Massachusetts Institute of Technology

TECH TALK

July 6, 1977
Volume 22
Number 1

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25min. HS

I.M. London Appointed Hermann Professor

Irving M. London, M.D., noted medical educator, a member of the faculties at both the Harvard Medical School and MIT, and director of the Harvard-MIT Division of Health Sciences and Technology, has been appointed by MIT to MIT's newly-established Grover Hermann Professorship in Health Sciences and Technology.

Announcement of the appointment was made by MIT President Jerome B. Wiesner.

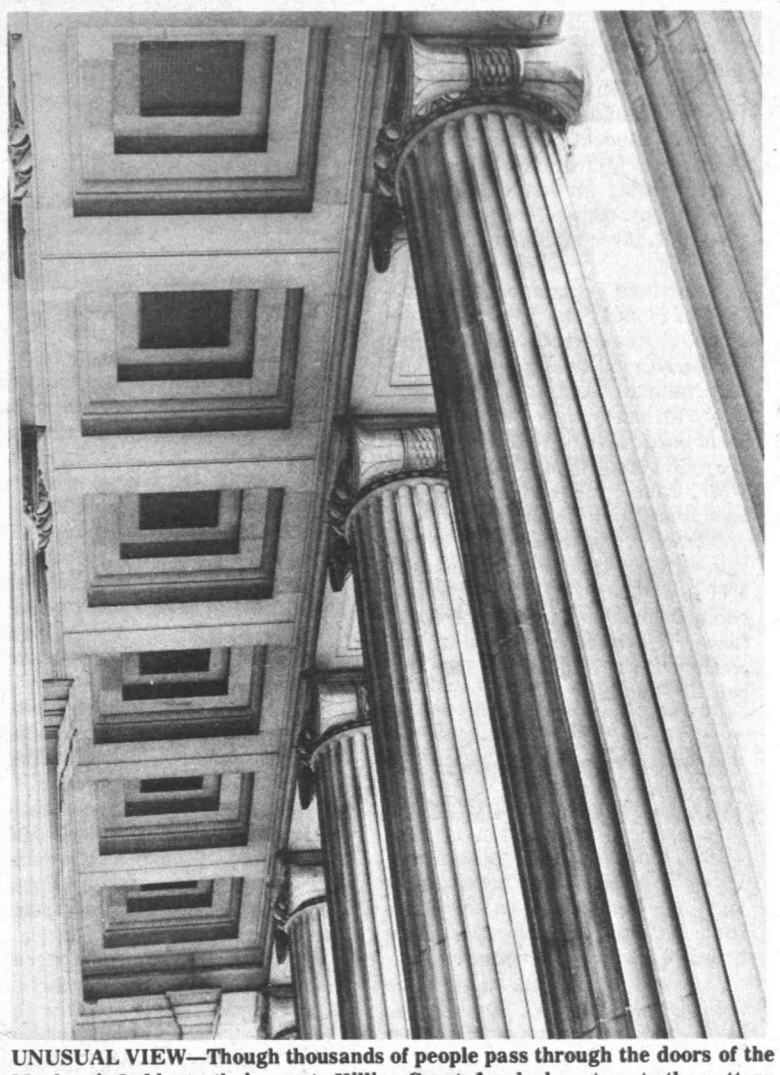
"In appointing Dr. London as MIT's first Hermann Professor," President Wiesner said, "we honor a distinguished and creative physician-scholar and give recognition to his leadership in the application of contemporary science and technology to national health needs, to the alleviation and treatment of disease and disability, and to the ultimate prevention of human suffering and the preservation of health and life."

The Grover Hermann Professorship in Health Sciences and Technology was established at MIT earlier this year by the Grover Hermann Foundation of Chicago. Mr. Hermann, noted industrialist and philanthropist, is the retired chairman of the Board of the Martin Marietta Corporation and was founder and president of American Marietta Co. which merged with the Martin Co. of Baltimore, Md. in 1961, to become Martin Marietta. Mr. Hermann is president of the foundation that bears his name.

Mr. Hermann said the Foundation is especially pleased that a scientist-teacher of Dr. London's background and distinction will be the first to occupy the Hermann chair.

"Our interactions with the Institute date back to the early 1960s when we participated in making possible a new building (the Grover M. Hermann Building) for the Alfred P. Sloan School of Management and the MIT School of Humanities and Social Science, he said. "It is clear that original participation has contributed im-

(Continued on page 5)



UNUSUAL VIEW—Though thousands of people pass through the doors of the Maclaurin Lobby on their way to Killian Court, few look up to note the pattern of the coffered ceiling of the portico. —*Photo by Calvin Campbell*

Carter Names Hansen To NRC

President Carter has nominated Dr. Kent F. Hansen, MIT professor of nuclear engineering, as a commissioner of the Nuclear Regulatory Commission (NRC). Senate confirmation of the appointment is required.

Professor Hansen, a member of the MIT faculty since 1961, if confirmed, will take a leave of absence from the Institute to serve on the five-member commision which is primarily responsible for regulating the nuclear industry.

The NRC, just over two years old, discharges part of the dual function that formerly rested with the now defunct Atomic Energy Commission (AEC).

The AEC was responsible for both regulating and developing the use of nuclear power. Those functions now are split between the Energy Research and Development Adminis-

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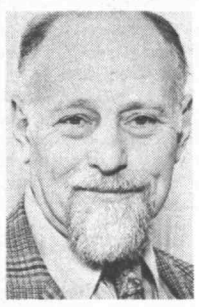
Richard Held Named Head of Psychology

Dr. Richard Held, professor of experimental psychology at MIT and well-known authority in the field of perception and its development, has been named head of the Department of Psychology, effective July 1. The announcement was made by Dean Harold J. Hanham of the School of Humanities and Social Science.

Professor Held has been acting head of the department since the death of Professor Hans-Lukas Teuber in January, 1977. Professor Teuber had headed the department since its founding in 1964.

Born in New York City in 1922, Dr. Held attended Columbia University where he received a BA in 1943 and a BS in civil engineering in 1944. Following service as an officer in the US Navy from 1944-46, he went on to receive a masters degree in psychology from Swarthmore College in 1948, and a PhD in experimental psychology from Harvard University in 1952.



From 1946 to 1948 Dr. Held was a research assistant in the Department of Psychology at Swarthmore College, working with the noted gestalt psychologist Wolfgang Kohler. From 1949 through 1953 he was a research assistant, teaching fellow, and N.I.H. postdoctoral fellow at the Department of Psychology of Harvard University.

In 1953, Dr. Held accepted a position as instructor in the Department of Psychology at Brandeis University, where he became successively, assistant professor, associate professor, professor, and chairman of the Department of Psychology. In 1962-63 he was appointed senior research fellow of the National Science

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Alarms!

Physical Plant will conduct a series of building fire alarm tests throughout the Institute starting Tuesday, July 12 and running through the end of the month.

Announcements to occupants of the individual buildings affected will be circulated before the tests and notices will be posted in those buildings.

Buildings are not to be evacuated during the tests. Should a fire occur during a test, Physical Plant personnel will notify building occupants.

Inquiries about the tests should be made to the work Control Center, x3-1500.

Underwood-Prescott Award Honors Hutt

Peter Barton Hutt, former chief counsel of the federal Food and Drug Administration and a nationally recognized authority on laws governing the content and marketing of foods and drugs, has been selected to receive the 1977 Underwood-Prescott Memorial Award at MIT.

A luncheon and award ceremony will be held on Tuesday, September 27, in the Sala de Puerto Rico in the Student Center. Mr. George C. Seybolt, president of the Wm. Underwod Co. of Westwood, will participate in the program and MIT President Jerome B. Wiesner will present the award.

Following the luncheon, a symposium will be presented by Mr. Hutt, Dr. Ogden C. Johnson, and Dr. Gordon F. Bloom. Dr. Johnson is corporate vice president of scientific affairs, Hershey Foods Corporation, and Dr. Bloom is senior lecturer in the Sloan School of Management and a specialist on productivity marketing and distribution and labor management in the food retailing industry.

More than 300 food scientists, nutritionists, and food industry executives are expected to attend the luncheon and symposium.

The 1977 award marks the 15th anniversary of the Underwood-Prescott lectures and symposia in which outstanding food scientists from throughout the world have participated.

Mr. Hutt was selected for the award by a Department of Nutrition and Food Science faculty committee comprising Dr. Marcus Karel, professor of food engineering and associate department head; Dr. Sanford A. Miller, professor of nutritional biochemistry; and Dr. Samuel A. Goldblith, Underwood-Prescott Professor of Food Science and director of the MIT Industrial Liaison Program, who serves as committee chairman.

The committee said the award was made to Mr. Hutt for "his contributions to humanity for the development of sound federal regulatory procedures for foods and drugs."

Mr. Hutt's topic for the symposium will cover current aspects, problems, and potential solutions of regulatory procedures for the food

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CU Seeks Nominations

Nominations are being sought to fill a vacancy on the Supervisory Committee of the MIT Employees Federal Credit Union.

The primary function of the Supervisory Committee is to make, or cause to be made, such audits, and to prepare and submit such written reports, as are required by Federal regulations.

Any interested Credit Union member is invited to submit his or her name for the vacancy. Please drop a note to the CU board of directors in care of Joseph R. Cullinan, vice president, Rm E19-563, telling a little about yourself and explaining why you are interested in serving as a member of the Committee. All applications received by July 29, 1977, will be considered.

