stranger" are practically easy listening next to Hüsker's "Crystal." *Workbook* is a beautiful album, raw with Mould's pain but full of his hope, too. It's more than a fitting elegy for Hüsker Dü.

Kirsty MacColl — *Kite*

Long sought-after as a backup singer by the likes of the Pogues and the Smiths, Kirsty MacColl finally came out with a full-length album of her own in 1989. Although MacColl had released some singles in the U.K. — most notably covers of the Smiths' "You Just Haven't Earned it Yet, Baby" and Billy Bragg's "A New England" — she was still relatively unknown to U.S. audiences, a situation that was not helped by *Kite's* unusually high price tag and its limited distribution. It's well worth the effort to search it out, though; MacColl's silky, sweet delivery is the ideal counterpoint to her frequently acerbic, witty lyrics. *Kite's* influences are mostly folk ones, with nods to the Beatles ("Dancing in Limbo") and the Kinks (a cover of "Days"). A tip to CD buyers (good luck finding the CD on this side of the Atlantic): the CD version of *Kite* contains three extra tracks, including "You Just Haven't Earned it Yet, Baby" and two songs in French.

... AND THE REST OF THEM

B-52's — *Cosmic Thing*

Their first album since *Bouncing off the Satellites* proved to be the surprise mainstream hit of the year. Buoyed on the un-

expected success of quirky, bouncy single "Love Shack," the B-52's suddenly made the jump from alternative radio to top-40. The rest of the album is as irresistible as the single, from the subtle beat of "Dry County" to the sugary girl-group harmonies of "Roam."

Big Audio Dynamite — *Megatop Phoenix*

The concept of an ex-Clash member producing such blatantly commercial music still disturbs me, but B.A.D. hasn't produced funk so solid since their debut album. *Megatop Phoenix* is more free-form in format than anything else, with songs flowing directly into each other or bridged by Don Letts' clever samples. "James Brown," with its lyrical and musical nods to the Godfather of Soul (and his current incarceration troubles) and "Contact" are two of the best dance tunes of the year.

David Bowie — *Sound and Vision*

This beautifully packaged box set contains everything the loyal Bowie fan could possibly want, including a Grammy Award-potential booklet of liner notes by former *Rolling Stone* editor Kurt Loder. The collection is worth the hefty price tag alone for the German-language version of "Heroes" and Bowie's sparse, uncertain demo of "Space Oddity."



Kate Bush — *The Sensual World*

Bush's most graceful, and yes, sensual album to date, *The Sensual World* opens with its lush title track, the theme and lyrics of which are based on Molly Bloom's speech in *Ulysses*. Not quite as eclectic as *Hounds of Love*, *The Sensual World* has an evenness of tone to it that makes it both unified and accessible. The inclusion on this album of "This Woman's Work," her sorrowful contribution to the soundtrack of *She's Having a Baby*, was gratify-

ing to those of us who don't like purchasing albums for just one track.

Christmas — *Ultraprophets of the Psykick Revolution*

By far the strangest album of these twenty, Christmas' *Ultraprophets* was a trip back into 60's bubble-gum psychedelia à la Donovan and "Mellow Yellow." Complete with double-exposed cover art and the back-cover advice, "We recommend you listen to this album in the nude," *Ultraprophets* included odes to sex ("Human Chain") and frankfurters ("Hot Dog"). A taste of the strangeness, from "Hot Dog": "[hot dog]... doesn't have to sit on a ship's guard rail/or anticipate having external feet." Elizabeth Cox's vocals are a little thin, but the guitar and bass back-up by the Cudahy brothers is taut and never overbearing.

Elvis Costello — *Spike*

While this is hardly Costello's best album, bad Elvis is better than no Elvis at all. Not that there weren't good songs on *Spike* — the gospel flavor of "Deep Dark Truthful Mirror," the sad comments on senility in "Veronica," the creepiness of "Miss Macbeth" — but the album is long, and it drags a little towards the end. At least Costello is back to his old snotty self on the vitriolic "Tramp the Dirt Down," about Margaret Thatcher: "And when they finally lay you in the ground... I'll tramp the dirt down." Ouch.

Terence Trent D'Arby — *Neither Fish nor Flesh*

An album that mixed D'Arby's funkier side with his calmer, more soulful one, *Neither Fish nor Flesh* lacked the urgency of his debut, *Introducing the Hardline According to...* But *Neither* is merely a different, more complex album. Oddly, the most appealing tracks here are not the faster ones, but the gentler ones, like "I Have Faith in These Desolate Times" and "To Know Someone Deeply is to Know Someone Softly."

Robyn Hitchcock 'n' the Egyptians — *Queen Elvis*

While *Queen Elvis* was obviously the album A & M Records wanted to make Robyn Hitchcock a star (Hitchcock even performed on "Late Night with David Letterman"), the musician's unmistakable weirdness still shone through. A Hitchcock short story about the dead making telephone calls appears with the record, and songs about traveling through the veins of Queen Elizabeth aren't exactly going to appeal to the average top-40 listener. For those of us who are die-hard Hitchcock fans, though, *Queen Elvis* was a fine return to form and possibly his strongest effort since *Fegmania*.

Joe Jackson — *Blaze of Glory*

In *Blaze of Glory*, his most musically varied album yet, Jackson's introspection reflects an acceptance of the inevitability of aging that sharply contrasts with the wishful thinking of "Is She Really Going Out With Him?" The album is a song cycle that characterizes the maturing attitudes of a young man, beginning with the hopeful, forward-thinking "Tomorrow's World," then chronicling his first romance (and first break-up), finally mellowing into "Nineteen Forever." A highlight of the second side is "Discipline."

Nick Lowe — *Basher: The Best of Nick Lowe*

The equivalent of two full-length albums, *Basher* is a treat for fans of Lowe's catchy pop-rockabilly mix. It's got every Lowe tune one could possibly want: "Refrigerator Love," "Cruel to be Kind," and "Heart," his old Rockpile song with Dave Edmunds. One of 1989's most fun albums.

Nine Inch Nails — *Pretty Hate Machine*

As aggressive as Ministry and as abrasive as Hüsker Dü, Nine Inch Nails have released an album true to their name: listening to *Pretty Hate Machine* is like feeling a giant rusty nail being driven directly into your skull. A hybrid of keyboard technopop (early New Order) and hardcore fury (Black Flag), Nine Inch Nails leave an indelible, if sometimes painful, impression. The roughness of "Down in It" is shocking and refreshing, and the lyrics of "Head like a hole" — "Head like a hole/black as a soul/I'd rather die/than give you control/bow down before the one you serve/you're going to get what you deserve" — are, as one *Tech* staffer put it, full of angst.

Tom Petty — *Full Moon Fever*

Petty's first solo effort is even more satis-



fyng than his already fine work with the Heartbreakers. He owes a large debt to the folk-rock of the 60's, a debt he repays with his stellar cover of the Byrds' "I'll Feel a Whole Lot Better When You're Gone." There isn't a weak track on the album, and if this is an example of Petty's most mature work, his next recording with the Heartbreakers should be spectacular.

The Red Hot Chili Peppers — *Mother's Milk*

A driving, passionate album, *Mother's Milk* marks the resurgence of the Red Hot Chili Peppers after the death of guitarist Hillel Slovak. Songs such as "Higher Ground" and "Taste the Pain" combine death-obsessed, insightful lyrics with the bass and horns that are the Chilis' trademark.

The Replacements — *Don't Tell a Soul*

Don't Tell a Soul is the Replacements' third major-label album and their first with new guitarist Slim Dunlap (replacing Bob Stinson, who was fired two albums ago after succumbing to alcoholic excesses). Consequently, it's got a slightly different sound from their last record and a very different sound from their first punk masterpiece, *Sorry Ma, Forgot to Take out the Trash*. Paul Westerberg's lyrics are developing even further, but the original themes are still there; fear, insecurity, and a brash front to cover up the fear and insecurity. Always afraid of being dragged into the limelight (after all, Westerberg is the man who sang "One foot in the door/the other one in the gutter/the sweet smell you adore/well, I think I'd rather smother" on the Mats' last album), the Replacements achieved success in spite of themselves with *Don't Tell a Soul*.

