Panel discusses funding for electronics, energy research

By John J. Ying

"Chemical companies only pay one approach. They are interested in doing one thing — selling compounds to kill pests. "It's all marketing and sales and not biology and ecology," said Professor Donald Dahlsten yesterday at a panel discussing the influence of funding on academic freedom and integrity of the university.

Dahlsten, professor of entomology at the University of California at Berkeley, stressed the influence of the chemical companies on pesticide research. Chemical companies only fund research that studies the beneficial aspects of potential chemical pesticides, he said, and no one supports research on the environmental and secondary effects of these compounds. "There is no way to know the other side of the coin."

"There are both pluses and minuses to industrial funding [of research], but there are more pluses" disagreed Henry Jacoby, professor of management and associate director of MIT's Energy Laboratory. He said corporate sponsors are not "fundamentally different" from other funding sources such as the federal government.

There are several types of research, Jacoby noted, and the more facilities intensive projects have to consider where money is available. "We can't write the checks. We have to consider where money is available. "We can't write the checks. We have to consider where money is available. "We can't write the checks. We have to consider where money is available.

"There are two types of compensation," said Jacoby. "One is the federal government and the other is industry. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors.

MIT's new Microsystems Laboratory for Very Large Scale Integration was cited by Adel as an example of positive industry influence. Half of the lab's $21 million capital costs for building renovation and equipment purchase and also half of the lab's annual $3 million operating costs will be borne by companies.

"We must give industry something in return for their contributions," but it won't be intellectual property. They will be buying a relationship," said Adel. Each company donating money to the lab will be able to participate in the Visiting Professionals Program, in which company employees will be able to work at MIT for a year under a professor.

The Semiconductor Research Corporation (SRC), a new group of high technology companies donating funds to university research, will donate an additional $1 million per year to the Microsystems Laboratory, said Adel, giving another example of positive corporate influence.

It astounds me that my colleagues seem to get money with no strings attached," Dahlsten marveled about the SRC. "Perhaps in their industries the atmosphere is quite different than in the chemical industry," Dahlsten said.

"For the moment, shortage of manpower and concern about foreign competition, sparked the creation of the Corporate Sponsored Adel. "I share the skepticism about how long industry's altruism will last."

"All of our research has a dual use," Adel said. "I, for one, don't want to relegate people to cool miles because of nuclear power problems. Not producing robots to solve this problem because someone may misuse them is a close call. Almost everything can be used for bad or good."

Federal draft aid rules change

By Sam Cable

The US Department of Education announced in March it will drop the requirement that men sign the draft in order for the draft provide copies of their registration documents to college officials.

The department will significantly revise measures for enforcing the Selective Service Act, which denies federal financial aid to draft registrants. The revisions will be in effect for at least two years, department officials said. No change in the financial aid will be required to sign a document indicating they have complied with draft registration laws, but college officials will not be required to verify the students' claims.

The change in requirements has not affected the positions most major schools in the Boston area have taken on giving financial aid to nonregistrants. Most officials interviewed said the changes will make administration of the law easier.

The new regulations will ease the job of the university, said Charles Davis, dean of financial aid at Northeastern University.

"As long as we don't have to be the policemen," he said. The changes will make the law "a lot easier to administer."

The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

"The federal government is applying pressure to MIT concerning the transfer of high technology to foreign citizens, according to Adel. He feels, also disagreeing with Dahlsten, the government presently is a much larger problem than corporate sponsors. Federal government money is available for research on what is important to the government. Industry money is available for research on what is important to the industry."

Asbestos hazard in dorms

By James F. Lise

Pipe smoke pollution is exposed in five of MIT's older dormitories, according to John Rutledge, assistant director of the House Office.

The protective covering on asbestos insulation which was torn out in several places, exposing the hazardous material in Baker House, Bentley Hall, East Campus, Random Hall, and Senior House.

The MIT Housing Office will cover exposed asbestos with plastic sleeves. Rutledge said. The sleeves are designed to eliminate the threat posed by direct exposure to asbestos, a material closely linked with several health disorders.

Rutledge expects the plastic sleeves to last for the lifetime of the buildings. None of the asbestos insulation will be removed. Rutledge said. However, if there are receiving attention already when residents complain, he said. Students' rooms in the five dormitories will be inspected and treated to cover exposed asbestos this summer.

Students who suspect asbestos is exposed in their rooms have been told to call campus police for help. The Classes of 1982 and 1983 had to undergo the cost of the damages, according to Kenneth R. Grant '84, president of MacGregor House.

"Both of the class presidents recommended that the drinking competition be discontinued," Grant said. "Most of the incoming groups said they did not want to be the last group to compete in the drinking off.

The Dean's Office sent letters to all living group social chairmen stating that alcohol should not be the central focus of any social event, said Glenn E. Eaton '83, MacGregor House social chairman.

"We were told all these horror stories about what happened in previous years," Grant commented.

"There were drunks running up and down Amherst Alley causing havoc.

The drinkoff would have been canceled this year. Sherwood said, but Grant and Eaton met with members of the Dean's Office to discuss the possibility of a drinkoff for the event.