PROJECT STILE

New Program Aims To Prevent Dropouts

By KATHARINE CHILDS JONES
Staff Writer

Dropout prevention and innovative training for teachers are the goals of a new program being launched this summer by the Cambridge School Department and MIT.

Funded by the Massachusetts Office of Education, Project STILE begins in July and will run for three years. STILE is an acronym for Student/Teacher Interactive Learning Environment.

"Most programs are for young people who have already dropped out of school," John Terry, program director and director of Upward Bound at MIT, said.

"One of the unique aspects of this project is that we'll be working with teachers. It's our view that classroom teachers represent the richest and most powerful learning resource that a student is exposed to. It is the quality of interaction between teachers and students that forms the basis of how much and how well students learn. If school environments can be made more exciting, kids won't drop out."

20 to Participate

For four weeks beginning July 25, 20 Cambridge high school teachers will spend six hours each weekday at MIT. They will participate in a series of intensive workshops and, near the end of the summer program, work with demonstration classes.

Four teachers will come from Charles River Academy, a private Cambridge school for learning-disabled young people of secondary school age. The other 16 teachers will come from the Cambridge Public High School System. The program is open to guidance counselors and paraprofessional helpers as well as teachers.

Assisting Dr. Terry in directing the program is Esther John who received the BA degree in psychology from Harvard College in 1976 and will return to Harvard in September to begin studies for a master's degree in counseling and education. Ms. John has tutored at Charles River Academy, worked with Upward Bound at MIT, and been a teaching assistant at MIT for Institute Seminars 211 and 212.

Also assisting with the program are Rosa O'Rourke who is liaison to the Cambridge Superintendent of Schools and Dr. Elsa Wasser-

(Continued on page 8)

Badges Identify Plant Personnel

Effective Tuesday, July 5, employees—other than clerical—in the Department of the Physical Plant are wearing Photo ID badges, according to Paul Barrett, associate director.

The clip-on badges, similar to those worn by Draper Laboratory personnel, give the name of the employee and his physical plant unit designation. Photo backgrounds are color coded in eight different shades according to unit designation.

"The new badges will provide a means by which Physical Plant personnel can be readily identified by other members of the MIT community," Mr. Barrett said. "They will also foster mutual communication between the community and the employees in the Physical Plant who travel widely throughout the Institute performing various functions."

Retirements Announced For 9 Faculty, 2 Lecturers

Nine members of the faculty and two lecturers, whose combined association with MIT totals 353 years, retired June 30. They are:

Michael B. Bever, professor of materials science and engineering.

Morris Cohen, Institute Professor, professor of materials science and engineering.

Bernard S. Gould, professor of biochemistry.

Patrick M. Hurley, professor of geology.

J. Francis Reintjes, professor of electrical engineering.

Clark C. Stephenson, professor of chemistry.

John C. Sheehan, professor of organic chemistry.

E. Neal Hartley, professor of history.

Eduardo F. Catalano, professor of architecture.

Richard S. Morse, senior lecturer at the Sloan School of Management and president of the MIT Development Foundation.

William A. Baker, lecturer in the Department of Ocean Engineering and curator of the Hart Nautical Museum.

Professor Bever of Cambridge is known for his work in physical metallurgy and applications of thermodynamics to metallurgy, especially calorimetry. He joined MIT in 1940. In recent years he has written, lectured and taught in the areas of recycling and the economics of materials.

Professor Cohen, whose first appointment at MIT was in 1936, is widely recognized as a leader in metallurgical research. He has been active in the fields of phase transformations, metallography, heat treatment, solid-state diffusion, thermodynamics and mechanical behavior. He lives in Swampscott.

Professor Gould, a specialist in the biochemistry of wound healing, tissue regeneration and the role of vitamins in these processes, has been associated with MIT since 1934. His research has centered on the biochemistry of the fibrous protein collagen, the most abundant protein in mammals. His home is in Brookline.

Professor Hurley, who joined the Institute teaching staff in 1938, is widely noted for research on the geological applications of nuclear science, particularly in geological time-measurements and isotope geochemistry. His book, *How Old is the Earth*, has been translated into 11 languages. His home is in Lexington.

Professor Reintjes is an authority on radar. He first joined MIT in 1943 as a visiting professor of electrical communications in the wartime Radar School. He became a member of the faculty in 1947, later headed the Electronic Systems Laboratory and was among those attending the first congress of the International Federation for Automatic Control held in Moscow in 1960. More recently he directed a program funded by the Frank E. Gannett Newspaper Foundation, Inc., aimed at developing technologists in the newspaper business. Professor Reintjes lives in Belmont.

Professor Stephenson, widely noted for his measurement and interpretation of low-temperature heat capacity of a number of the elements and inorganic compounds and for his systematic use of ion entropies in the determination of accurate values of thermodynamic functions for many inorganic substances, came to MIT in 1937. He had an active role in teaching the first-year chemistry course and was instrumental in updating the content and methodology of the course over the years. Professor Stephenson lives in Belmont.

Professor Sheehan, known for his research in the chemistry of penicillin and its synthesis, came to MIT in 1946. He holds more than 20 patents, including the patent for semi-synthetic penicillin. He has been an adviser to several government and military agencies on the applications of chemistry and biology. He lives in Lexington.

Professor Hartley, a specialist in the study of the impact of science and technology on modern society, was the Institute Archivist from 1966 to 1976. He has been a member of the faculty since 1946 and has done extensive research on trade association in the steel industry in this country and in England. In the early 1950s he was active in a project to restore the country's first iron works at Saugus, Mass. Out of that experience came a book, *Ironworks On the Saugus*, which was favorably reviewed. He lives in Concord.

Professor Catalano of Cambridge is best known for his work on thin shell architectural design based upon the use of hyperbolic paraboloid surfaces. His work on the MIT campus includes the Julius Adams Stratton Building, the Grover M. Hermann Building and the 28-story Eastgate student housing complex. He came to MIT in 1956.

Mr. Morse, an industrialist and former government official, has been a lecturer at the Sloan School since 1962 and president of the MIT Development Foundation since 1972. He was founder and president of the National Research Corporation and pioneered industrial applications of high vacuum technology. He organized Vacuum Metals Corp., Minute Maid Corp., and the NRC Equipment Corp. His home is in Wellesley.

Mr. Baker, a naval architect and an authority on historic ships, was appointed curator of the Francis Russell Hart Nautical Museum at MIT in January 1964. In 1949 he was commissioned to design the Mayflower II, which was sailed to this country from England in 1957. He lives in Hingham.

Hall Receives McKnight Award

Dr. Linda M. Hall, assistant professor in the MIT Department of Biology, has been named as one of the first recipients of the McKnight Scholars Awards in Neuroscience.

The award, presented by the McKnight Foundation, Minneapolis, Minn., is in the amount of $25,000 per annum for a three-year period. The awards are given to stimulate research in neuroscience, especially as it pertains to memory and to a clearer understanding of diseases affecting memory and its biological substrates.

Dr. Hall's area of research concerns the role of cholinergic synopses in learning and memory in *Drosophila melanogaster*.

Erdely Duo to Give Sonata Recital

Stephen and Beatrice Erdely will give a sonata recital at 8pm on Tuesday, July 12, in Kresge Auditorium.
—Photo by Ivan Massar, Black Star

The Erdely Duo—pianist Beatrice Erdely and violinist Stephen Erdely—will give a sonata recital at 8pm on Tuesday, July 12, in Kresge Auditorium at MIT.

The recital, the second in a series of four summer concerts sponsored by the MIT Music Section, will be open to the public free of charge.

The program will include Hindemith's Sonata in E, Mozart's Sonata in B Flat Major, K. 378, Milhaud's Second Sonata (1917) and Brahm's Sonata in D Minor, Opus 108.

The Erdely Duo has given recitals in New York, Cleveland, Washington, DC, Boston, and at colleges throughout the US.

Mrs. Erdely began piano studies at the American Conservatory of Music in Chicago. Among her teachers were Heniot Lévy and later, Eduard Steuermann of the Juilliard School, New York.

Winner of the Society of American Musicians competition, she was presented in debut at Orchestra Hall, Chicago, followed by appearances at Town Hall, Station WQXR, and the ABC network in New York. She has been soloist with the Chicago Symphony, Grant Park Symphony, and Cleveland Orchestra. She now is on the piano faculty of the New England Conservatory of Music and teaches at Brandeis University.

Dr. Erdely received his early musical training at the Franz Liszt Music Academy in Budapest as a violin and composition student of Ede Zathureczky, Leo Weiner and Zoltán Kodaly. He received the PhD degree from Case Western Reserve University in 1962.

He began his performing career in the chamber music department of Radio Munich, toured in recitals throughout western Europe and has recorded for radio stations in Paris, Zurich, Frankfort, Baden-Baden and Stuttgart. He was a winner of the International Music Competition in Geveva in 1948. Invited to join the Cleveland Orchestra by its musical director George Szell, he remained there until a few years ago when he decided to devote full time to concert and teaching careers. He is now associate professor of music and director of music in the MIT Department of Humanities.