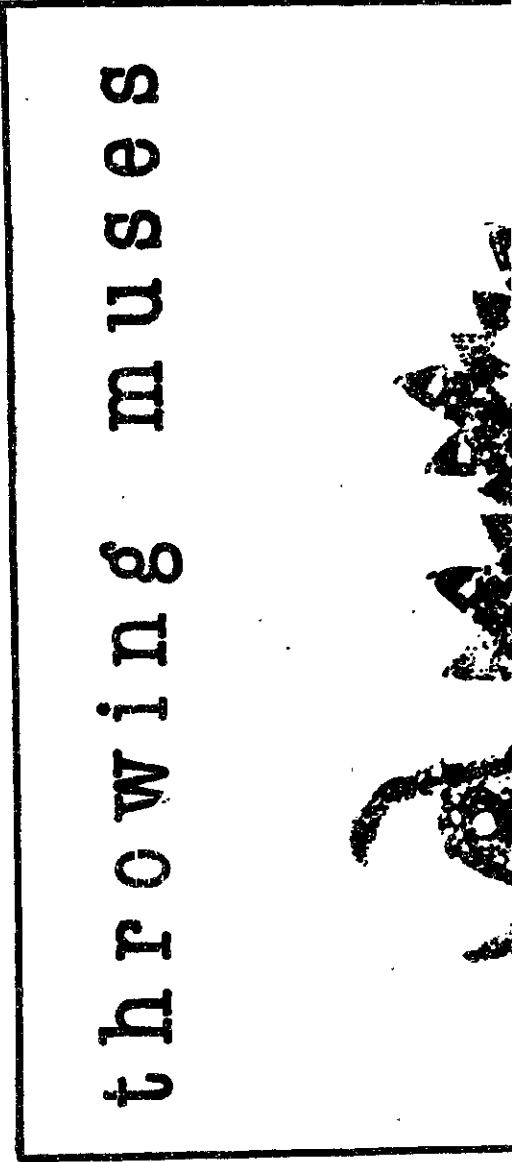
The Rolling Stones — *Steel Wheels*

Unlike the Who, who didn't bother recording a new album before embarking on a multi-million dollar tour, the Rolling Stones overcame their mutual differences long enough to produce their finest album since *Tattoo You*. "Sad Sad Sad" recalls the days of "Honky Tonk Woman" and "Start Me Up," and despite a not-so-subtle pun in "Mixed Emotions" ("Mick's Emotions"), *Steel Wheels* is as tight an album as the Stones have released.

The Smithereens — *11*

Their third full-length recording, *11*, featured more of the Beatlesque pop for which the Smithereens have become famous. They're more than just imitators of the Fab Four, however; songs like "Yesterday Girl" and "A Girl Like You" bring a much-needed hard edge to their style. While *11* will never touch the pure pop glory of *Especially for You*, it's a recording that can stand on its own and a good introduction to a band that deserves more airplay.

Various artists — *Young Einstein*
Even if you didn't like the movie, the

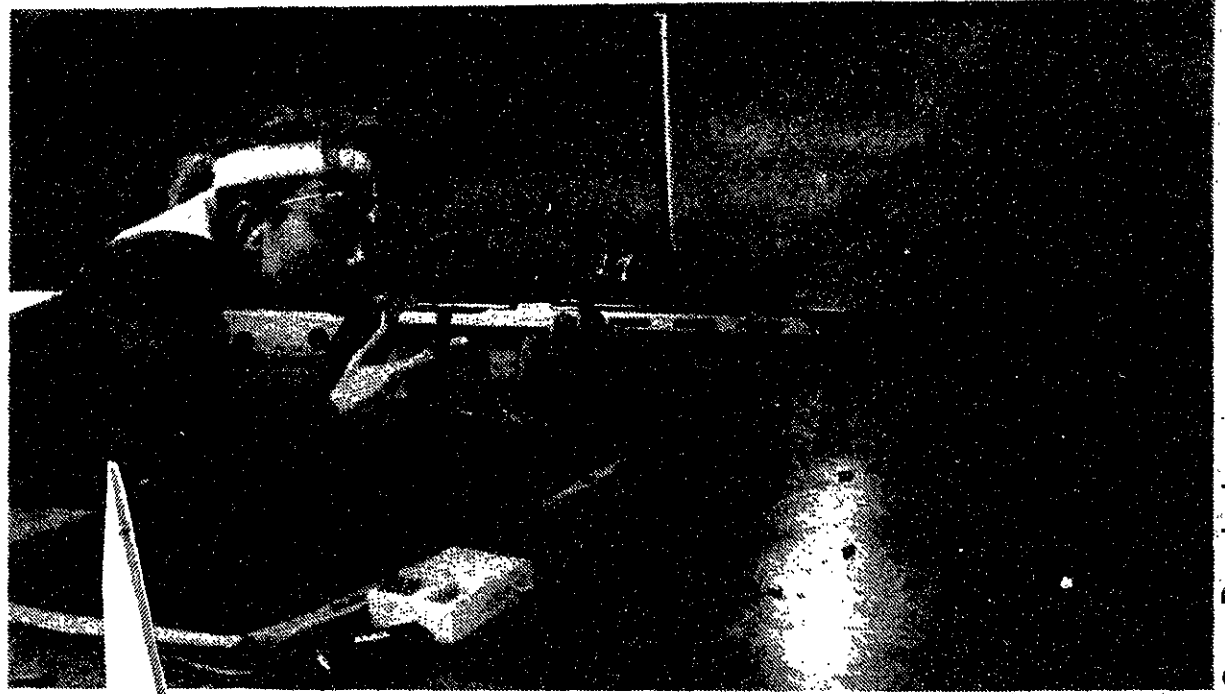


soundtrack was superb. A sampler of the best in Australian music, *Young Einstein* includes songs by Mental as Anything, The Saints, Icehouse, the Lime Spiders, and the Models. My personal favorite is Paul Kelly and the Messengers' "Dumb Things," a song with an irresistible chorus and harmonica line. Even if you can't bring yourself to spring for the two dollars to rent the movie, live a little — spend the eight or ten bucks for the soundtrack. It's worth it.

The Waterboys — *Fisherman's Blues*

The Waterboys have always been compared to U2. Both bands are Irish, both appeared at about the same time, and both feature lead singers who are more poets than traditional lyricists. Yet while U2 have veered more towards the political side of things, the Waterboys continue to sing about love and sorrow. And while singer Mike Scott doesn't have much of a voice — like Bob Dylan, his scratchy, nasal vocals are an acquired taste — his lyrics are as romantic as any poem by Byron or Keats: "Your beauty is familiar/and your voice is like a key/It opens up my soul/and torches up a fire inside of me," Scott sings in *Fisherman's* best song, "When You Go Away." It's an inspiring and compelling album full of the vitality of life.