MacGregor was selected as the site for a pub including the drinkoff, Grant said. "We're going to open a pub on April 21," he said. The drinkoff will be part of the activities, but it will also include nonalcoholic beverages, food, and live entertainment.

Each class, in previous years, had turned a leg of beer before moving on to the next location, Grant explained. The first class to empty the kegs at any of our locations won the drinkoff.
Applitek is leading the way in local area network technology. Our product is based on an innovative, proprietary technique that could revolutionize the computer and communications industries.

We're looking for exceptional people who want the challenge offered by a start-up company at the forefront of technology. Through participation in meaningful projects, you will experience real personal growth and job satisfaction. Those individuals who are committed to the entrepreneurial spirit will find our "Fortune" worth looking into.

We are offering exciting opportunities for self-starters with an MS or BS in Computer Science or Electrical Engineering. Dealing with an up and coming data communications technology, you will be involved with projects that combine the excitement of R&D with real world product development experience in such areas as:

- Network Systems Software
- Data Communications Application Software
- RF Communication Systems (Analog)

Applitek encourages an open exchange of ideas in an environment that strives for technological innovation. We are well funded by major venture capital companies and our management team has had successful careers with leaders in the industry. We offer competitive salaries and a complete benefits package including a stock options plan.

ON CAMPUS INTERVIEWS will be held Tuesday, April 12th from 10am - 5pm.

Applitek

5 Corporate Place, 107 Audubon Road, Wakefield, MA 01880

An Equal Opportunity Employer
Coop will remain closed on Sundays

By Ellen L. Spero

Harvard Cooperative Society stores will not open on Sundays "just because the blue laws are over," according to James A. Argeros, general manager of the Coop. "We will open when it serves a purpose for the Coop to do so," Argeros said.

To meet the needs of the MIT community, the Tech Coop might open on Sundays during "important" times, such as the beginning of the academic term and commencement, Argeros continued, a policy similar to the Coop's current practice of extending its hours at the start of the term.

The Coop plans to open its Harvard Square store Sunday, April 17 from noon to 5:45pm on a one-time trial basis, according to Argeros. The Sunday opening would coincide with a special Patriots' Day weekend celebration for which most other Harvard Square merchants will also open on Sunday for the first time, Argeros said.

The response to the April 17 opening will determine whether the Coop will continue opening on Sundays, Argeros said.

Stores along Massachusetts Avenue and in Central Square have reacted differently to the repeal of the blue laws. Purity Supreme, Radio Shack and Hit or Miss have been open Sundays since March 27 when the repeal took effect. Other stores near MIT, including Banes Furniture World and the Bicycle Workshop, plan to open Sundays, but are unsure when they will begin.

A few stores do not plan to open, but several echoed the sentiments of Max Naggar, owner of the Cambridge Trading Company in Central Square, who said, "If everybody opens, we will have to. But right now we have no plans to do so."

World

European leaders react to Gromyko rejection of Reagan arms plan — Soviet Foreign Minister Andrei A. Gromyko's rejection of the United States' proposal to limit medium-range missiles is not likely to be the Soviets' last word, Western European leaders told officials in Washington this week. NATO governments had encouraged Reagan's proposal to limit American missile placement in Europe in return for Soviet reductions in Europe and Asia. West German Chancellor Helmut Kohl said he would deploy the missiles in his country in the fall if proposed Geneva arms talks fail to produce results.

Jordan and the PLO postpone negotiations with Israel — Yasser Arafat, chairman of the Palestine Liberation Organization, and Jordan's King Hussein were unable Sunday to agree to hold a summit with Israel based on President Ronald Reagan's call for peace in the middle east. Reagan's plan calls for a self-governing Palestinian group in the West Bank, but not an independent Palestinian state. Arafat scheduled a new Arab summit where "everything will be discussed," despite Hussein's attempts to convince Arafat that Reagan's plan may be the last chance to negotiate for a return of the West Bank and the Gaza Strip.

Nation

Railroad car spills acid, forcing 2000 to evacuate Denver — A railroad car loaded with nitric acid ruptured in a northwest Denver rail yard Sunday, injuring 16 persons and forcing 2000 to leave their homes. At least 18,000 gallons of acid spilled from the car when it was pierced by the coupling from another car, according to Miles Stocum of the Office of Emergency Preparedness.

Second operational Space Shuttle launched — NASA launched its newest Space Shuttle, Challenger, at 1:16pm yesterday, to begin a five-day mission. Its four-man crew will deploy a communications satellite, and two astronauts will make a three-and-one-half hour spacewalk. The launch was successful despite high winds at high altitudes which could have thrown Challenger off course.

Weather

Sunshine turning to clouds and rain — Sunny today with highs between 52 and 56 degrees. Clouds will appear late this afternoon and tonight. Showers becoming likely tomorrow, with temperatures in the 40s.
Editorial

Exorbitant tuition hikes unjustified

The MIT Corporation last month approved the 10.3 percent increase in tuition recommended by President Paul E. Gray ’54 and the Academic Council. Undergraduate housing costs also increased by an average of 9.9 percent, and food service contracts will cost 8.7 percent more next year. The estimated total undergraduate tuition budget of $14,900 for 1983-84, largely for calculating financial aid, represents an increase of 9.6 percent over this year.