Future concerts in the summer concert series will be a piano recital by John Buttrick on July 22 and a piano recital by Beatrice Erdely on July 26. The concerts will be at 8pm in Kresge Auditorium.

TT Schedule

The next issue of Tech Talk will be published July 20. The Institute Calendar in that issue will cover the period July 20 through August 14. Deadline for entering calendar listings, classified ads and notices is Friday, July 15, at noon.

CABLE TV SCHEDULE X3-3625

July 6-19

Wednesday, July 6
Channel 8:

11am-12noon — *RHETORIC & JOURNALISM* (Course 21.940) with Ed Diamond. Recorded 3/11/77.

1-2pm — *BASEMENT VIDEO PRESENTS* "Pete Smith".

2-3pm — *THE PRESIDENT & THE PRESS* (Course 17.27) with Ed Diamond. Recorded 3/17/77.

4-5pm — *BASEMENT VIDEO PRESENTS* "Pete Smith".

Thursday, July 7
Channel 8:

10am-12noon — *MCGEORGE BUNDY*. President of the Ford Foundation. Recorded 3/15/77 as part of the "World Change and World Security" lecture series.

12-12:40pm — *OPERATION SAIL*. A documentary about the voyage of the tall ships, celebrating the bicentennial.

1-1:40pm — *GUERRILLA PHOTOGRAPHY*. Produced by the MIT Video Workshop.

Friday, July 8
Channel 8:

12 noon-1pm — *THE PRESIDENT & THE PRESS* (Course 17.27) with Ed Diamond. Recorded 3/17/77.

1-2pm — *RHETORIC & JOURNALISM* (Course 21.940) with Ed Diamond. Recorded 3/11/77.

4-5pm — *BASEMENT VIDEO PRESENTS* "Pete Smith".

Monday, July 11
Channel 8:

11am-12noon — *THE PRESIDENT & THE PRESS* (Course 17.27) with Ed Diamond. Recorded 3/17/77.

2-3pm — *RHETORIC & JOURNALISM* (Course 21.940) with Ed Diamond. Recorded 3/11/77.

Tuesday, July 12
Channel 8:

12 noon-1pm — *BASEMENT VIDEO PRESENTS* "Brother Blue".

1:30-3:30pm — *CAMERA TECHNIQUE FOR VIDEO TAPE — LIGHTING FOR VIDEO TAPE PRODUCTION — SET UP AND CARE OF A VIDEO SYSTEM — HOW TO PRODUCE A VIDEO TAPE PROGRAM — HOW TO PERFORM ON TELEVISION — A PRACTICAL GUIDE TO SETS AND PROPS FOR VIDEO TAPE PRODUCTION*. A series of instructional tapes for people interested in learning about video tape production. Produced by 3M Company, each tape runs for approximately 20 minutes.

3:30-5pm — *SIGVARD EKLUND*. Director General of the International Atomic Energy Agency. Recorded 3/24/77 as part of the "World Change and World Security" lecture series.

Wednesday, July 13
Channel 8:

11am-12noon — *COLLEGE BOWL*. Produced by the Video Club.

12noon-1pm — *JACQUES BREL*. Produced by the Communications Workshop.

1-2pm — *AN EYE TO THE PAST*. Presentation of films and tapes from the MIT Historical Collections.

2-3pm — *JACQUES BREL*.

Thursday, July 14
Channel 8:

11am-12noon — *AN EYE TO THE PAST*. Presentation of films and tapes from the MIT Historical Collections.

12noon-1pm — *COLLEGE BOWL*. Produced by Video Club.

1-2pm — *WOMEN'S WORK: ENGINEERING AND WOMEN'S WORK: MANAGEMENT*. Documentaries produced by the Film Unit, CAES

Friday, July 15
Channel 8:

11am-12noon — *THE PHYSICIST*. Produced by Video Club.

12-1pm — *WOMEN'S WORK: ENGINEERING AND WOMEN'S WORK: MANAGEMENT*. Documentaries produced by the Film Unit, CAES.

1-2pm — *JACQUES BREL*. Produced by The Communications Workshop.

Monday, July 18
Channel 8

11am-12noon — *THE WOMEN'S SHOW: INFERTILITY*. Produced by Niti Salloway.

12noon-1pm — *HAYSTACK, WHOI, A VIEW OF KENMORE SQUARE*. Produced by The Communications Workshop.

1-2pm — *WOMEN'S WORK: ENGINEERING AND WOMEN'S WORK: MANAGEMENT*. Documentaries produced by the Film Unit, CAES.

Tuesday, July 19
Channel 8:

11am-12noon — *THE PHYSICIST*. Produced by Video Club.

12noon-1pm — *AN EYE TO THE PAST*. Presentation of films and tapes from the MIT Historical Collections.

1-2pm — *HAYSTACK, WHOI, A VIEW OF KENMORE SQUARE*. A Comunications Workshop presentation.

INSTITUTE NOTICES

Announcements

Freshman Advisors—Needed for the 1977-78 academic year to assist freshmen with various academic and non-academic decisions and situations they will face. If you'd like to get to know a few freshmen well and feel you can offer something to them in their adjustment to MIT, contact Freshman Advisory Council, Rm 7-103, x3-6771 for information.

MIT Furniture Exchange—Open Tues & Thurs, 10am-2pm, 25 Windsor St, to buy or sell used furniture.

New UROP Listings

For more detailed information on UROP opportunities listed, MIT undergraduates should call or visit the Undergraduate Research Opportunities Program Office, Room 20B-141, Ext. 3-5049 or 3-4849 unless otherwise specified in the listing. Undergraduates are also urged to check with the UROP bulletin board in the main corridor of the Institute.

Department of Mechanical Engineering

An ongoing UROp project has an opening for an undergraduate interested in computers and microprocessors. The project's goal is to produce a prototype of a surface-measuring instrument based on a microcomputer. Two students are already involved with the construction and debugging of the hardware, and a control program has been written for the instrument. The student will work with the construction team and become familiarized with the system design and the use of a Nova minicomputer. S/he will write a program for loading the control program into a UV-erasable read-only memory (EPROM) and will complete the firmware development. At the end, documentation of the firmware will be written.

Contact: Prof N.H. Cook, Rm 35-132, x3-2216, or Tom Rhodes, Rm 35-135, x3-2734.

Graduate Studies

Law Enforcement Assistance Administration Graduate Research Fellowship Program

The LEAA Graduate Research Fellowship Program provides support for doctoral candidates writing dissertations in crime-related fields. Fellowships of up to $10,000 are awarded for a one-year period. Doctoral candidates in crime-related fields of study who have finished their core course work and require support while they are writing their dissertations are eligible to compete for grants.

Deadline: October 1, 1977.

Contact: Graduate School Office, Rm 3-136

Club Notes

Beginner's Sailing—Instruction, Weds, 5:15pm, thru summer, MIT Sailing Pavilion.

MIT Bridge Club*—ACBL duplicate open pairs game Thurs, 7pm, Stu Ctr Rm 407. Info: 494-8593. Admission .25.

MIT/DL Bridge Club**—ACBL Duplicate Bridge. Tues, 6pm, Stu Ctr Rm 473.

Gays at MIT*—(formerly SHL) Coffeehouse/meeting, first Sunday each month, 5pm, Gay Lng (Walker Rm 50-306). Everyone welcome. Info or just an ear listen: x3-5440, or join us for lunch.

Hobby Shop**—Mon-Fri, 10am-6pm, Rm W31-031. Fees: $10/term for students, $15/term for community. Info: x3-4343.

MIT Juggling Club*—Juggling practice and get-together Suns, 12:30-4:30pm, Kresge Oval (in front of Stu Ctr). We teach beginners.

MIT Nautical Association**—Basic Shore School, Wed, 5:30pm, MIT Sailing Pavilion, free. **Racing*****—Summer series racing. Tues and Thurs; Novice Racing Clinic, Mon.; 5:30pm, MIT Sailing Pavilion, free.

Tech Model Railroad Club—Meetings, Sat, 4pm; Operating Sessions, Fri nights; Rm 20E-214, x3-3269.

Tech Squares*—**Club Dance**, Tues, 8-11pm, 2nd Fl, Stu Ctr, for club level dancers. Admission $1.00. **Fall Krash Kourse** (free beginner class), Tues, 8-11pm, beginning Sept. 13, 2nd Fl Stu Ctr. Info: Marianne, x3-6724.

Religious Activities

The Chapel is open for private meditation 7am-11pm daily.

United Christian Fellowship*—MIT-IUCF prayer, singing, bible study and fellowship, Wed, 7pm, Rm 1-236. Info: Bill Spencer x3-6813.

Tech Catholic Community*—Mass, Sun, July 10, 9:30am, Kresge Little Theatre; Sun, July 17, Mezzanine Lounge, Stu Ctr.

TECH TALK
Volume 22, Number 1
July 6, 1977

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Mail subscriptions are $8 per year. Checks should be made payable to MIT and mailed to the Business Manager, Room 5-111, MIT, Cambridge, MA 02139.

Pressman Fellowship Established

The MIT-Harvard Joint Center for Urban Studies has established an annual fellowship in memory of MIT Professor Jeffrey L. Pressman, who died March 1 at the age of 33.

Dr. Pressman, an associate professor of political science in MIT's Department of Political Science, was one of the Institute's most popular teachers and was widely regarded as one of the leading young scholars in the field of American politics.