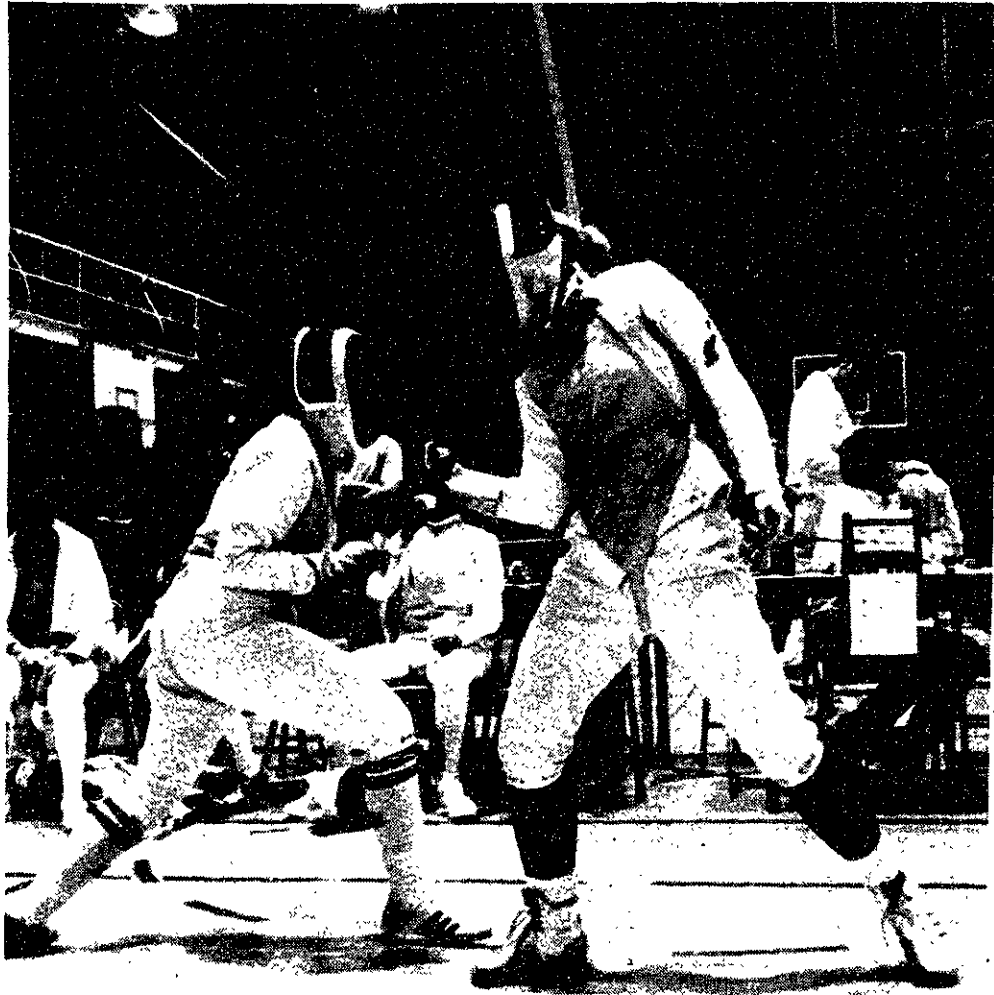




Sean Dougherty

The Year

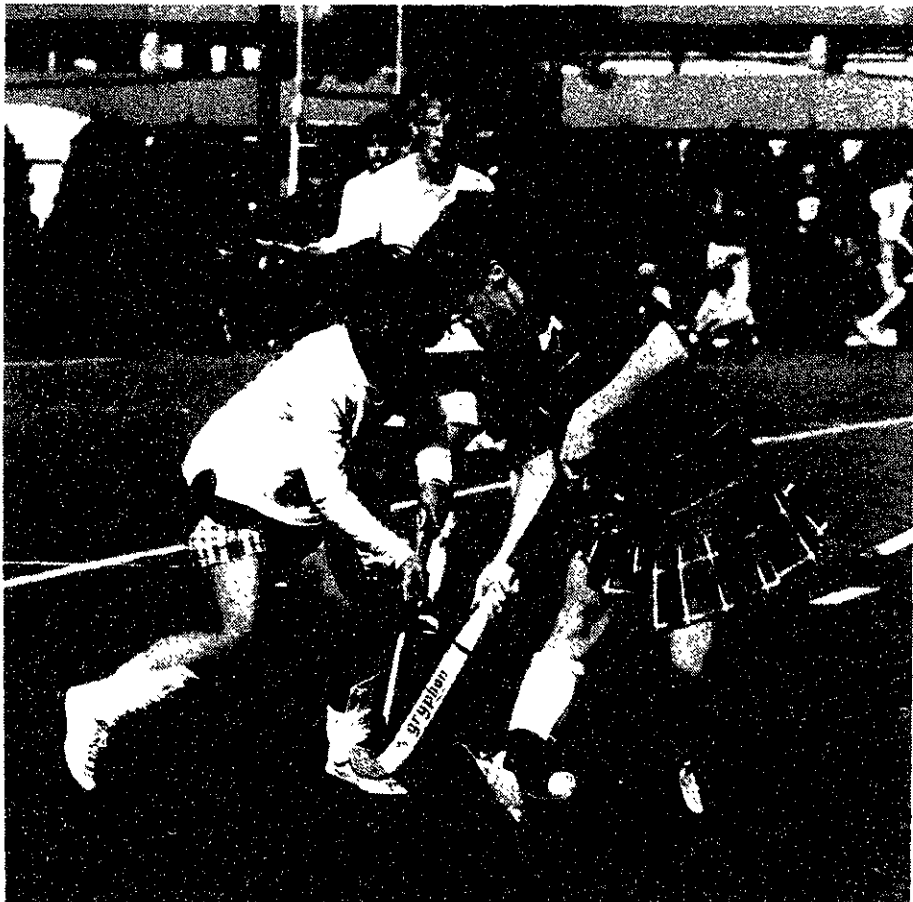
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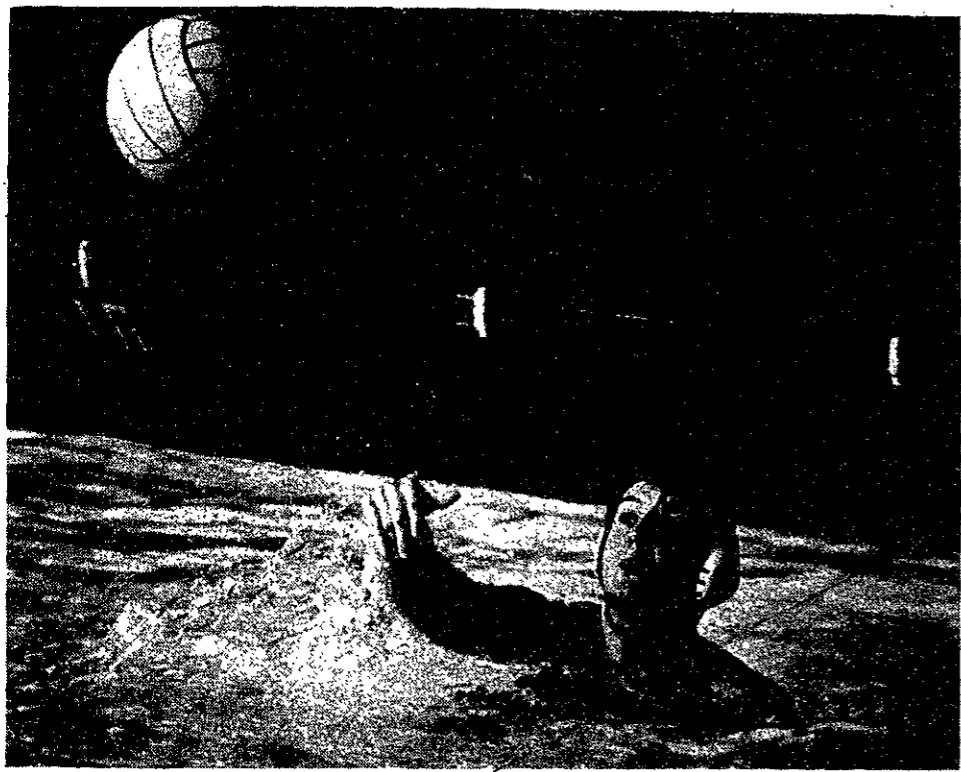
Michael Franklin