The US Consumer Price Index, which measures inflation in the cost of a selection of goods, rose by 4.6 percent in the 1982 calendar year. MIT tuition has, in fact, increased at a greater rate than the index every year since 1977. This year’s increases seem mild only when compared with those of the last three years. The most devastating jump was that announced in 1981; a 19.4 percent increase in tuition and a 17.2 percent increase in student budget, compared to a 13.5 percent increase in the price index.

The exorbitant annual increase, although expected, is not unjustified. MIT should not need to increase its tuition by more than the increase in the cost of providing education, food, and housing. The MIT administration’s excuses for fee hikes in excess of inflation have been varied and convincing: cutbacks in federal financial aid requiring MIT to draw support for needy students from other sources, and competition for talented young faculty members prompting MIT to find money for higher salaries.

Such compelling arguments merely hide the Institute’s compulsion to increase tuition. As the editorials in The Tech (March 29), we have decided to voice our discontent. The arguments of the test-ban proponents were well intentioned, but nevertheless naive. One remark by Dr. Caldicott so incensed us that we felt obliged to comment:

‘Very few Americans use their votes... Voting should be compulsory,’ said Dr. Helen Caldicott, national president of Physicians for Social Responsibility. Since ‘nothing moves a politician more than his own personal career,’ people have tremendous power to influence their leaders to pass the test ban treaty, she noted” in The Tech article.

How can Dr. Caldicott justify mandatory voting? Perhaps she would like mandatory voting for a mandatory candidate — the Soviet Union has a “democracy” much like that. Many citizens in our country choose not to vote. However those that do take the time to vote must be concerned about the issues. Since they are concerned about the issues, they must be informed about the issues. A concerned and informed vote is much more valuable than the vote of an apathetic and uninformed individual who was forced to cast his vote. Forcing uninformed individuals to vote would only be detrimental to the voting process.

The key here is that voting in a democracy is a right and a privilege. Of course it is also a responsibility, but if a citizen chooses not to exercise his right to vote, that is his prerogative. It is not the government’s place to force him to do otherwise.

Fred Johnson ’86
and two others
Warns of Soviet film influence

To the Editor:
Steven Kroft describes communi-

nist infiltration of pornography, and (on less solid ground) of Heaven [Feedback, March 18]. I should like to contribute my own findings on the attempted Soviet takeover of the United States.

Soviet influence in X-rated movies is well documented, but lesser known is what is done on the opposite end of the spectrum: G-rated movies. I was appalled by the MIT Lecture Series Com-
mitee's showing of "Bambi," which has scenes which would make Mister Rogers recoil in horror. The brutal slaying of an in-

nocent deer is a Soviet design to turn the viewer to anti-NRA and pro-environment politics. With

this film, the Russians have made the G-rating as pornographic as the G in G-spot. Indeed, this film may have had a substantial influ-

ence on the communist New York anti-nuclear demonstration.

My source (Deep Throat) in Washington tells me of Soviet at-
ttempts to make inroads into President Reagan's brain. The ef-

fort has created different effects than desired, actually damaging more of the President's brain cells than turning them into commu-
nist cells. Reagan's recent speech to evangelicals, where he tells

them to press an anti-nuclear freeze platform, illustrates this ef-
f.

To combat the possible emer-
genesis of "Dense Pack Churches" or "The First Church of the MX," Soviet infiltration of pornography, anti-nuclear demonstra-

tions, and anti-communist statements are possible. In particular, statements such as "The whales are taking

over New Bedford and raping women. Let's eradicate them," or "El Salvador out of the US" are possibilities.

Once President Reagan reaches this point, the country will be fin-

ished. MIT, with its superior re-

search capabilities, should look for a solution before it's too late.

Eric Schneider G

QUALITY DENTISTRY... JUST DOWN THE STREET
Malcolm L Dana, D.D.S.
Richard H. Dana, D.D.S.
Susan H. Robotham, D.D.S.

University Typewriter Co., Inc.
Repairs - Sales - Rentals
Electronic, Electric, and Manual Typewriters
Olivetti - Brother - Hermes
Olympia Silver Smith Corona
Quality Ribbons
547-2720
547-1298

AROUND THE WORLD STUDY
Kyoto, Bali, Singapore, Benares,
Nairobi, Cairo, Jerusalem, London.

INFORMATIONAL MEETING
30 university students, drawn from across the United States, will circle the world Sept. '83 - March '84 living and studying in the above locations. Accompanied by internationally known senior professors, the selected students will carry a full course load as they explore how societies represent and interpret themselves to themselves and outsiders.

An exceptional opportunity to study around the world for a full academic year, the International Hon-

ors Program Seek marks mature, motivated candidates who have achieved academically. Interested students are in-

vited to send a resume and/or a representative of the program on

Thursday, April 7, at 4 pm, in Room 3-153.