Dr. Arthur P. Solomon, director of the Joint Center, said that the fellowship honors "an outstanding colleague whose brilliant scholarship was matched by his constant concern for the intellectual and personal development of his students."

The first recipient of the fellowship award is Martin Sanchez-Jankowski of Bay City, Mich., a PhD candidate in the Department of Political Science. His proposed dissertation is "The Relations Between Cultural and Political Values Among Chicano Adolescents: The Effects of Urbanization."

Jones Named Dean at BU

Hubert E. Jones, associate professor of urban studies and planning and head of MIT's Community Fellows Program, has left the Institute to become dean of Boston University's School of Social Work. He assumes his new post July 1.

Dr. Langley C. Keyes, head of the Department of Urban Studies and Planning, said that Melvin H. King, an adjunct professor and associate director of the Community Fellows Program, would become director for next year. The program brings minority community and government officials to MIT for research and study.

Dr. Keyes said that Professor Jones would be "greatly missed because of the leadership and drive he has given the Community Fellows Program."

Professor Jones, who received his BA from City College of New York and master's degree in social work from Boston University, was a member of the MIT Community Fellows Program and a lecturer in urban studies before being appointed a visiting associate professor in 1973. He was appointed associate professor in 1975.

Davenport Joins Television Panel

Dr. Wilbur B. Davenport, Jr., a communications specialist and head of the MIT Department of Electrical Engineering and Computer Science, has been appointed to a new Carnegie Commission to study the future course of public television in the United States.

To be headed by Dr. William J. McGill, president of Columbia University, the 20-member commission will investigate possible effects of technological developments—cable television and video disks, for example—on public television. It will also look into the economic needs of the system, its governance, citizen involvement, programming improvement and what the mission of public television should be.

The new commission is the first broad-based examination of public television since the 1967 Carnegie Commission, headed by Dr. James R. Killian, Jr., then chairman and now honorary chairman of the MIT Corporation, issued its report.

Ting Honored

Dr. Samuel C. C. Ting, Thomas Dudley Cabot Professor of Physics at MIT and co-recipient of the 1976 Nobel Prize in physics, was one of 42 "master achievers" honored at the Golden Plate Awards, Sunday, June 26, in Orlando, Florida.

The awards, presented by the American Academy of Achievement, are intended to honor men and women who have made outstanding achievements in their fields.

Mexican 'Guest Workers' Entry Seen Advisable

By CHARLES H. BALL
Staff Writer

An MIT professor who is an expert on illegal immigration has proposed to the Carter administration that up to 800,000 Mexicans be allowed into the United States each year as "guest workers."

Under the plan proposed by Dr. Wayne A. Cornelius, temporary worker visas permitting up to six months of employment in the US each year would be issued by US consulates in Mexico on a first-come, first-served basis.

To maintain a valid visa, a worker would have to leave the United States for at least six months each year. There would be no limitation on where a "guest worker" could look for a job or on what kind of a job he could take.

Dr. Cornelius, associate professor of political science at MIT, made the proposal as a potential short-term solution to the problem of illegal Mexican aliens. He said the plan would not increase the number of workers from Mexico looking for jobs in this country because most of the laborers who would seek the temporary visas probably already are working in the US as illegal aliens, or could be expected to come to the US illegally if they could not obtain visas.

Professor Cornelius is director of a four-year study of illegal migration to the US sponsored by the Center for Population Research of the National Institutes of Health. A system of temporary worker migration visas was one of the recommendations made by him in a preliminary report published in May.

Dr. Cornelius was asked by the White House staff to prepare a detailed proposal describing how such a system might work. The proposal is still under consideration by Administration officials involved in formulating a comprehensive national policy on illegal immigration.

The temporary worker proposal drew heavily on Professor Corelius' own observations during 18 months he spent in Mexico investigating the characteristics of illegal migration of Mexicans to the US and interviewing hundreds of returned illegal aliens.

Cornelius' preliminary report, which also reviewed the findings of 12 other studies of illegal immigration from Mexico, called into question many of the basic assumptions underlying US attitudes toward illegal Mexican workers.

Among its conclusions were these:

—While hundreds of thousands of Mexicans do enter the US each year in search of work, the "vast majority" return to Mexico during the same year, usually after 4 to 6 months of employment.

—Huge wage differentials between the US and Mexico (often three to four times, for comparable work) are more important than outright unemployment in Mexico in promoting migration to the US. The average Mexican worker can earn and save more in one to three months of work in the US than he could in a year in his own community.

—There is no direct evidence that illegal Mexican workers displace large numbers of native Americans, at least in those sectors of the job market where the Mexicans typically seek employment. Few Americans will do this work, which is dirty and physically demanding and pays less, generally, than an American can receive in welfare support.

—The US economy, particularly its small business and agricultural sectors, needs the labor provided by the illegal aliens.

—The illegal migration is a crucial "political and economic safety valve" for the Mexican economy, which is greatly aided by the temporary employment of its unemployed and underemployed workers. Wages returned to Mexico by the workers also are an important offset to unfavorable trade balances with the US.

—Illegal Mexican laborers contribute far more to the US through payment of federal, state and local taxes, as well as contributions to Social Security, than they receive in tax-supported social services.

Professor Cornelius concludes that not even "the most draconian" police actions or restrictive measures would be able to stop the flow of illegal immigrants because of the intense economic and population pressures that drive the Mexican laborer across the border.

In addition to setting up a system of temporary work visas, Cornelius recommended that the US declare a moratorium on new, unilateral efforts to restrict illegal immigration, increase the quota for legal immigration from Mexico, and declare an amnesty for illegal aliens who entered the US before 1972.

A long-term solution to the problem, Cornelius said, can be achieved only through concerted efforts by the United States and Mexican governments, with primary emphasis on action by the Mexican government.

"Much greater attention should be devoted to programs for the direct creation of reasonably well-paid, non-agricultural employment opportunities in Mexico for rural dwellers," Professor Cornelius said. "My research indicates that this is likely to be the single most effective policy instrument for reducing rural outmigration, both to the United States and to urban centers within Mexico."

In the meantime, he said, the proposed system of temporary worker visas would:

—Bring within the law a large proportion of aliens working in the United States, thus increasing public confidence in our legal system and enabling alien workers to seek legal redress of grievances against US employers.

—Significantly reduce the volume of illegal immigration from Mexico.

—Eliminate the need for Mexican workers to pay "coyotes"—professional smugglers—for assistance in illegal border crossing and eliminate physical risks involved in illegal crossings.

—Reduce the risk of economic exploitation and other abusive practices by US employers.

A key feature of the proposed system is the avoidance of pre-arranged contracts between US employers and alien workers, as was done in the "bracero" program of contract labor from 1942 to 1964.

Such contracts, Professor Cornelius said, tie the alien worker to a particular employer, increasing the risk of exploitation.

MIT PRESIDENT AT UMANA SCHOOL—Dr. Jerome B. Wiesner, president of MIT, addressed students at the Mario Umana Harbor School of Science and Technology in East Boston during ceremonies Thursday, June 16, at which nearly 100 students were presented achievement awards for academics, athletics and other activities. Awards are in foreground. Seated behind Dr. Wiesner is Dr. Edward T. Kirkpatrick, president of Wentworth Institute and Wentworth College of Technology. MIT, Wentworth and the Massachusetts Port Authority have been working with the East Boston high school, under a plan prepared by US District Court Judge W. Arthur Garrity, to develop a high school curriculum polarized around science and technology.

Photo by Calvin Campbell

Cancer Center Researchers Receive Leukemia Grants

Dr. Fayth K. Yoshimura, Dr. Robert G. Levenson and Dr. Salvatore J. Turco, postdoctoral fellows in the Center for Cancer Research, have been awarded two-year grants by the Leukemia Society of America, Inc., to support research aimed at uncovering clues leading to the cause and cure of leukemia.

The awards are among 32 new grants being made this year by the Leukemia Society of America, Inc., to become effective in July 1977. Dr. Levenson, whose research is currently supported by an American Cancer Society fellowship, will accept the award as of Jan. 1, 1978.

Dr. Yoshimura has received a $31,000 special fellowship. Her research will focus on genome organization of the mammalian RNA tumor viruses. A native of Honolulu, Hawaii, she received the BA degree from the University of California in 1967 and the PhD in molecular biophysics and biochemistry in 1972 from Yale University. Before joining the Center for Cancer Research staff in late 1975, Dr. Yoshimura took postdoctoral training at the Institute de Biologie Physico-Chemique, Paris, France, and at the Cardiovascular Research Institute of the University of California, School of Medicine.

Dr. Levenson has received a $25,000 fellowship. He will be focusing on the molecular and genetic analysis of erythroid differentiation. A native of New York City, Dr. Levenson received the AB degree from Bard College in 1967, the MS from New York University in 1971 and the PhD in biology from State University of New York at Stony Brook in 1976 where he was a teaching assistant and lecturer before coming to MIT.

Dr. Turco has also received a $25,000 fellowship to support his research of the control of transglycosylation mechanisms in normal and transformed cells. A native of New Kensington, Penn., Dr. Turco received the BS degree from Indiana University of Pennsylvania and the PhD in biochemistry from the University of Pittsburgh in 1976.