Kristine AuYeung



Ann Thu Vo

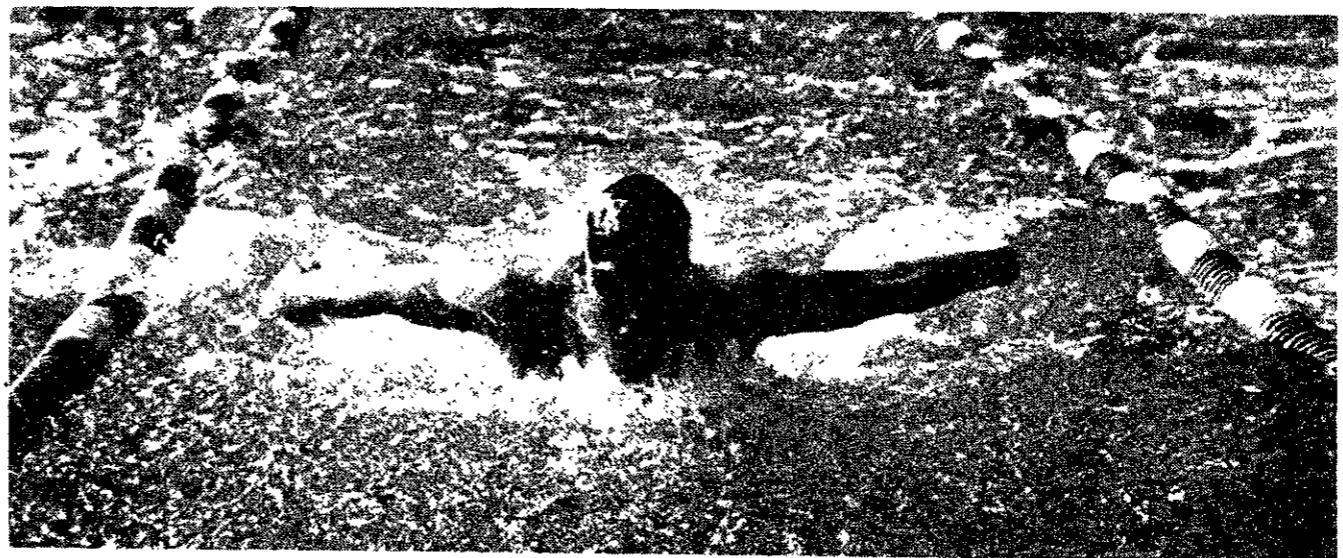


Michael Franklin

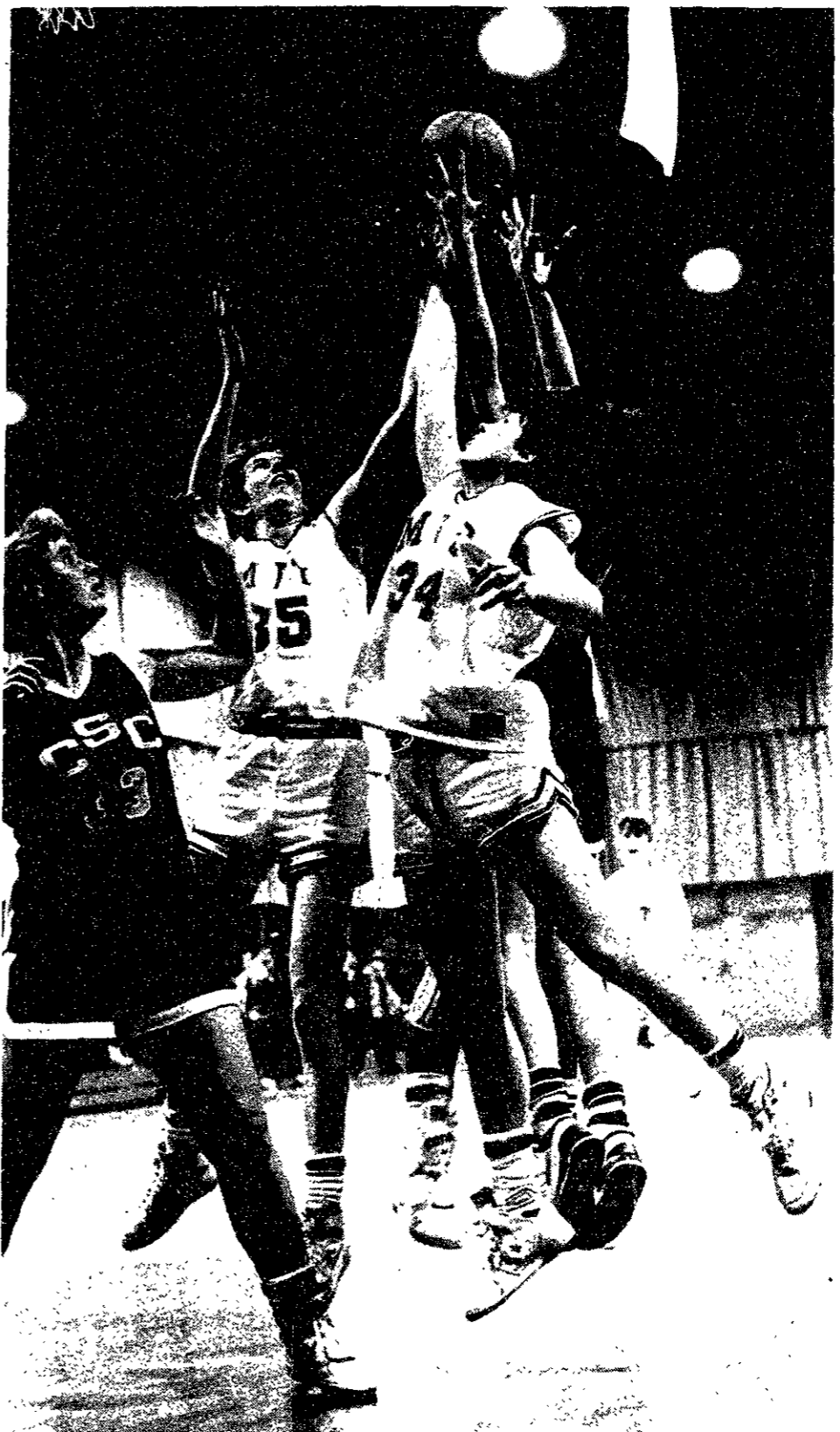


William Chu

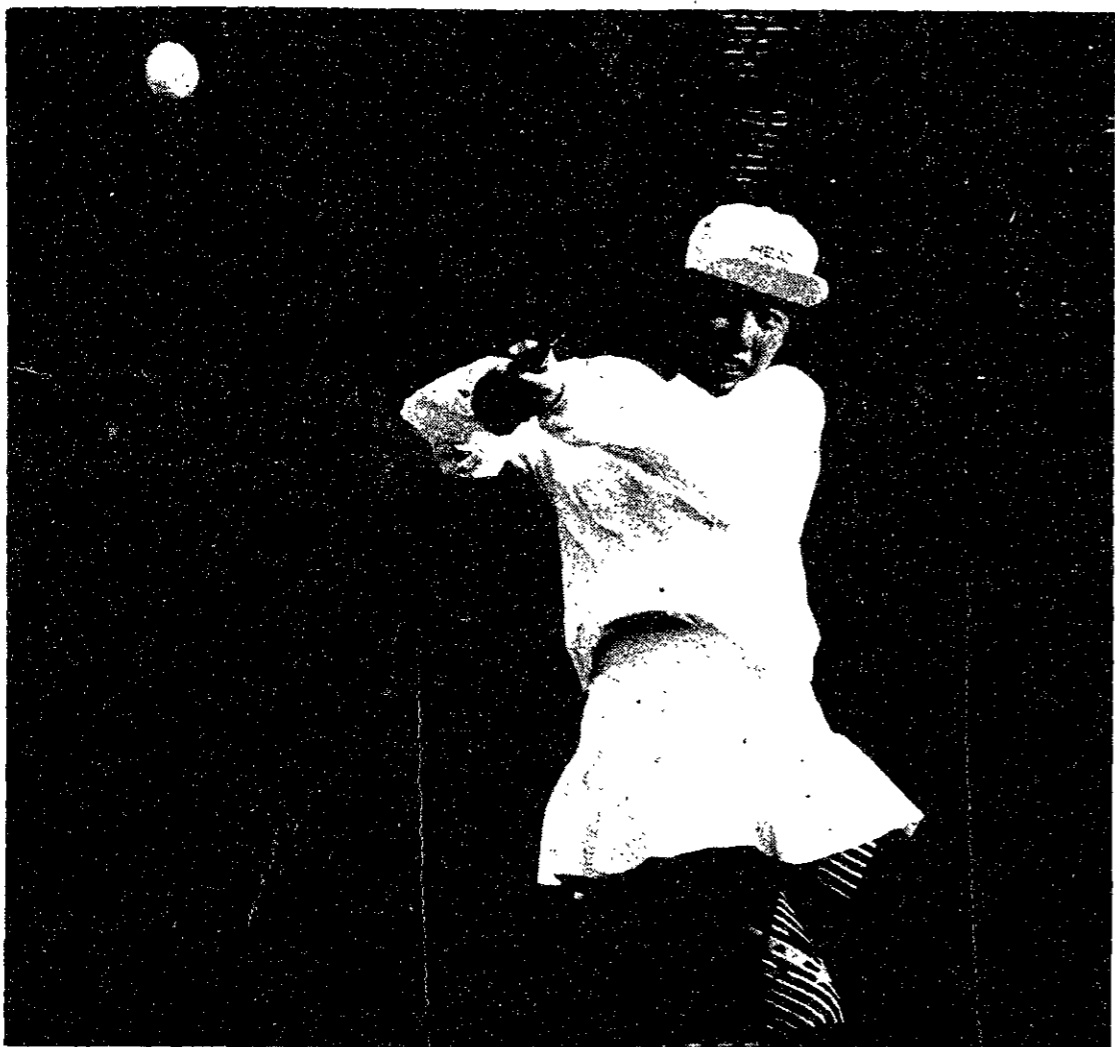
Sports



William Chu



William Chu



William Chu

The Year in Sports

Hoops most improved team in New England

(Continued from page 20)

tions to the program.