Further information may be obtained by contacting the program directly.

THE INTERNATIONAL HONORS PROGRAM
Suite 307-96
1430 Massachusetts Avenue
Cambridge, MA 02138

反馈

 Warns of Soviet film influence

The International Students' Association and other participating clubs would like to extend an invitation to the MIT community to come and take part in our 2nd annual International Fair, this Friday, the 8th, and on around the Kresge Oval.

What makes an International Fair an event not to be missed? Well, last year, participating groups, such as the ISA, CSC, Carrihgh Students Club, and Sangam provided music, dance, food, and conversation from their respective countries or cultures. This made the fair both colorful and interesting. The universal language of fun and laughter made it enjoyable.

For lots of fun, and as an interesting way to spend an afternoon, join us, this Friday, in celebration of an International Community that boasts members from many different nations, including, don't forget, the United States!

UNIX* and C Programmers
Make sweeping events in telecommunications work to your advantage.

You've seen the news. We're building on a rich tech-
nological base, and are competing in new business areas. As a result, we're seeking experienced software people who can support new network services and entities.

Immediate Openings
Specifically, we're staffing two pro-

gram areas:

Applications
If you can show us at least 2 years of applications programming experience using C language and UNIX* operating system, we can show you a remarkable showcase for your career. Have a back-
ground in systems analysis/design and systems testing? So much the better.

Systems
We're looking for UNIX* systems programmers to provide support for operations support systems. We offer the opportunity to work with state-of-the-art Bell Systems processors (EX-25, intelligent data base machines, and Ethernets). Strong C background is required. UNIX* internals and data com-

munications background desired.

Let us tell you more.
To investigate your future at our facility in New Jersey, send your resume, including salary history, and preferably including a career anticipa-
tions... To: Management Recruiter, Dept. M7-1, AT&T Long Lines, Room 5A267, Bedminster, NJ 07921.

An equal opportunity employer.
Random record roundup

The Man From Utopia, Frank Zappa on Barking Pumpkin Records:

Frank Zappa's 35th — that's right, 35th — album finds him sinking deeper into the morass of scatology and bad taste he's been creating since the dissolution of the Mothers of Invention. His once scathing social commentary has been supplanted by his desire to rub our noses in our own cultural reflex, with less than satisfactory results.

When Zappa amuses it's because his targets are more curiously. The Disco Boy, the Danziger Fool, and the Valley Girl were the subjects of jokes long before Zappa joined in the decision. When he tackles larger issues, however, Zappa falls flat on his face, as is evidenced by The Man From Utopia, a duly rotten collection of half-baked ideas and weak instruments.

As is the case with other Zappa albums, Utopia incorporates one new idea and works it to death; in this case the idea is the guitar-voice duet in both "The Dangerous Kitchen" and "The Jazz Discharge Party Plan." Both tracks are based on live performances in which Zappa sings lyrics to a simple accompaniment. Guitarist Steve Vai transcribed Zappa's singing and reproduced the melody note for note in the studio, where the tracks were combined to produce the duet. The resulting sounds, at times suggestive of George Benson on acid, are the only truly humorous moments on the album, amusing despite the ridiculous lyrics.

Elsewhere in Utopia we find Zappa discounting cocaine abuse ("Cocaine Decisions"), bad science fiction movies ("The Radio Is Broken"), labor unions ("Stick Together"), and sex ("Sex") with his usual misanthropic cynicism, taking swipes we've all heard before at easy targets. The three short instrumentals provide little relief, serving only to remind us of the paucity of Zappa's compositional ideas.

I feel obliged to mention, even at the risk of being accused of nitpicking, how little music — less than 37 minutes — there is on The Man From Utopia or any other Zappa release since 1977. I know he's out to make a buck, but he also decries record industry tactics. Heaven knows there's enough Zappa material in the vaults to make another 35 records, so why is he spreading it so thin? Why doesn't he just shut up and play his guitar? For the answers to these and more questions, wait for the next Zappa manifesto, The Man Who Sold the World.

Beats Surrender, the Jam on Polydor Records:

"Understand kiddiwinks, that there are times, undoubtedly, when it's a kick to be alive ..." Thus spake Paul Weller, guiding light of the Jam, in the notes for his band's final single. After one listen you'll understand that the Jam had a real kick recording this EP, a double single. "Beats Surrender" is in the running for the best song the band ever made, and "Shopping" is their second best B side (after "Dreams of Children"). What makes this EP such a delight, however, is the second side's trio of rhythm and blues classics, a set of lovingly rendered homages to the Jam's influences.


"It's always sad when a band dissolves at its creative peak, but the Jam have provided us with a fitting farewell, and a reminder: "It's only when coffee and milk are mixed do they both become delicious under the banner of the best surrender brothers and sisters, it's then you make your mind up.""
Baltimore on genetic research
Future possibilities and ethical questions remain

By Tony Zambardi
David Baltimore '61 is American Cancer Society professor of microbiology and director of the Whitehead Institute for Biomedical Research. We received the 1975 Nobel Prize in medicine for his work in microbiology. Baltimore will give a lecture entitled "Will Successful Molecular Biology?" tonight at 8:00 in the Tech photos by Robert Winters.