Founded in 1949, the Leukemia Society of America, Inc., supports studies at 55 leading institutions here and abroad with research concentrated in the fields of immunology, virology, chemotherapy and basic science.

Sea Grant Info Center Closed

The MIT Sea Grant Information Center, Rm. 5-331, will be closed from July 11-22 and from Aug. 1-12.

Ms. Barbara Passero, Sea Grant information specialist, said assistance can be obtained during those periods by calling the Sea Grant Program office at 3-7401.

Dedication, Richards Lecture To Highlight October AOC

Two special events—dedication of the Building 10 Alumni Center and refurbished Huntington Hall, and the inaugural Robert H. Richards Alumni Lecture—will highlight the 1977 Alumni Officers Conference to be held at MIT October 7 and 8.

AOC is scheduled to coincide with completion of work on the new Alumni Center and Huntington Hall (Rm 10-250), a gift from alumni to the Institute.

The first Richards Alumni Lecturer will be a prominent member of the MIT family in public service. Named in honor of the founder of the MIT Alumni Association and a member of MIT's first graduating class, the lecture is intended to highlight the obligation alumni have to influence public policy.

More than 600 people are expected to attend the two-day conference.

Following informal luncheons with students Friday noontime, there will be four program workshops: Alumni Roles in Academic Assistance, led by Harl Aldrich, '47; Alumni Roles in Improving the Quality of Campus Life, led by Fagi Levinson, widow of the late Dr. Norman Levinson, Institute Professor and professor of mathematics at MIT; Alumni and the Educational Council, led by Joseph Edwards, director of the Educational Council, and Alumni and the Alumni Fund, led by the yet-to-be-appointed director of the Alumni Fund.

Presentation and dedication of Huntington Hall and the Alumni Center will be held at 4:30pm, followed by a reception in the Alumni Center.

Howard W. Johnson, chairman of the MIT Corporation, will report on the Leadership Campaign at the evening banquet in du Pont Gymnasium. MIT Logarhythms and Gospel Choir will provide entertainment during the banquet.

After a continental breakfast Saturday morning, MIT President Jerome B. Wiesner will give remarks of welcome. The new director of the Alumni Fund will speak on the MIT Alumni Fund Program, and Professor Walter A. Rosenblith, MIT provost, will give a talk, "The Importance of Educational Facilities in a University."

The Robert H. Richards Alumni Lecture will be given at 11am, followed by the alumni awards luncheon in Walker Memorial.

Saturday afternoon three professors in the Department of Electrical Engineering and Computer Science will participate in an electrical engineering program to be moderated by Dr. Paul E. Gray, MIT chancellor. Dr. Stephen D. Senturia, associate professor of electrical engineering, will speak on "The Future of Home Fire Alarms"; Dr. Gerald L. Wilson, Philip Sporn Professor of Energy Processing and director of the Electrical Power Systems Engineering Laboratory (EPSEL), "MIT's EPSEL as an Example of Interdisciplinary Education," and Dr. Michael L. Dertouzos, director of the Laboratory for Computer Science, "Scheduling of Microprocessors for the Control of Physical Processes."

The conference will end with the President's Reception at the President's House.

Chairman of AOC is Claude W. Brenner, '47.

THE INSTITUTE CALENDAR X3-3270

July 6 through July 24

Seminars and Lectures

Thursday, July 7

The Role of Diol-Epoxides in the Metabolic Activation of Polycyclic Hydrocarbons* — Philip Grover, M.D., Institute of Cancer Research, Chester Beatty Research Institute, London, U.K. Toxicology Group Seminar. 4pm, Rm 66-110.

Monday, July 11

Plasma-Surface-Interactions Controlled Thermonuclear Research — Rainer Behrisch,** Max Planck Institut for Plasma Physics, Garching/-Munich, W. Germany. Nuclear Reactor Laboratory, Material Science and Engineering, Nuclear Engineering Department Seminar. 10am, Rm NW12-222. Coffee 9:30am.

Community Meetings

Wive's Group** — Group leaders: Charlotte Schwartz, sociologist & Myra Rodrigues, social worker, both from Medical Dept; Carol Hulsizer, faculty spouse in residence, Ashdown Hse. Wed, 3-5pm, Stu Ctr West Lng. Babysitting Stu Ctr Rm 473. Cheryl, x3-4911.

MIT Blood Drive* — Fri, Jul 8, 11am-4:45pm, Sala. No appointment necessary. Info, x3-7911.

Auditions for Summer Production of *Dames at Sea** — M.I.T. Musical Theatre Guild. Sun, Jul 17, 1-3pm, 7-9pm; Mon Jul 18 & Tues Jul 19, 7-10pm. West Lng, Stu Ctr. Preference given to M.I.T. Community.

What's For Lunch?* — Prenatal and Parent Education Group Meeting concerning suggestions for feeding the older baby and toddler. Discussions of family nutrition. Connie Bean, Medical Dept, will lead the meeting. Tues, Jul 19, 12n-1:30pm, Infirmary, third floor conference room. Take front stairway at elevator. Info: x3-1316. Coffee, tea, juice, will be served, bring your lunch.

Movies

LSC Double Feature** — Fri, Jul 8, Rm 26-100. **A Star is Born,** 7pm, Judy Garland & James Mason. **D.O.A. (Dead On Arrival),** Edmond O'Brien is a detective dying from poison who solves his own murder, 10pm. Admission 75¢ w/MIT & Wellesley ID.

Hiroshima Mon Amour (Renais)* — MIT Film Society. Fri, Jul 8, 7:30 & 9:30pm, Rm 6-120. Donation $1.25.

Charade** — LSC Movie. Sat, Jul 9, 7 & 9:30pm, Rm 26-100. Spy/Suspense/Spoof starring Cary Grant & Audrey Hepburn. Admission 75¢ w/MIT or Wellesley ID.

This Island Earth** — LSC Movie. Fri, Jul 15, 7 & 9:30pm, Rm 26-100. Science Fiction Classic. Admission 75¢ w/MIT or Wellesley ID.

Ugetsu (Kenji)* — MIT Film Society. Fri, Jul 15, 7:30 & 9:30pm, Rm 6-120. Donation $1.25.

A Night to Remember** — LSC Movie. Sat, Jul 16, 7 & 9:30pm, Rm 26-100. The sinking of the Titanic. Admission 75¢ w/MIT or Wellesley ID.

LSC Double Feature** — Fri, Jul 22, Rm 26-100. **The Hunchback of Notre Dame,** 7pm. Charles Laughton & Maureen O'Hara. **The Seven Year Itch,** 9:30pm, Marilyn Monroe Comedy. Admission 75¢ w/MIT or Wellesley ID.

Street of Shame (Kenji)* — MIT Film Society. Fri, Jul 22, 7:30 & 9:30pm, Rm 6-120. Doantion, $1.25.

Gypsy** — LSC Movie. Sat, Jul 23, 7 & 10pm, Rm 26-100. Musical starring Rosalind Russell & Natalie Wood. Admission, 75¢ w/MIT or Wellesley ID.

Music

Stephen and Beatrice Erdely* — Violin/piano duo will present a sonata recital, performing Sonata in A by Hindemith, and works by Mozart, Darius Milhaud, and Brahms. Tues, Jul 12, 8pm, Kresge. Free.

John Buttrick Piano Recital* — Two preludes and fugues from the *Well-Tempered Clavier*, Book II by Bach; Sonata #21 in C Major, Opus 53 by Beethoven; The Cypresses of the Villa d'Este & Funerailles by Liszt; Twenty-four Preludes, Opus 75 by Chopin. Fri, Jul 22, 8pm, Kresge. Free.

Dance

MIT Summer Dance Workshop** — Workshop in composition led by Beth Soll, and self-motivated projects. Tues & Thurs, 5-7pm, duPont W31-125. Info: Stina Cooke, 491-6050, lv msg.

MIT Folk Dance Club — International: Sun, 7:30-11pm, Sala. **Balkan:** Tues, 7:30-11pm, Stu Ctr Rm 491. **Informal:** Fri, 12n-2pm, Kresge Oval (Bldg 7 Lobby in bad weather). **Israeli:** Thurs, 7:30-11pm, Sala.

Exhibits

Strobe Alley* — High speed photographs by Harold E. Edgerton, Institute Professor and Professor of Electrical Measurement, Emeritus. Bldg 4, 4th fl.

Hart Nautical Museum* — Permanent exhibit of rigged merchant and naval ship models, half models of yachts and engine models. Open daily in Bldg 5, 1st floor.

Canones* — Music Library, Rm 14E-109. Examples of the use of canons from 7 centuries of music.

MIT Historical Collections* — Permanent exhibition Mon-Fri, 9am-5pm, Bldg N52, 2nd floor. **Bicentennial Exhibits:** Katharine Dexter McCormick, '04; Vannevar Bush, '16; Karl Taylor Compton; Norbert Wiener, and 1876 Exhibit, Bldg 4 corridor. **The New Technology Exhibit** 2nd floor balcony of Lobby 7. **Energy Exhibit** Bldg E40, 1st floor. **Radiation Laboratory Exhibit** main corridor, Bldg 8. **Center for Space Research, Astrophysics Exhibit** Main corridor, Bldg 4.

Graphics by MIT Design Services* — On exhibit in Bldg 7 corridor.

Freshmen are encouraged to attend departmental lectures and seminars. Even when these are highly technical they provide students one means to learn more about professional work in a department and field.