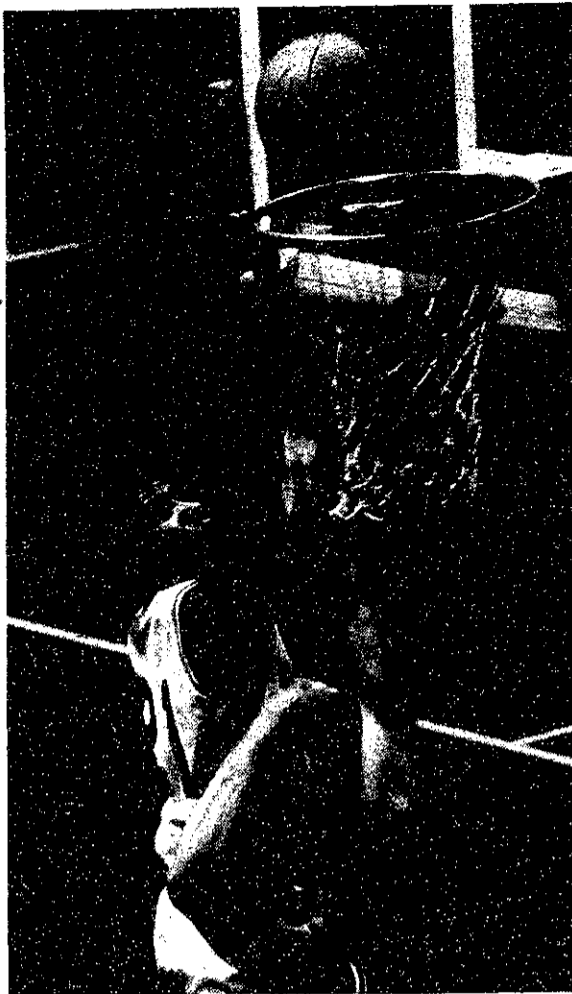
The team was also well-recorded in the National Collegiate Athletic Association statistical books. The defense held its opponents to a mere 42.6 percent shooting, in the top 20 in the nation. This led to the 13th fewest points allowed, only 63.3. The most impressive statistic, however, was MIT's +12.5 per game rebound margin, which put them fourth in the nation.

As for MIT records, Fraser scored his 1000th point on the year. The team set a school record for points in a game during a 112-61 bombing of Emerson. The win-loss record itself was only bettered by the 1965 team, which posted a 19-7 record.

The New England Basketball Coaches Association named the team as the most improved. The Associated Press and the United Press International named Osgood as New England Division III Coach of the Year, and the National Association of Basketball Coaches named him Coach of the Year. Only eight such accolades were awarded across the nation.

The season itself was highlighted by a late-season eight game winning streak. During the streak, it looked as though the only way the team could lose was when they wanted to. Unfortunately, just as the team was peaking, the season came to an end.

As the team failed to qualify for postseason play, its full potential was never realized.



Michael Franklin/The Tech
Team MVP Doug Cornwall '89

Volleyball wins NEW8, advances to nationals

(Continued from page 20)

to the Pioneers the year before. It was the Engineers' second NEW8 title since the conference's inception three years ago.

Along with the championship, MIT was honored by the selection of senior co-captain Cecilia Warpinski as NEW8 Volleyball Athlete of the Year and Karyn Altman '78 as Coach of the Year.

Warpinski was also named to the all-tournament teams in the Salem State and Eastern Connecticut University Invitational tournaments. Senior co-captain and setter Jenny Harris made the Eastern Connecticut all-tournament team as well, and later was named a GTE All-American, an award given for athletic and academic excellence.

Competition from other NEW8 teams was not extraordinary. Bates College, a school outside the conference, was the only team which gave MIT trouble throughout the

season, handing the Engineers three of their four regular-season losses. Aside from the NEW8 championship, perhaps the strongest indication of the team's caliber came in winning the Albany State tournament in late October.

Altman will have to count on a number of freshmen next fall and the continued improvement of this year's underclassmen if she expects her team to match MIT's success of the past few years, for the Engineers graduate five seniors in June.

Most sorely missed, perhaps, will be Warpinski, an excellent passer and outside hitter, and along with Harris, a spirited team leader. The loss of Harris will leave the team weak at the setting position, and experienced middle hitters like Debbie Nungester '90 are always hard to come by.

Tonya Parker '90 also departs after an effective season at the outside hitting spot.

Soccer team wins conference in upset

Basketball

The basketball team improved from a dismal three-win season in 1988 to a respectable 7-13 last year. Maureen Fahey '90 was the key to the turnaround, scoring an MIT single season record 386 points. Fahey, averaging 19.3 points per game overall, averaged 22.1 points per game within the conference to lead it, and 13.4 rebounds to finish second. Her overall rebound totals gave her a 25th ranking in the nation. Tough defense also contributed to the turnaround; The team allowed only 54.9 points per game, among the 20 lowest averages in the nation.

Crew

Crew posted an impressive 8-5 mark in dual meets, culminated by a fourth place finish in New England.

Laura Opsasnick '90 was the most lauded performer on the team. Her abilities led her to be one of 24 people in the nation selected to the National Development Camp, which is used as a preparation for the Olympics.



Cross Country

MIT also enjoyed a great deal of success in cross-country. In the New England Women's Eight Championships, the Engineers finished fourth overall. Theresa Fuentes '91 finished fifth and Chris Goh '92 finished sixth, and both were named NEW8 All-Stars. In the MAIAW Championships, Goh finished fifth and Fuentes sixth, with Gabrielle Rocap '92 coming in tenth.

Fencing

The fencing team qualified for the New England Regional Championships, with Alice Chang '90 and Laura Armstrong '90 qualifying for individual championships. Chang was also named first-team All-New-England, and Armstrong was MVP.



Field Hockey

Under new Head Coach Carol Martin, the field hockey team finished a strong 8-8-1 and won one tournament game before being eliminated. Susie Ward '92 was named All-Conference for her play, and Karlin Anderson '91, Kirsten Domingo '90, and Sandy Owen '91 were all selected to play on the New England Colleges team.

Gymnastics

Despite a 3-5 record on the season, the gymnastics team made their presence known in post-season tournaments. They finished second in the New England Championships, and then went on to finish fifth in the Eastern Collegiate Athletic Conference Division III championships.

Lisa Arel '92 was the lifeblood of the team. She won the all-around, balance beam, and uneven bars events at New England, while finishing second in the vault and third on the floor. At the National Collegiate Gymnastics Association Championships, she finished fourth all-around, third on the floor, and fifth in both the balance beam and uneven bars events.

Skiing

The ski team finished with a respectable 23-27 record for the season. Rebecca Emerson '89 won an award for lettering all four years while at MIT.

Soccer

The soccer team provided the most pleasant surprise of the season as they captured the NEW8 Championship, rising from the number seven seed to upset the top three teams in the conference. The team wound up 11-7 on the year, with all seven losses ironically coming within the conference.

All three victories in the championship were by 1-0 scores. The team had expected a quick exit against a potent Mount Holyoke squad which was ranked second in the conference. Riding high after the upset, the team ground out another winner against third-ranked Wellesley, and then upset defending champion and top-seeded Smith.

The team set school records for goals and wins. Lorainne Cirillo '90 was All-Conference and second-team All-New England. She scored the game winning goals against Mount Holyoke and Wellesley. Julie Ask '90 netted the winner against Smith.



Softball

Despite unimpressive numbers on paper, the softball team put up impressive numbers where it counted — on the scoreboard and in the record book. Tough pitching by Lynn Albers '92 and Lisa Johnson '92 "kept us in the game," said Head Coach Jean Heiney. She also commented that the team "played smart enough to win," and they did just that in posting a 9-6 record. Dianne Di-Massa G was named All-Conference.

Swimming

The record of the swim team was 5-4, but the real story was Yvonne Grierson '90. Grierson won the NCAA Division III championships in both the 100 butterfly (for the second consecutive year) and 100 freestyle. She now owns or shares an incredible 11 school records, and was a four-event All American. For these amazing efforts, she was named NECAC Division III Female Athlete of the Year.

The team finished a best-ever 16th at nationals.