Q: If in 1974 you were one of the first people to call for guidelines on recombinant DNA research, could you have ever imagined that in 1983 we would be in the midst of a national political controversy over the use of recombinant DNA technology?
A: No, that's why I asked you what you meant by it.

Q: What about genetic research on humans?
A: That's why I asked you what you meant by it.

Q: Should there be limitations on the scope of genetic research?
A: What do you mean by that?

Q: What areas should not be researched? One extreme example would be military applications.
A: That's why I asked you what you meant by it.

Q: What does it mean for research to be voluntary?
A: What do you mean by that?

Q: Is it appropriate to do research on heredity in a country that requires everyone to have identification cards?
A: That's why I asked you what you meant by it.

Q: In 1974 you were one of the first people to call for guidelines on recombinant DNA research. Why do we need guidelines now?
A: That's why I asked you what you meant by it.

Q: Should there be limits on the scope of genetic research today? What are some of the problems that have arisen?
A: That's why I asked you what you meant by it.

Q: Should the NIH committee provide guidelines to the whole scientific community as well as to the laboratories?
A: That's why I asked you what you meant by it.

Q: Are there instances where a professor is working on a similar problem both at his university and as a consultant, and he reports the results as a consultant he would get patent licensing?
A: Again, I suspect that's a possibility. On the other hand, if he works at a non-university research corporation, it would be gross deceit to seek to take out a patent at a corporation. Secondly, at least around here, all of the work that we do involves graduate students and postdocs, so there is no way I could go and take out a patent on some experiment that they did through a company I was involved in. I don't think that's a virtual impossibility. They would have my head if I tried to do that. And, as I say, that is just plain illegal. You could, I suppose, posit totally illegal scenarios.

TUESDAY, APRIL 5, 1983 The Tech PAGE 7
Baltimore discusses genetic research: Commercial success is still elusive

(Continued from page 7)

Q: Do many professors consider leaving academia, as did Walter Gilbert, to join a company?
A: A fair number of professors have been thinking about that.

Q: Is it more problem at smaller schools more than ones like MIT?
A: Well, Harvard is not such a small school, And I know two or three people who did it at Harvard. No, I don't really think it is a problem of small schools or large schools.

I think we see a number of people going from academia into industry when their tenure decision comes up. A number of people from Harvard, for instance, have recently not gotten tenure and have gone into industry. There has been nobody in the biology department faculty at MIT who's left to go to industry.

Q: In some industry agreements to support university research — such as W.R. Grace's agreement with MIT — companies have a prior restraint on review of research, in other cases exclusive patents or license agreements. Do these provisions infringe on academic freedom?
A: I wouldn't say that any prior restraint is an inhibition of academic freedom, and even if it is a matter of 15 days, it certainly crimps your style. In setting up instruments we have been very careful to minimize any such interference.

Q: A lot of attention has been given to government requests for prior review for national security reasons of research in certain areas. These have been termed threats to academic freedom, but similar requests by industry have not received the same scrutiny, the same attention. Why is there this difference?

... biotechnology has an enormous future because of its tremendous adaptability, the tremendous range of applications of biological systems to commercial problems.

A: I don't know. In my mind, any prior restraint is an infringement and should be looked at very, very carefully. Part of the reason why one has received more attention than the other is the implications are quite different. The reason for prior review, from a national security point of view, is the possibility of classifying research so it could not be published. The review for patentability is for an absolute finite time, and they say, "give us n days and either we'll file or we won't file [for a patent], but we're not going to ask you to rewrite your manuscript or to hold anything secret."

Q: In recent months, there's been a lot of discussion about biotechnology companies — several have failed. Has that been a problem?

... what the field has been overwhelmed by the amount of naive enthusiasm, the naivete at this point. But naive enthusiasm carried molecular biology a very long way and so it is our style. I think what we are seeing are the results of a fair amount of naivete at this point.

Q: How is one company you are involved in, Collaborative Research, faring?
A: Collaborative Research is doing quite well. It went public and the stock price is holding up.
The image contains a comic strip titled "Neonews". Due to the nature of the comic, it includes visual elements and text that are not fully visible in the text-only format. The comic strip appears to involve characters and dialogue, but specific details are not clear from the image provided. For accurate transcription, a closer view of the comic strip or additional context would be necessary.
Softball takes home opener

(Continued from page 12)

The 2-0 lead held, compliments of Robinson's work on the mound and some big plays in the field by a flawless Engineer defense. In the fourth, Kelly speared a drive destined for right field by a flawless Engineer defense. In the fourth, Kelly speared a drive destined for right field, getting the runner by two steps. Robinson did her part by keeping the Bates hitters off-balance and behind in the count. Although she wasn't as overpowering as in Wednesday's game against Coast Guard, the Los Angeles native forced the Bobcats to hit easy grounders and lazy fly balls.