***Open to the public**
****Open to the MIT community only**
*****Open to members only**

Send notices for Jul 20 through Aug 14 to the Calendar Editor, Room 5-111, Ext. 3-3270, before noon Friday, Jul 15.

Hutt to Receive Underwood-Prescott Award

(Continued from page 1)

industry and the consumer.

Mr. Hutt was chief counsel for the Food and Drug Administration and assistant general counsel of the US Department of Health, Education, and Welfare from 1971 to 1975. He is a member of the Institute of Medicine, National Academy of Sciences (NAS) and a member of the Governing Council. In addition, he is a member of the NAS Committee on a Study of National Needs for Biomedical and Behavioral Research Personnel.

He is a member also of the Institute of Medicine Health Sciences Policy Advisory Committee, a member of the Advisory Board of the Center for the Study of Drug Development at the University of Rochester School of Medicine and Dentistry and a member of the Advisory Panel on Regulatory Reform of the US Senate's Committee on Government Operations.

Mr. Hutt received the BA degree magna cum laude from Yale University in 1956, the LLB degree from Harvard Law School in 1959, and the LLM degree in 1960 from New York University where he studied under a fellowship from the Food and Drug Law Institute. From 1960 to 1971 he practiced law, specializing in food and drug law, with the Washington, D.C. firm of Covington and Burling, which he rejoined in 1975. He became a partner in this firm in 1968.

He has received numerous honors and awards for his work and is the author of many papers and articles in his fields. He has been a member also of the New Foods Panel of the White House Conference on Food, Nutrition and Health (1969-70), a member of the Committees on Cosmetics and on Agency Procedure of the Food, Drug, and Cosmetic Law Division of the American Bar Association's Corporation, Banking and Business Law Section (1970-71), and chairman of the Food and Drug Law Committee of the American Bar Association's Administrative Law Section (1965-66).

Dr. Ogden C. Johnson, who will speak at the symposium on "Food Labeling for Consumers," is responsible for the research and development programs and coordinates quality assurance and laboratory activities for the Hershey Foods Corporation, Hershey, Pa.

Before joining Hershey, he was Director of the Office of Nutrition and Consumer Sciences of the Food and Drug Administration, with responsibility for nutrition, consumer science, and food service sanitation programs.

Dr. Johnson had served earlier as Chief, Domestic Unit, Nutrition Program, Health Services and Mental Health Administration of the US Department of Health, Education and Welfare; as assistant secretary of the Council on Food and Nutrition of the American Medical Association; and as senior research chemist of the A.E. Staley Manufacturing Company.

Dr. Johnson received his BS, MS and PhD degrees in food science from the University of Illinois. He is a member of a number of professional societies including the Institute of Food Technologists, the American Institute of Nutrition, the American Public Health Association, and the American Chemical Society.

Dr. Gordon F. Bloom's topic for the symposium will be "Government Regulation: The Hidden Tax on Food."

An authority on food management, with wide experience both in commercial food marketing and distribution and in research in productivity in the food industry and food economics, Dr. Bloom served as chairman of a task force of MIT scientists who assisted the food industry in selecting the Universal Product Code symbol now displayed on packages of most grocery products for automatic checkout systems.

He is also one of the originators of an experimental MIT program called TAFI, standing for Technology Applied to Food Industry, which is attempting to effect collaboration of food industry executives and engineers who have an interest in developing technology for the industry.

Dr. Bloom has served as chairman of the board of directors of the National Association of Food Chains and is former president and general manager of Elm Farm Foods Co., a Massachusetts supermarket chain. He is a member of the Food Retailing Advisory Commission, Office of Emergency Preparedness, Executive Office of the President, and a member of the Food Industry Advisory Committee of the Federal Energy Administration. He is the author of numerous publications in his fields, including business and urban problems, economics and labor law and public policy and administrative law.

Dr. Bloom holds the BA degree from the University of Buffalo; MA, MPA and PhD degrees from Harvard University, and LLB and JD degrees from Harvard Law School.

The Underwood-Prescott Award and Lectureship are in memory of William Lyman Underwood, grandson of William Underwood, who founded the Wm. Underwood Co. in Boston in 1822, and Dr. Samuel Cate Prescott, the first dean of the School of Science at MIT.

In one of the first industry-university partnerships, they were the first to establish in 1895 that spoilage in canned foods was due to bacteria. Together they developed the temperature and time guides necessary to destroy the spore-forming organisms responsible for the spoilage of foods and thus established the scientific basis of the modern canning industry.

Obituaries

Margaret G. Alvord

Word has been received of the death of Mrs. Margaret Greham Alvord of Kittery Point, Maine, formerly housemother of the MIT women's residence at 120 Bay State Rd. Mrs. Alvord, 84, died Wednesday, June 8, following a long illness.

Mrs. Alvord, the widow of Professor Henry B. Alvord of Northeastern University, was housemother at Bay State Road from 1945 until her retirement in 1957.

Survivors include two daughters, Mrs. Margaret Tharp of Cardiff, Calif., and Mrs. Jean Ruth Cramer of Overland Park, Kan., a son, Graham G. Alvord of Kittery Point, two sisters, 11 grandchildren and 18 greatgrandchildren.

Eugene S. Cotton

A memorial service for Eugene S. Cotton, 55, of Lexington, assistant leader of Group 52 at Lincoln Laboratory, will be held Friday, July 8, at 3pm in St. Brigid's Church in Lexington. Mr. Cotton died Sunday, July 3.

Mr. Cotton is survived by his widow, Mary Kelly Cotton, a son, John W. Cotton of Washington, D.C., a daughter, Dr. Deborah Cotton Lipsett of Brookline, and a brother, Edward W. Cotton of Indianapolis, Ind.

Joseph L. Camera

Funeral services for Joseph L. Camara, 61, of Wilmington were held Monday, June 27.

Mr. Camara died Friday, June 24, following a long illness. He came to MIT in 1970 as a groundsman and had been on long-term disability since last August.

Mr. Camara is survived by his widow, Maria Silva Camara, two sons, Joseph S. and Ronald R. Camara, and several brothers and sisters.

Editors of *Ethics in Medicine*, from left, Stanley Joel Reiser, MD, William J. Curran, LLB and Arthur J. Dyck, PhD, were honored at a publication celebration recently at the MIT Faculty Club.

Book on Medical Ethics Published by MIT Press

Ethics in Medicine: Historical Perspectives and Contemporary Concerns, edited by Stanley Joel Reiser, Arthur J. Dyck and William J. Curran, has recently been published by the MIT Press.

The book contains the most inclusive set of primary documents and articles ever published in the field of medical ethics—from the earliest historical material and original public documents to the most recent codes of the American Medical Association. Nearly all of the original public documents and historical selections—more than 100 of them—appear in their entirety and a significant number would be difficult to obtain elsewhere.

The broad and varied scope of *Ethics in Medicine* integrates works from philosophy, religious ethics, history, political science, sociology, economics, law, medicine and biology. The essays and primary documents were selected to encompass divergent viewpoints and to encourage humane practices and deepen understanding of the multiple traditions that have shaped and do shape the development of medicine.

The editors have developed this text in teaching graduate and undergraduate courses at Harvard University over the past six years. Stanley Joel Reiser directs the History of Medicine Program at Harvard Medical School. Arthur J. Dyck is Mary B. Saltonstall Professor of Popualtion Ethics at the Harvard School of Public Health and a member of the faculties of the Harvard Center for Population Studies and the Harvard Divinity School. William J. Curran is professor of legal medicine at Harvard Medical School. They are also codirectors of the Kennedy Interfaculty Program in Medical Ethics at Harvard.

Ethics in Medicine is available at a prepubication price of $29.95 to September 1 and $40.00 thereafter. A student edition is available in paperback at $19.95. For further information, call Brooke Stevens, x3-5642.

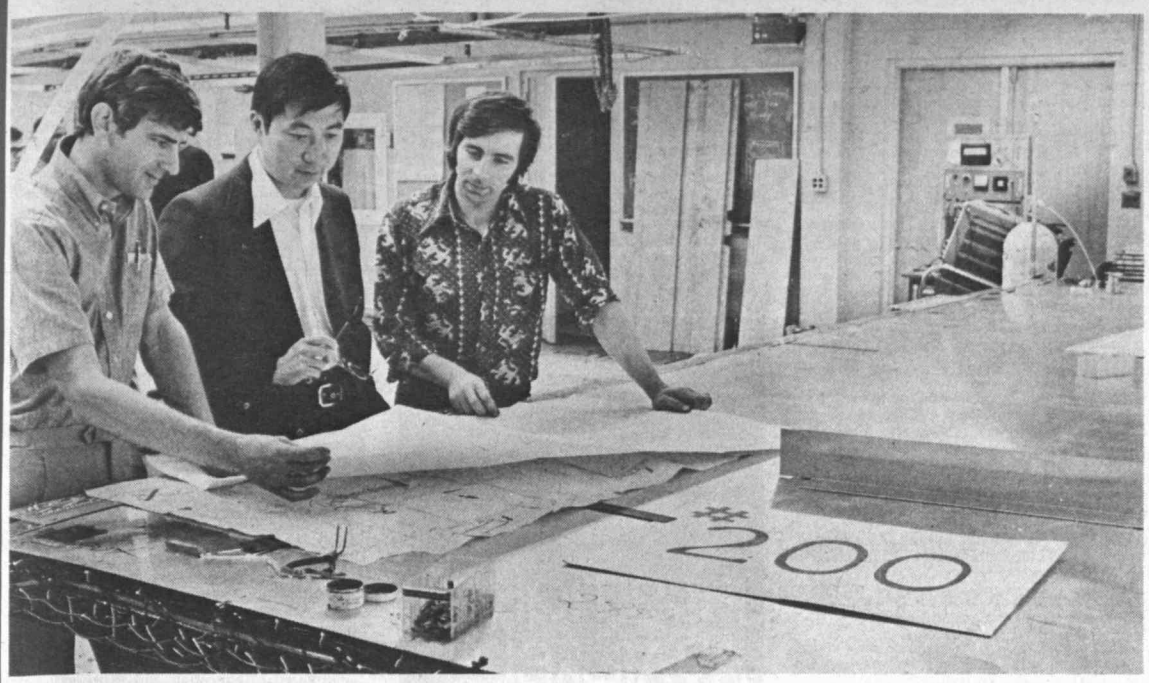
Soccer Team Places Third

The MIT Amateur Soccer Team has finished the first half of its season with a 4-2-1 record, for third place in the Bay State Industrial League.