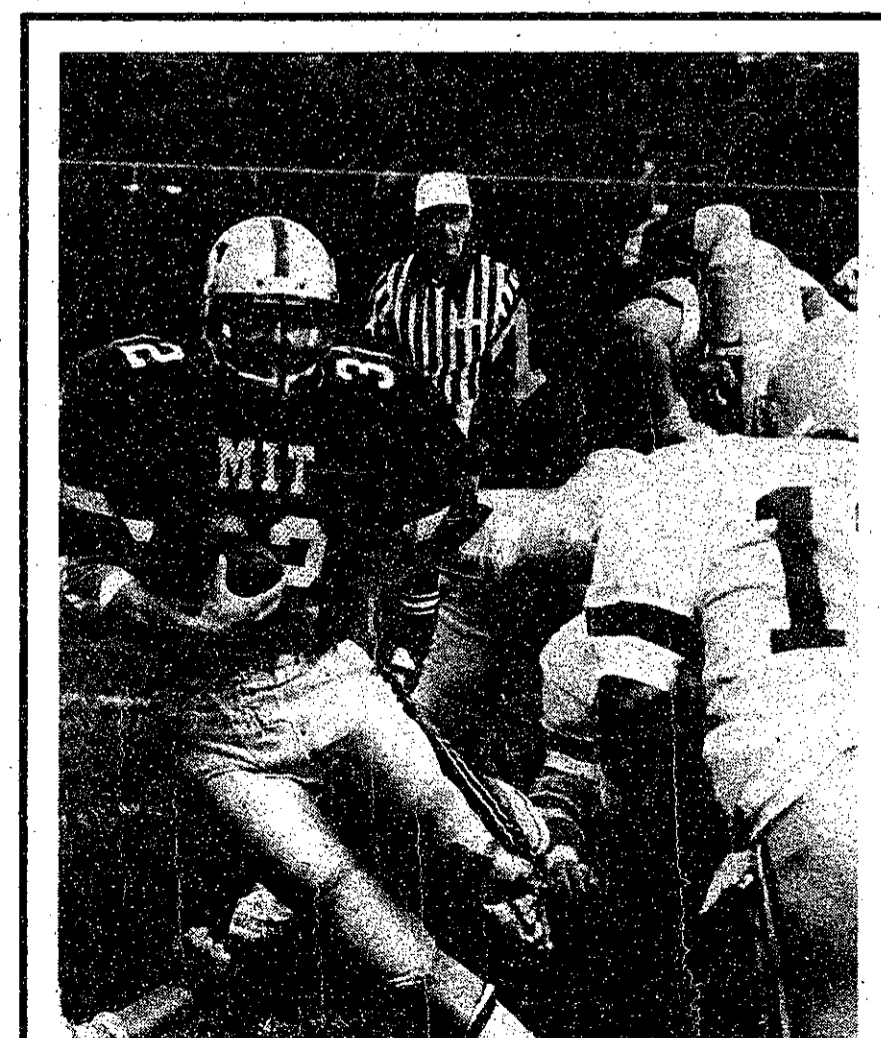


Tennis

In the spring, the tennis team concluded its season ranked 20th in Division III. Fiona Tan '91 ranked 47th individually.

In the fall, the team finished at 3-9, 2-5 in the conference. Dheera Ananthakrishnan '90 was named to the All-Conference team.

Compiled by Shawn Mastrian, with assistance from Stu Schmill and Roger Crosley of the Sports Information Office



William Chu/The Tech
Shane LaHousse '90 set new MIT records for points in a season and yards in a career during the '89 season.

The Year in Sports

Ski team wins NCAA Division II title

Baseball

For the first time in its history, the MIT baseball team qualified for post-season play, finishing with a record of 17-12. Though the Engineers did not advance in the tournament past the first round, the 17 wins marked a high in the 41-year history of the program.

Head Coach Fran O'Brien won his 200th career victory during the season. Catcher Tim Day '89, third baseman Mike Murray '90, and pitcher Fran Patterson '89 received the highest accolades. Day was the second leading hitter in Greater Boston League play, hitting .516, made second team All-New England, and was rated in the top 50 hitters in all of Division III with his .420 average. Murray was also named All-New England, making the third team, and Patterson had the third best ERA in all of Division III, allowing only six earned runs in 44 1/2 innings, while compiling a 5-1 record.

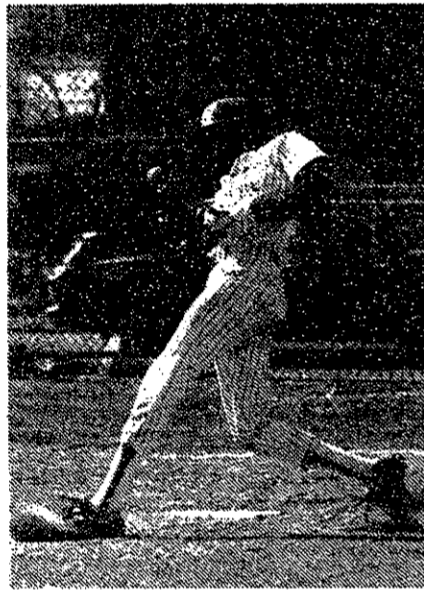


season play. Joe Sang G, T. K. Wong '89, and Joe Harrington G each won their events in the New England Intercollegiate Championships, competing in the sabre, foil, and epee. Their efforts helped MIT earn second place in the tournament.

Harrington went on to earn eighth place in the Intercollegiate Fencing Championships, where MIT finished 11th overall. Sang went on to take ninth place in the NCAA's, meriting him an All-America honorable mention.

Golf

Golf is played in both the spring and fall. The Engineers finished the spring season an impressive 11-4, winning the Engineers Cup to conclude the regular season. The team placed 18th in the New England Intercollegiate Golf Association Championships. The fall team finished 25th in the NEIGA Championships.



Crew

The crew teams, unfortunately, did not experience such good fortune. Both the heavyweight and lightweight crews had what could best be called a "rebuilding year."

The heavyweights opened with a strong pre-season, winning their Club 8 division going into the Head of the Charles. During the season, however, they compiled with a disappointing 0-9 record, though several of the losses were by just fractions of a second. Captain Chris Neils '89, MVP Jay Best '89, and Rick Franklin '89 all rounded out their careers as three-year letter winners.

The lightweights fared little better. They compiled a 4-6 record on the season, but all four victories were outside the league against weaker crews. Nonetheless, they were victories, giving the team hope for the future.

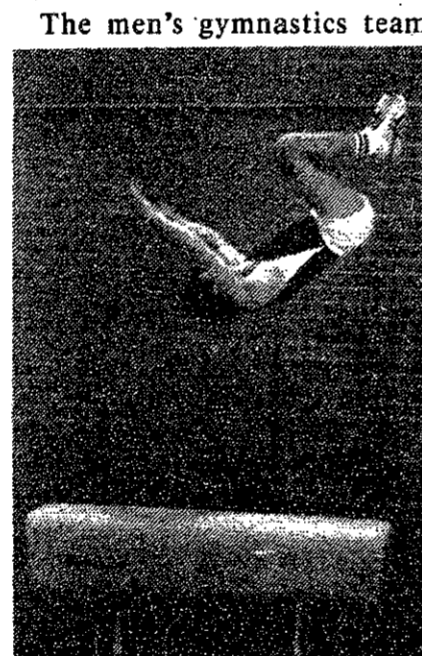
The best news for the crew teams came from outside the boathouse, as Jim Pierce, a 1981 graduate, made the US National Rowing Team.

Cross Country

The cross country team was ranked often in the top 10 in New England Division III throughout the season, so their 0-3 record belied their abilities. The team finished strongly in multi-school meets, often losing only to the Division I clubs.

Fencing

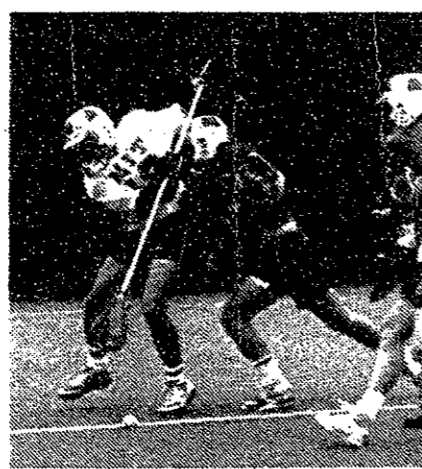
The fencing team was well lauded for their exploits in post-



The men's gymnastics team

was not able to test itself to the fullest, due to a funding problem. Their fourth place finish in New England qualified them for the Nationals in California, but a lack of money kept them home.

The team finished the season at 4-2, ranked sixth in all of Division III. Eric Reifschneider '89, Mark Malonson '89, and Alan Nash '89 all qualified for the Eastern Colleges Athletic Conference Championships. Reifschneider was the 1989 winner of the Kispert Award, given to the MIT male senior scholar-athlete of the year. He won an NCAA post-graduate scholarship for being an outstanding scholar-athlete as well.



Hockey

Being an undersize club, the hockey team had trouble against most of its foes. The team record was a disappointing 6-10. The high point of the season was an impressive 19-goal outburst at the end of the season against Gordon College.

Lacrosse

There was rarely a dull moment when watching the lacrosse team. The team set MIT records for scoring all season long as they compiled a 6-7 record (4-3 in the Pilgrim League). Dave Chang '89, a first-team All-League selection, set MIT records for points in a season (78), assists in a season (33), and assists in a career (81). Pat Nee '89 set an MIT career record for goals scored with 102. As a team, the Engineers broke a school record as they swished in 12.2 goals per game.

Chang finished tied for fifth in Division III for most points per game, and 11th in goals per game. Phil Kim '89 joined him as a first-team All-League selection.

Pistol

Pistol has consistently been one of the top teams at MIT, and this year was no exception. The team placed highly in all three events at the national level, and individual team members distinguished themselves quite well.

Eric Blau '91 was the most outstanding team member. He finished second in the air pistol, earning him All-American status, and fifth in free pistol, making him an Honorable Mention All-American in this event. His performance also earned him a spot on the US Junior National Air Pistol team.