MIT cruised along until two were out in the top of the seventh inning. The visitors sent a pinch hitter to the plate, and Robinson, in her only real mistake of the game, hit her on the first pitch. The next batter hit a soft fly that Raymond could not get to. The ball skipped by the Tech rightfielder for a triple, scoring one run and putting the potential tying tally on third. Bates' next hitter rolled a grounder up the middle, but Chen, in a fine play, went to her right and made the throw to first for the final out.

Extra innings: In two games, Jandura leads the team in hitting with a .571 average. Anderson is second at .571. ... Robinson had a 13-inning scoreless streak broken with Bates' run in the seventh. She has a sterling 0.50 ERA in the first two games of '83. She has given up just seven hits, and has 11 strikeouts. Last year, Robinson was 10-4, with a 1.52 ERA, and was named to the New England Intercollegiate Softball Association Division III All-Star Team... Saturday's win over Bates was MIT's first ever. Last year, the Bobcats won 10-4... The NCAA News has predicted MIT to be one of the top Division III teams in the East... MIT takes on Clark in Worcester tomorrow and plays a doubleheader with Wheaton on Briggs Field Saturday.

Humansities Open House

April 6, 1983
2:00 - 4:00
Bush Room 10-105

Information about HUM-D subjects
Humanities subjects
Concentrations
Major Programs.

Refreshments will be served.

Zilch.

If you're a senior and have the promise of a $10,000 career-oriented job, do you know what's stopping you from getting the American Express Card?
You guessed it.
Nothing.
Because American Express believes in your future. But more than that. We believe in you now. And we're proving it. A $10,000 job promise. That's it. No strings. No gimmicks. And this offer is even good for 12 months after you graduate.
But why do you need the American Express Card now?
First of all, it's a good way to begin to establish your credit history. And you know that's important.
Of course, the Card is also good for travel, restaurants, and shopping for things like a new stereo or furniture. And because the Card is recognized and welcomed worldwide, so are you.
So call for a Special Student Application or look for one at your college bookstore or on campus bulletin boards.
The American Express Card. Don't leave school without it.
Call today for an application: 800-528-8000.
The squad will be looking for its dropped its home opener 6-4 to a home run and a triple, were not stop Dale Rothman '84, including Track--The team will have plenty of opportunities to raise its record, with afternoon home meets Wednesday (vs. Bowdoin), Thursday at 3pm against Holy Cross. These games will give the squad large doses of experience, which is an ingredient that has been surely lacking.

The Engineers go after their first win today (they are now 0-2 after a season-opening defeat against Tufts) at Westfield State and play at home Thursday at 7pm against Holy Cross. These games will give the squad large doses of experience, which is an ingredient that has been surely lacking.

Baseball -- Three hits by shortstop Dale Rothman '84, including a home run and a triple, were not enough, as the baseball team dropped its home opener 6-4 to Bowdoin Saturday afternoon. The squad will be looking for its first win today when it hosts the Harvard Crimson at 3pm on Briggs Field.

Rifle -- Cliff Eskey '85 placed 11th in the small bore competition at last weekend's national collegiate rifle championships.

Tennis -- The men's tennis team upset Harvard's record to 5-1 with a 5-4 win at Wesleyan Saturday. Ramy Rizk '86, captain George Hoehn '83, and Chiwon Hahn '83 all took their singles matches, while Chen and Rob Craig '86 followed Hoehn and Will Sauer '85 in chalkling up doubles victories. The team will have plenty of opportunities to raise its record, with afternoon home meets Wednesday (vs. Bowdoin), Thursday (vs. Amherst), Friday (vs. Colby), and Saturday (vs. Williams).

Track -- The outdoor track team opened its season with a 57-67 loss at Division I University of New Hampshire Saturday, Pat Paris '85 (hammer), John Taylor '84 (440-yard dash and intermediates) and Ed Areenberg '84 (220-yard dash), captain Martin Taylor '83 (triple jump), and Bob Walmsley '84 (three mile) all posted victories in the losing effort, and the team captured the one-mile relay. The Engineers will open at home Saturday against Bowdoin. The meet is scheduled to begin at 12:30pm.

Volleyball -- The men's volleyball club experienced the thrill of victory Saturday, defeating Boston University 3-1.

NEW POLITICS

MASS FAIR SHARE, one of the largest progressive, grassroots organizations in the country, is now hiring individuals to do fundraising, community outreach, and to develop a citizens lobby that can shape and influence the political and economic decisions in this state.

SUMMER AND PERMANENT POSITIONS AVAILABLE

BEING PREGNANT ISN'T ALWAYS A BLESSING.

That's when when you come to term, you'll meet with a counselor who can answer any questions you may have. So if you choose an abortion, you'll be making the choice that's right for you. Call 1-800-CAMPAIGN (226-7249). Each pregnancy is a unique experience. We are here to help you. We provide supportive care to every pregnant woman who chooses to continue her pregnancy. We offer pregnancy services to women who are 19 years old or younger, and if you are younger than 16, you don't even have to tell your parents.

Nippon Express USA, Inc.