In the recent Massachusetts Knockout Cup Tournament the team first beat the Canary Square team from Jamaica Plain 10-0, then scored an upset victory over first-place Honeywell, 4-2.

The second half of the season and cup finals will be completed in the fall. Meanwhile the team is playing formal matches in a Boston tournament and informal matches against local teams.

Anyone interested in playing soccer with the MIT team may call Tom Stagliano, x3-2433, or Al Lush, x3-2736.



Dr. Samuel C. C. Ting (center), Nobel-laureate and professor of physics, checks construction at the MIT Laboratory for Nuclear Science of the 200th and last particle detection panel for his new experiments in Europe. The 8-foot by 19-foot chamber containing the 200th panel was shipped Friday, June 24, to CERN, the European Center for Nuclear Research, near Geneva, Switzerland, where the experiments are scheduled to begin at the end of July. At CERN Dr. Ting hopes to find higher energy particles similar to the "J" particle. Dr. Ting who is Thomas Dudley Cabot Professor at MIT, shared the 1976 Nobel Prize in Physics with Professor Burton Richter of Stanford University for the discovery of the particle named "J" by Dr. Ting and "psi" by Professor Richter. Assisting Dr. Ting are David M. Osborne (left), and Peter Berges (right), staff scientists in the Laboratory for Nuclear Science.

—Photo by Calvin Campbell

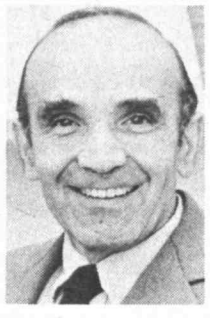
I.M. London Appointed Hermann Professor

(Continued from page 1)

portantly to the growth and strength of those two areas of teaching and research and we have every confidence that our participation in the new professorial chair to be occupied by Dr. London will have the same stimulating effect in the area of health science and technology. Under the leadership of Dr. London, an enhanced linkage of current and future technology with developing medical resources will be achieved for the benefit of our society."

The Harvard-MIT Division of Health Sciences and Technology which Dr. London directs seeks to join the complementary strengths of the two universities in the education of physicians, biomedical scientists, medical engineers and medical physicists. The Division also aims at the solution of important health and medical problems by promoting productive multidisciplinary collaborative research.

Dr. London is a graduate summa cum laude of Harvard College (1939) and Harvard Medical School (1943), and was a Sheldon Fellow in 1939 and 1941. After a medical internship at the Columbia-Presbyterian Medical Center in New York, he entered military service and engaged in research on antimalarial drugs and on the clinical treatment of malaria and schistosomiasis. He served also as the Army staff medical officer at the Bikini atom-bomb tests. Following military service he returned to Columbia for residency training, and served on the faculty from 1947 to 1955. From 1955 to 1970, he was the first professor of medicine and chairman of the Department of Medicine at Albert Einstein College of Medicine in New York, serving simultaneously as director of medical services at the Bronx Municipal Hospital Center.



Dr. London, a native of Malden, Mass., returned to the Boston area in 1969 to become professor of biology at MIT, visiting professor of medicine at Harvard Medical School and director of the Harvard-MIT Program in Health Sciences and Technology then being formed. He was made professor of medicine at both Harvard University and physician at the Peter Bent Brigham Hospital in 1972. The Harvard-MIT Program in Health Sciences and Technology was recently established as a formal inter-university Division with Dr. London continuing as director.

Dr. London has made important contributions to the knowledge of human red blood cells, the origins of bile pigment, and the synthesis of hemoglobin in normal and in disease states. His early research, with colleagues in the Department of Biological Chemistry at Columbia University, led to the development of methods by which the normal life span of human red blood cells could be ascertained. This led, in turn, to studies of the life span of red cells in sickle cell anemia, polycythemia vera, and pernicious anemia.

Dr. London was among those who early recognized the opportunities for application of the emerging knowledge of molecular biology to the study of human physiology and medicine, and his recent work on the metabolic control of heme and globin synthesis has broad implications for many human anemias.

Among the many honors accorded Dr. London was the receipt, in 1966, of the honorary Sc.D. degree from the University of Chicago. He is a member of the National Academy of Sciences, and is a charter member of the Institute of Medicine. He holds the Theobald Smith Award in Medical Sciences of the American Association for the Advancement of Science. He is a former president (1963) of the American Society of Clinical Investigation. He has held numerous honorary lectureships, including those of the Harvey Society and the Jacobaeus Foundation. He is a member of the Harvard chapters of the medical honor society Alpha Omega Alpha, and Phi Beta Kappa.

Dr. London is a member of the American Academy of Arts and Sciences, American Society of Biological Chemists, Association of American Physicians, Harvey Society, International Society of Hematology, Interurban Clinical Club, Practitioners Society, and the Society for Developmental Biology. He has served on numerous government panels, most recently as a member of the National Cancer Advisory Board.

Dr. London and his wife, Huguette, have two sons, Robert, Amherst '79, and David, Buckingham, Browne and Nichols, '77.

Dr. Malkus To Chair Applied Math

Dr. Willem V.R. Malkus of the MIT Department of Mathematics has been appointed chairman of the department's Committee on Applied Mathematics, to succeed Dr. Daniel J. Kleitman.

The appointment was made by Dr. Robert A. Alberty, Dean of the MIT School of Science, and Dr. Kenneth M. Hoffman, Head of the MIT Department of Mathematics. They also announced that Dr. W. Gilbert Strang will continue as Chairman of the Committee on Pure Mathematics.

Dr. Malkus, professor of applied mathematics, and Dr. Strang, professor of mathematics, will have important responsibilities in the administration of the mathematics department.

Professor Malkus began his research career investigating the properties of the magnetic monopole, and he has recently made important contributions to the theories of turbulence, thermal convection, and the dynamo problem for the earth's magnetic field. He is currently engaged in a theoretical study of the effects of additives on turbulent pipe flow, and in laboratory studies of spheroids.

A member of many professional and scientific societies, including the National Academy of Sciences, Professor Malkus came to MIT as professor of applied mathematics in 1969. He was a professor of geophysics at the University of California, Los Angeles, from 1960 to 1967, and a physical oceanographer at the Woods Hole Oceanographic Institution from 1951 to 1960, with a joint appointment as professor of oceanography at MIT from 1958 to 1960. He is active as editor and referee for a number of professional journals. He received his PhD in physics from the University of Chicago.

Lamme Award Honors Shapiro

Ascher H. Shapiro, Institute Professor and a member of the Department of Mechanical Engineering, has been honored by the American Society for Engineering Education with the Lamme Award.

The award, the society's highest honor, is bestowed for excellence in teaching and for contributions to the art of teaching, to research and technical literature, to the advancement of the profession and to engineering college administration. The award was presented at the society's 85th annual conference, held June 27-30 at the University of North Dakota.

The Society also presented a division award to Dr. Robert C. Reid of the MIT Department of Chemical Engineering and a Western Electric Fund Award to Dr. James K. Roberge of the Department of Electrical Engineering and Computer Science.

Professor Reid won the Chemical Engineering Division Lectureship Award bestowed annually upon a distinguished engineering educator. Professor Roberge's award was for excellence in the instruction of engineering students.

Richard Held Named Head of Psychology

(Continued from page 1)

Foundation and visiting professor at the Department of Psychology at MIT, until he joined the faculty of that department in 1963.

Dr. Held is a Fellow of the American Academy of Optometry, the Eastern Psychological Association, and the American Psychological Association, where he served on the executive committee, the Board of Scientific Affairs, and is the newly-elected president of Division 6—Division of Physiological and Comparative Psychology. He is also a member of the Association of Members of the Institute for Advanced Study, the International Brain Research Organization, the International Society for Developmental Psychobiology, Sigma Xi, Society for Neurosciences, and numerous other professional organizations. In addition, Dr. Held is an elected member of the Society of Experimental Psychologists, the American Academy of Arts and Sciences, and the National Academy of Sciences.