The team itself finished second in air pistol (to Navy), third in free (to Air Force and Army), and seventh in standard. Ken DeCanio '90 and Fredric Chong '90 finished 23rd and 24th respectively in air pistol, while DeCanio finished 18th in standard pistol.

Rifle

Like the other shooting team, the rifle team also enjoyed a great deal of success. The team was 6-8 in air rifle, but finished an amazing 19-9 in the smallbore event. The highlight of the year came when the team won the Mid-Atlantic Conference Championships.

Sailing

This year marked the retirement of Head Coach Hatch Brown from the sailing team. His efforts led his team to be chosen Club of the Year by the Massachusetts Bay Yacht Racing Union. The award was both for the club's efforts on the Charles and in the community.

Skiing

The ski team turned out to be about as tough as one could possibly expect. The final match record for the team was 43-7, impressive in itself. What was even

more impressive was the way that they won the Eastern Intercollegiate Skiing Association Division II championships. Considering that the top Alpine skier fell on both his runs in the championships makes this feat quite remarkable.

Steven Bull '90, Terry Tote-meier '91, and Tim Sulzbach G were selected as All-East in the cross-country event, while Greg Montonaga '89 was named All-East Alpine skier.

Soccer

The soccer team finished the season an all-together average 6-7-3. Stephen Feldgoise '92 was the leading scorer for the second year in a row, while Michael Dorsch '90 was named MVP.

Squash

Despite an unimpressive-looking 11-14 record, the squash team was nonetheless potent. The team wound up ranked 17th in the nation. Alec Litowitz '89 was the team's top performer, becoming MIT's first All-American as he made the second team.

Swimming

The swim season was also one of the greater accomplishments in MIT sports this year. There were national championship qualifiers in five events and four All-Americans. The team finished sixth in New England Division III (the best performance in five years) and 14th in nationals.

Marcos Fernandes '90 was the top performer, earning two All-American awards and three Honorable Mention All-American honors as well. Fernandes finished third in the nation in the 100-yard backstroke and was a member of the seventh-place 200 medley relay team; he also took 11th-place in the 50-yard freestyle and participated in the 16th-place 200 free and 14th-place 400 free relay teams. Fernandes set several new MIT records; he now owns or shares seven.

Peter Neirinckx '90, Dinesh Lathi '92, and Andrew Knoedler '91 were also members of the All-American 200 medley relay team, as well as the Honorable Mention 200 and 400 free relay teams.

Men's volleyball ends at 23-11

(Continued from page 20)

was out on maternity leave the previous year and has passed up on coaching the 1990 squad after a second son arrived in November.

The 1989 Engineers finished a strong second in the early March EIVA Open Tournament, but did not do so well at the Concordia Classic and Navy Tournaments later in the season.

The regular season ended with a 3-2 loss to Springfield College, which put MIT's chances of qualifying for the NCAA playoffs in jeopardy. But Roger Williams College, the only other EIVA team to beat MIT, defeated Springfield, which allowed for MIT to advance to first-round NCAA competition.

Playing without Tang, a strong outside hitter who had broken his wrist, MIT faced East Stroudsburg University of Pennsylvania, against which MIT held a 1-2 record during the season.

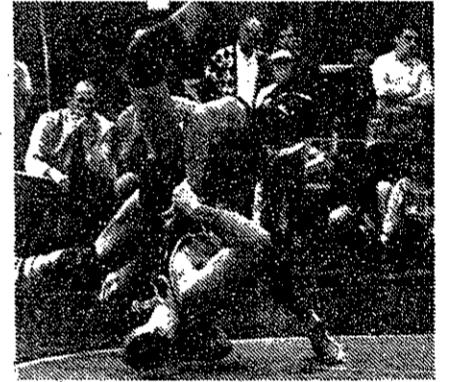
Neirinckx also received Honorable Mention All-American awards for his 13th-place finish in the 200-yard individual medley and his 16th-place finish in the 200-yard butterfly.

Tennis

The tennis team finished the season at 13-10, ranked 16th nationally. Kai-Yee Ho G was the top individual on the team, ranked 40th, and Ho and Brian Brown '89 were the top doubled tandem, ranking 23rd nationally. As a team, the Engineers qualified and went on to the NCAA Division III Championships.

Water Polo

Water polo was another sport experiencing a rebuilding year. The team, which finished at 6-15, took sixth place at the New England Championships.



Wrestling

The wrestling team tied a best-ever performance at the New England Wrestling Association Championship, finishing fifth and scoring an MIT best-ever 87.5 points. Five wrestlers turned in finishes in the top four.

Scott Schwartz '89 had the most impressive performance, culminating a 26-0 season with a victory in the 134-pound division, which sent him to nationals. Alec Franz '90 finished second in the 190-pound division, while Matt Long '91 took third at 150. Fourth place finishes were turned in by James Lombarda '90 at 167 and Josh Ertischek '91 at heavyweight.

Head Coach Tim Walsh won his 100th career match victory last year as well.

Compiled by Shawn Mastrian, with assistance from Stu Schmill and Roger Crosley of the Sports Information Office

The Year in Sports

Men spikers go to nationals

By David Rothstein

The men's volleyball season, marred by early and late injuries to key players, marked an end to the Marin Era. It also heralded a new beginning with the addition of five freshmen, who apparently will define the course the team follows for the next three years.

The team, which finished the season at 23-11 (6-2 in the Eastern Invitational Volleyball Association Conference), was under the command of Edwin Marin '89, a fine passer and outside hitter, and the squad captain. Marin had been a starter on the varsity since his sophomore year and was expected to lead an experienced team that included seniors Charles Lee, Joe Tang,

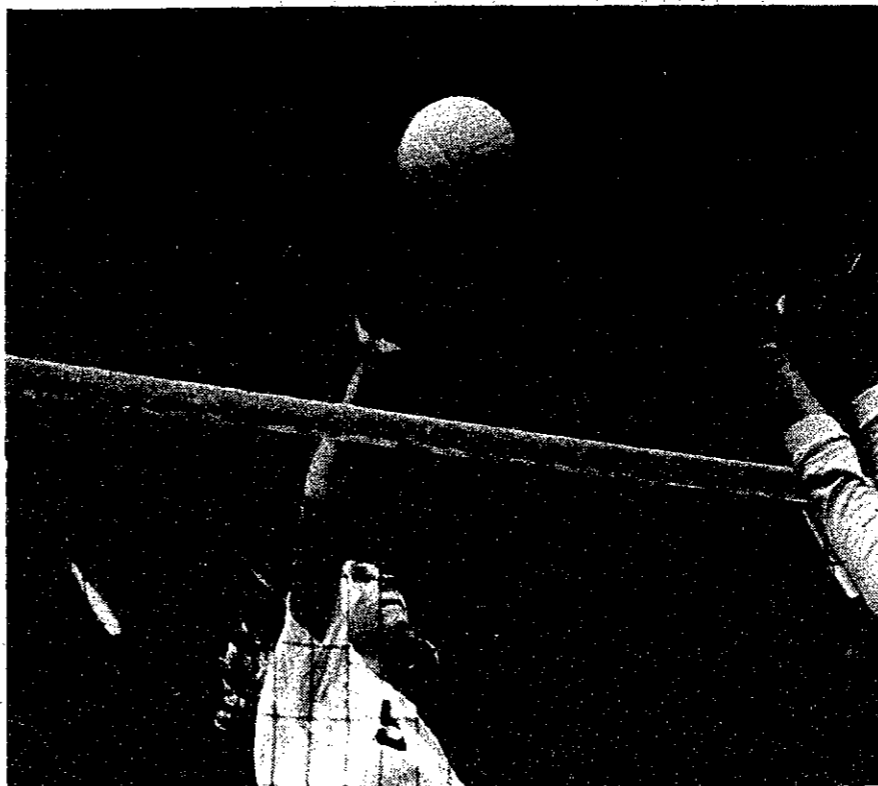
Allen Downey and junior Roland Rocafort.

But Marin went down with a serious ankle sprain just before the season began, and was unable to return to action until well into the season. It was a difficult setback for team and captain alike.

MIT embarked on a somewhat difficult schedule without Marin, playing with no great consistency. Against the better teams, MIT fared well, but lost to some weaker teams that perhaps it should have beaten, according to coach Karyn Altman '78.

Altman in fact spent what these days seems a rare season coaching the men's team, as she

(Please turn to page 19)



Tech file photo

Women go undefeated in conference

By David Rothstein

MIT once again reigned supreme in the New England Women's Eight Volleyball Conference, capturing the conference title and both athlete and coach of the year awards. The Engineers went on to their fifth appearance of the 1980s in the NCAA Division III playoffs, but lost to Calvin College in the first round of regional play in Ada, OH.