Air - Ocean
Household Goods
Going Home?
Why not let Nippon Express Boston handle your personal effects.

Do-to-door service to most major points in the United States and the world.

Both air and ocean modes.

Our own truck will pick up your shipment.

Hill Associates Cargo Building
Logan International Airport
East Boston, MA 02128 (617) 569-7770

Easy Access to University Computers*

- where & when you want
- $5.39 per terminal, modem & monitor
- one month rental, $77

The Zenith Data Systems ZT-1 is a high-quality information terminal that weighs only 18 lbs. and takes up only 1/6" of surface area. The high-resolution monitor displays 80 columns in easy-on-the-eyes green phosphor. Purchase price includes subscriptions to three information services. Nothing could be easier!

HARVEST COMPUTER

118 Magazine Street, Cambridge
547-3889

The quality goes in before the name goes on

and the New York Times, AP, UPI, Don & Bradstreet, federal government databases and many more.

NEW ZENITH COMPONENT TV SYSTEM UNSURPASSED FLEXIBILITY IN HOME VIDEO

Complete Audio/Video System — for the ultimate in home entertainment. Includes the following:

- Color TV Monitor
- Allegro Bookshelf Speakers
- Stereo Amplifier
- Source Selector
- TV Tuner

$500 Off

CALL 266-7505 btwn 9-1.

SUMMER AND PERMANENT POSITIONS AVAILABLE

BEING PREGNANT ISN'T ALWAYS A BLESSING.

That's when when you come to term, you'll meet with a counselor who can answer any questions you may have. So if you choose an abortion, you'll be making the choice that's right for you. Call 1-800-CAMPAIGN (226-7249). Each pregnancy is a unique experience. We are here to help you. We provide supportive care to every pregnant woman who chooses to continue her pregnancy. We offer pregnancy services to women who are 19 years old or younger, and if you are younger than 16, you don't even have to tell your parents.

Nippon Express USA, Inc.

Air - Ocean
Household Goods
Going Home?
Why not let Nippon Express Boston handle your personal effects.

Do-to-door service to most major points in the United States and the world.

Both air and ocean modes.

Our own truck will pick up your shipment.

Hill Associates Cargo Building
Logan International Airport
East Boston, MA 02128 (617) 569-7770

Easy Access to University Computers*

- where & when you want
- $5.39 per terminal, modem & monitor
- one month rental, $77

The Zenith Data Systems ZT-1 is a high-quality information terminal that weighs only 18 lbs. and takes up only 1/6" of surface area. The high-resolution monitor displays 80 columns in easy-on-the-eyes green phosphor. Purchase price includes subscriptions to three information services. Nothing could be easier!

HARVEST COMPUTER

118 Magazine Street, Cambridge
547-3889

The quality goes in before the name goes on

and the New York Times, AP, UPI, Don & Bradstreet, federal government databases and many more.

NEW ZENITH COMPONENT TV SYSTEM UNSURPASSED FLEXIBILITY IN HOME VIDEO

Complete Audio/Video System — for the ultimate in home entertainment. Includes the following:

- Color TV Monitor
- Allegro Bookshelf Speakers
- Stereo Amplifier
- Source Selector
- TV Tuner

$500 Off

CALL 266-7505 btwn 9-1.

Nippon Express USA, Inc.

Air - Ocean
Household Goods
Going Home?
Why not let Nippon Express Boston handle your personal effects.

Do-to-door service to most major points in the United States and the world.

Both air and ocean modes.

Our own truck will pick up your shipment.

Hill Associates Cargo Building
Logan International Airport
East Boston, MA 02128 (617) 569-7770

Easy Access to University Computers*

- where & when you want
- $5.39 per terminal, modem & monitor
- one month rental, $77

The Zenith Data Systems ZT-1 is a high-quality information terminal that weighs only 18 lbs. and takes up only 1/6" of surface area. The high-resolution monitor displays 80 columns in easy-on-the-eyes green phosphor. Purchase price includes subscriptions to three information services. Nothing could be easier!

HARVEST COMPUTER

118 Magazine Street, Cambridge
547-3889

The quality goes in before the name goes on

and the New York Times, AP, UPI, Don & Bradstreet, federal government databases and many more.

NEW ZENITH COMPONENT TV SYSTEM UNSURPASSED FLEXIBILITY IN HOME VIDEO

Complete Audio/Video System — for the ultimate in home entertainment. Includes the following:

- Color TV Monitor
- Allegro Bookshelf Speakers
- Stereo Amplifier
- Source Selector
- TV Tuner

$500 Off

CALL 266-7505 btwn 9-1.

Nippon Express USA, Inc.

Air - Ocean
Household Goods
Going Home?
Why not let Nippon Express Boston handle your personal effects.

Do-to-door service to most major points in the United States and the world.

Both air and ocean modes.

Our own truck will pick up your shipment.