The Engineers were undefeated in NEW8 play (8-0) and posted a 25-5 record for the season. In the NEW8 conference final, MIT blew by Smith College in three games to regain the title, which it had lost

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Indoor extends streak

By David Rothstein

Winning ways continued for the track team in its outdoor season, as MIT destroyed its three regular-season opponents to extend its undefeated streak to 59.

The Engineers placed third at the Greater Boston Championships, and then went on to win the New England Division III Championships, setting new meet records for winning score (150 points) and winning margin (Brandeis University was second, with 69).

At the All-New England Championship, MIT placed seventh on the strength of junior Boniface Makatiani's first in the 400 meters and a fourth place earned by the 400-meter relay team of Dave Wright '89, Doug Cornwall '89, Mark Dunzo '91, and Makatiani.

Just as the spring term ended, MIT departed to compete in the NCAA Division III Championships, where it tied Loris College for fifth place.

Junior Bill Singhose scored 7206 points in the decathlon, which gave him the national

title and the MIT record, while Scott Deering '89 was third in the hammer throw.

Freshman Mike Piepergerdes placed fifth in the 1500 meters and Makatiani was sixth in the 400.

The 1600-meter relay team of Cornwall, Paul McKenzie '90, Dunzo and Makatiani rounded out MIT's point total with a second-place finish.

Singhose, Deering, Piepergerdes, and the relay team members were all awarded All-America honors for their performances. Makatiani and McKenzie also received honors for their individual performances. McKenzie's eighth-place finish in the intermediate hurdles did not score, but did set an MIT record of 52.95 seconds.

The season ended on a tragic note with the death of McKenzie on June 17. McKenzie, who had been selected as co-captain with Singhose of the 1989-90 indoor squad, was killed in a car accident in Mexico while on shore leave from a Navy base in San Diego.

Outdoor track still on top

By David Rothstein

These are the golden years for the MIT track and field team, and only injuries limited the performances of the 1988-89 indoor squad.

By season's end, MIT's undefeated streak in dual and triangular meets stood at 56. The Engineers placed higher than ever before in the Greater Boston Championships and the NCAA Division III Championships in addition to running away with the Eastern Coast Athletic Conference Championships in early March.

The only great disappointment came in failing to win the New England Division III Championships, something that MIT had accomplished for four consecutive years prior to this season. But the Engineers were missing leading scorer Bill Singhose '90 and sprinters Mark Dunzo '91 and Karim Roshd '89, all of whom were out with injuries.

The week after the New England Championships, buoyed by the return of Singhose and Dunzo, MIT racked up 140 points to win the ECAC title convincingly.

The teams MIT faced in regular-season dual and tri-meets — even Division I Holy Cross College and St. Lawrence University — were overwhelmed by Tech's strength on almost all fronts. So the Engineers' success remained to be measured at the championship meets.

At the GBCs, MIT lost Singhose to a hamstring pull and missed fourth place by only half a point. Still, it was a strong finish — paced by firsts by Dunzo (400 meters) and Scott Deering '89 (35-pound weight throw) — against tough Division I schools like Harvard and Northeastern.

At the national championships in mid-March, the Engineers gained an individual crown in Deering's first place 35-pound weight throw. Singhose placed third in the pole vault, and the 1600-meter relay team of Kevin Scannell '92, Paul McKenzie '90, Dunzo and Douglas Cornwall '89 earned a sixth place. These six earned All-America honors for their performances.

MIT finished in a tie for sixth place at the nationals, its highest finish in the five-year history of the meet.

Football rewrites record book

By Shawn Mastrian

Before the football season started, good things were predicted for the Beavers. Lineman Bob Kupbens '90 was a Division III pre-season All-American third team, and running back Shane LaHousse '90, wide receiver Tony Lapes '90, and linebacker Darcy Prather '91 were all honorable mention. These players and their teammates did not disappoint as the team rewrote the record book in their 4-3-1 season.

Playing in the newly formed Eastern College Football Conference, the Beavers announced that they would be a force, stomping conference rival Stonehill 45-13 in the season's opener. The game was more one-sided than the score would indicate, as MIT dominated both offensively and defensively.

Western New England was to be MIT's next victim. What started out as a see-saw contest resulted in the Beavers pulling away, and a last gasp effort by WNEC made the score respectable at 39-34 in favor of MIT. While the defense experienced a few problems, the offense was consistent, almost scoring at will. The Beavers were undefeated and riding high after the second week.

Then came UMass-Boston. The defense solved the problems of the previous game, but the offense went away from what worked best for it — punishing the opposition with LaHousse and Garret Moose '91 through the middle. The result was a 14-14 tie which left a bad taste in the mouths of all involved.

This left the team on a downward slope, facing an improved and sure-to-be-upset Stonehill squad the next week. The result was a 42-20 loss, the Engineers' first of the season.

A muddy field at Siena proved to be a cure for Tech's slide. The defense dominated the hapless Saints, and the offense found a way to score in the muck just once. It was all the Beavers needed to return to their winning ways, 6-0 MIT.

Homecoming is the Super Bowl of MIT's football season, and the 49ers, I mean the Beavers, kept the home fans and Vegas happy. Assumption came to town at the wrong time, and left with a little less dignity. MIT rolled up a school-record 56 points, and the defense yielded only a last-minute touchdown to the lifeless Broncos, I mean Greyhounds. 56-6, Beavers.

This meant that if MIT were to beat Bentley, they would win the inaugural conference title. MIT has historically had trouble with the Falcons, and this time proved no exception. Despite a heroic comeback effort, driving the ball 90 yards with about one minute left for a touchdown to put MIT within one, the Beavers fell as the two-point conversion attempt failed. 21-20 was the heartbreaking final score, two points away from the title.

The last game was at WPI, and given the circumstances, the team performed admirably. The final score of 35-10 was more respectable than it would look.

It was by no means a season of "it could have been" for the Beavers; it was a season of accomplishments. Quarterback Tim Day '89, Lapes, Kupbens, center Don Ewart '90, Moose, linebacker Rick Bullesbach '90, defensive tackle Mike Ahrens '90, and Prather were all selected as All-Conference performers, and that was just the tip of the iceberg.

Prather and Lapes were both Academic All-District selections as well as GTE CoSIDA Academic All-Americans, with Lapes making the first team and Prather the second.

Lapes also took the Woody Hayes Award, given to only one Division III male (encompassing every sport). This was the highest honor ever given to an MIT athlete. In addition, he was named a National Football Foundation and Hall of Fame Scholar-Athlete Award winner, one of 11 Division II and III students granted

the post-graduate scholarship which accompanies the award.

As records go, nobody set more than Day did this year. He set records for most touchdowns thrown in a season and a career, most passes completed in a season and career, and wound up as the ECFG's top-rated passer. He was named Conference Offensive Player of the Week once, and finished 24th among Division III quarterbacks in passing efficiency.

LaHousse set MIT records of his own, breaking the existing marks for points in a season, yards in a career, and tying the existing mark for points in a career. He was the conference's second leading rusher and leading scorer (points per game), finishing 27th in this category in the nation, and he was named Conference Offensive Player of the Week once.

Moose was the conference's third leading rusher, and Ahrens was named Conference Defensive Player of the Week once. Lapes finished as the conference's fourth-leading receiver.

Team high in tackles went to Prather, and he tied Fred Loh '92 for the team lead in interceptions. Ahrens led the team in sacks, followed by Prather and Larry Donahue '90, who lead the team in tackles for losses. Bullesbach defended against the most passes on the team, followed by Brian Teeple '91.

As a team, the Beavers set highs for average yards per game, total yards in a season, and points scored (210).

Cagers post successful season

By Shawn Mastrian

The 1989 men's basketball season was, in a word, amazing.

Head Coach Leo Osgood directed his troops to a 14-8 record, the best that MIT has seen in 20 years, and almost led the Engineers into the playoffs for the first time since the extinction of the dinosaurs. MIT was ninth in line for the eight playoff spots.

An offense with unlimited weapons and a tenacious defense were the keys to victory for the Engineers. Trae Shattuck '90 (14.3), Jay Fraser '89 (14.2), and Doug Cornwall '89 (13.5) all averaged in double

figures to lead the team in scoring. Mike Casagrande '89 provided a sure outside shot and team leadership, and Dave DellaGrote '90 handled the ball adeptly at point guard, adding his expert defensive skills at the other end of the court. Dave Tomlinson '91 provided a spark and extra scoring punch off the bench. Basically, the team had the chemistry to win.

Team MVP was given to Cornwall. Shattuck was the top rebounder. DellaGrote was given the best defense award and another for dedication and hustle. Casagrande won the Larry Grabin award for his contribu-

(Please turn to page 18)