Hill Associates Cargo Building
Logan International Airport
East Boston, MA 02128 (617) 569-7770

Easy Access to University Computers*

- where & when you want
- $5.39 per terminal, modem & monitor
- one month rental, $77

The Zenith Data Systems ZT-1 is a high-quality information terminal that weighs only 18 lbs. and takes up only 1/6" of surface area. The high-resolution monitor displays 80 columns in easy-on-the-eyes green phosphor. Purchase price includes subscriptions to three information services. Nothing could be easier!

HARVEST COMPUTER

118 Magazine Street, Cambridge
547-3889

The quality goes in before the name goes on

and the New York Times, AP, UPI, Don & Bradstreet, federal government databases and many more.

NEW ZENITH COMPONENT TV SYSTEM UNSURPASSED FLEXIBILITY IN HOME VIDEO

Complete Audio/Video System — for the ultimate in home entertainment. Includes the following:

- Color TV Monitor
- Allegro Bookshelf Speakers
- Stereo Amplifier
- Source Selector
- TV Tuner

$500 Off

CALL 266-7505 btwn 9-1.

Nippon Express USA, Inc.

Air - Ocean
Household Goods
Going Home?
Why not let Nippon Express Boston handle your personal effects.

Do-to-door service to most major points in the United States and the world.

Both air and ocean modes.

Our own truck will pick up your shipment.

Hill Associates Cargo Building
Logan International Airport
East Boston, MA 02128 (617) 569-7770

Easy Access to University Computers*

- where & when you want
- $5.39 per terminal, modem & monitor
- one month rental, $77

The Zenith Data Systems ZT-1 is a high-quality information terminal that weighs only 18 lbs. and takes up only 1/6" of surface area. The high-resolution monitor displays 80 columns in easy-on-the-eyes green phosphor. Purchase price includes subscriptions to three information services. Nothing could be easier!

HARVEST COMPUTER

118 Magazine Street, Cambridge
547-3889

The quality goes in before the name goes on

and the New York Times, AP, UPI, Don & Bradstreet, federal government databases and many more.
Lacrosse

was not as simple as one might imagine from the number of shots taken. The Lord Jeffs led 3-0 after one quarter and 5-0 at the half, thanks mainly to the heroics of goalie Bill Larkin '84, who made numerous superb saves. His performance prompted MIT coach Walter Alessi to comment, "Bill Larkin will be All-New England if he keeps it up." If he continues to face sixty shots a game, however, he will also be All-Black and Blue.

Aside from Larkin, there were few individual bright spots. The

By Eric R. Fleming

The result was a rout at 6-5, left six runners on base, and

managed to score just two runs in the seventh. The key was an

other solid performance on the mound by Cindy Robinson '84 and to

another long stretch of clutch offensive plays, MIT edged Bates 2-1.

Tech is now 2-0 in dual meets in pursuit of its second straight

Lacrosse loses 10-1

By Mark Harsch

Unfortunately, it's not a perfect world. If it were, MIT would not

have to charge tuition, gasoline would not be over $1 a gallon, and the

lacrosse team would not have lost its home opener 10-1 to Amherst

Saturday. However, thanks to an easy run as the throw went

home. Christy Bellinger '84 flew to right, ending the inning. The

Engineers finally broke the ice in their half of the third. Stac

Thompson '86 began with a perfectly-executed bunt single, and to

Julie Chen '86 then got a bunt down for the sacrifice. Thomp-

son, noticing that the Bates' first baseman was lackadaisical in get-

ting off the bag, sped for third. The throw was wild, and Thomp-

son got under the tag at the plate for MIT's first run. Lil Anderson

'84 kept the rally going, smashing a single to left. She stole second,

and came home on junior Lou Andrusa's single which just got under

the shortstop's glove.

It's on a Navy ship.

The Navy has more than 1.9,000 reactor-years of nuclear

power experience — more than anyone else in the world. The Navy has the most sophisti-

cated nuclear equipment in the world. And the

Naval Nuclear Reactors Department operates over half of the nuclear

reactors in America.

With a nuclear program like that, you

know the Navy also offers the most com-

prehensive and sophisticated nuclear training.

Every officer in the Nuclear Navy

completes a full year of graduate level

technical training. Outside the Navy, this

kind of program would cost you thousands.

In the Navy, you're paid while you learn.

Then, as a nuclear-trained officer, you

supervise highly trained personnel in the

operation of the most advanced nuclear

propulsion plants ever developed. You get a level of technical and management

experience unequaled anywhere else.

You get important responsibilities and you

get them fast. Because in the Navy, as your knowledge grows, so do your responsibilities.

Today's Nuclear Navy is one of the most

challenging and rewarding career choices a man can make. And

that choice can pay off while you're still in school. Qualified

juniors and seniors earn approximately $1,000 per month while they finish school.

As a nuclear-trained officer, after 4

years with regular promotions and pay

increases, you can be earning as much as $46,500. That's on top of a full benefits package that includes medical and dental care, and

30 days' vacation earned each year.

As a nuclear-trained officer, you also earn a place among this nation's most

qualified and respected professionals. So, if you're majoring in

math, engineering or the physical sciences, send in the coupon.

Find out more about the most sophisti-

cated training school for nuclear engineer-

ing. Today's Nuclear Navy.