He serves on the Committee on Vision—Armed Forces National Research Council, the Board of Directors of the Foundations' Fund for Research in Psychiatry, the executive Committee of the International Neuropsychological Symposium, and the Committee on Research in Infancy of the Child Study Center at Brown University. Dr. Held has been a member of the Experimental Psychology Study Section of the National Institutes of Health (1964-68) and was chairman of that Study Section from 1966-68.

Dr. Held is on the editorial boards of a number of publications, including *Proceedings of the National Academy of Sciences, Psychological Research*, and *Perception* (a British journal). He is an editorial consultant for the Professional Education Division of *Scientific American* and is on the board of directors of Sinauer Associates, Inc., a publishing company.

In his own research laboratory, Dr. Held is conducting several research projects including one concentrating on the development of vision and its pathologies in human infants, and parallel work on the development of vision in the monkey which provides an animal model for experiments which cannot be done with human subjects. One of Dr. Held's better known experiments demonstrates the importance of active movement in the development of visually coordinated behavior. Here, an active kitten pulls a passive one in a restricted visual environment—the so-called kitten carousel. Dr. Held has also conducted experiments on adaptation to rearranged vision; the development of eye-hand coordination in infant monkeys; the color-contingent tilt aftereffect, and the determinants of man's orientation in space.

Recently, Dr. Held received an honorary degree (Doctor of Ocular Science) from the New England College of Optometry.

A resident of Cambridge, Dr. Held is married, has three children, and recently completed serving a term on the board of governors of the Cambridge Tennis Club. He is also a member of the Old Cambridge Shakespeare Association.

Carter Nominates Hansen As Nuclear Commissioner

(Continued from page 1)

tration, which is the prime research and development agency for nuclear power, and the NRC, essentially a watchdog agency responsible for the licensing of all nuclear facilities—both those intended for the generation of electric power and those intended for research—and for the development of additional licensing regulations. It also sponsors research in developing safety standards and procedures for the use of nuclear materials in both energy production and other uses such as medical applications. The NRC has no responsibility for encouraging the development of additional nuclear facilities.

Professor Hansen, who received the SB in physics in 1953 and the ScD in nuclear engineering in 1959, both from MIT, is widely noted for his work in nuclear reactor theory and mathematics, reactor safety analysis and nuclear fuel management.

He is a fellow of the American Nuclear Society and has been a member of the Society for Industrial and Applied Mathematics, the Association for Computing Machinery, the American Society for Engineering Education, the Society of Sigma Xi and Sigma Chi Fraternity.

Dr. Hansen, 45, is a native of Chicago. He was married in June 1959 to the former Katherine Elizabeth Kavanagh, who died Dec. 3, 1975. Their children are Thomas Kay, 17, and Katherine Mary, 15. On June 25 Professor Hansen married Deborah Lea Hill of Boston. The family lives in Bedford, Mass.

CISR Plans Information Seminar

The MIT Center for Information Systems Research (CISR) is presenting a five-day seminar, July 18-22, concerning recent findings on major issues in the information systems area.

The seminar, entitled "Current Issues in Information Systems Research: A Managerial Perspective," will cover current research results and relevant concepts in connection with the management of computer-based information systems.

Some of the topics include: distributed processing, database systems, decision support systems, implementation, microprocessors, operating systems, performance evaluation, and privacy and security.

CISR was established at MIT's Sloan School of Management in mid-1974. Its activities focus on research aimed at improving the effectiveness of information-processing tools and techniques available to managers in the private sector and policy makers in the public sector.

For additional information on the seminar, contact Sarah S. Fitzgerald or Linda E. Kramer at Rm E53-316, x3-3372 or 3-2930.

Rotberg is Author Of Africa Book

An MIT professor is one of the authors of *The Black Homelands of South Africa*, a book exposing aspects of South Africa's racially divisive program of separate development, was published in June by the University of California Press in its special series on southern Africa.

The Black Homelands was written by Robert I. Rotberg, professor of political science and history. His co-authors were an historian from Wesleyan University and an economist from the University of Maryland.

The book began as a report for the US Department of State and was then updated, revised, and expanded. It is based on interviews with homeland leaders in South Africa, on a detailed analysis of official and press data, and on economic and political surveys.

The authors concede that the creation of homelands has given black politicians a public platform that they would not otherwise have had, and that several homeland prime ministers have made good use of their platforms to criticize South African policy. As economic entities, however, the homelands are failures, the authors conclude, and cannot achieve legitimacy or viability as nations.

CLASSIFIED ADS X3-3270

Ads are limited to one per person per issue and may not be repeated in successive issues. All ads must be accompanied by full name and Institute extension. Only Institute extensions may be listed. Members of the community who have no extensions may submit ads by coming in person to the *Tech Talk* office, Room 5-111, and presenting Institute Identification. Ads may be telephoned to Ext. 3-3270 or mailed to Room 5-111. **Please submit all ads before noon, Friday, Jul 15. They will be printed on a first come first serve basis as space permits.**

For Sale, Etc.

Wstnghse wshr & dryr, hvy dty, 3 yrs; 9' Slate Bed pool tbl; 17 cu ft wstnghse top freezer; apt refrdg; 12000btu Quiet Kool air cond; 20 gal aquarium, pump & stnd, color grvl. Call 891-0092.

Exc 4' matte blk deacons bench st, 1½" thick, $25. Call 484-0494, aft 2.

B&W TV in cbnt, nds wrk to restore radio & phonograph, but tv wrks fine & cbnt is beaut, ask $30. Call 322-3034.

Primus DX bike pump for Schraeder (Amrcn) valves. x3-7805, lv msg.

Gold barrel chr, gd cond, $25. Diane, x8-1766 Draper.

Teletype, mdl 33ASR, nw, in orig crtn, $750. Ralph, 862-5904, evgs.

Steering clmn lck for late mdl car, prvnts tmprng w/ign, $20. Bill, 247-7775, lv msg.

Fedders air cond, 1 yr, 5,000btu, $95; 225 sq ft Armstrong vinyl tile, bge mrbl, $25. Jake, x8-1478, Draper.

Crib & mttrss, drssng tbl, car st, rocking chr, gd cond. Ana, x8-4616 Draper.

EPOI Printrol electronic enlarging drkrm timer, exc cond, $35. Call 232-7540.

Apache tent trlr, slps 6, stove, icebx, dng tbl, zip on canopy, exc cond, incl Camel 12x12 scrn hse, $550. Rocky, x8-3657, Draper.

McIntosh MC250 + Crown IC 150, $450. x3-5384.

LRE 80 Lafayette amp, 18 w/ch, exc cond, $65. Albert, x3-6561.

Singer sewing mchn, 15+ yrs, wrks wl, no fancy stitches, $25; Supershooter Polaroid cmra, used 2x, $20. Merry, x3-7353.

DR furn, dnsh mod, buffet tbl, 4 chrs, $200. Susie, x3-4856.

M 10 sp touring bike, 21", 27lbs, blu, lthr st, VGT lux derailler, ridden 50 mi, exc cond, $160 or best. x3-1653.

Steindorff binocular microscope, blt-in lt srce, graduated stage, 35x, 100x, 400x, 1000x, crryng cse, exc cond, perf for med stu, $450. Lou, 354-2077.

Wedgewd Victoria, 8 pl set, ovn-to-tbl, retail, $260, in crtn sell for $100. Call 266-8418.

Sofa, 3 sts, $70; DR tbl, $60; Little dsk, $30. x3-6829.

Kenmore sewing mach w/attchmnts, gd as nw, $30. x3-4153.

Antique 1855 Steinway, sq grnd piano, fully rstrd & tuned, in mint cond, rosewd veneer w/crvd Vctrian legs, $3,500. Linda, x3-6838, morns.

Refnshd wd dsk, $25; fld dwn blk sofa, $30; blu Formica K tbl, 4 chrs, xtra leaf, $35; all gd cond. Call 625-1374, evgs.

DR set, mirror, drssr, nite tbl, exc cond, wht lacquered wd, ownr lvng cntry, must scrfce, $250 or best, wrth 2x price nw. Dick Samuels, x3-6625.

Stereo equpmnt & tps, br nw, dscnt prcs, e.g. Maxell UDC90 csstts, $2.75/ea. Rich, 787-5288, evgs, lv msg.

Wtrbed, kng sz, Wtrrst mttrss w/htr, 6x9 wd frm & liner, best over $40. Joe, x3-2158, T, Th, 4-8.

Early Am hutch, 48" wd, 3 drwrs, cbnt undrnth, prcln knobs; Mtchng server, 36" wd, xclnt cond; $300/both. Gary, x5861 Linc.

'70 Fleetwood mobile hm, 12x64, in Pepperell, 3BR, 1½B, ac, sale by ownr. Call 322-6318.

Lightning sailbt, #8698. fbrgls on wd, exc cond, ideal first boat, $1,250. x3-2572.

PDP-8 Microcomputer kit: IM6100 chip set, undebggd wirewrppd brd, $70; 6' rack cbnt w/3 drs, xtras, $30. Roy, 861-6369, evgs.

Bike rack, nw, fts on rear bmprs (not VW), $15. Judy, x3-5542.

Hobie Cat 16 Sailbt, '74, lw hours, exc cond, ask $1650. x3-2964.

Krook lock. Chet Janiak, x8-2442 Draper.

F Columbia 10 sp bike, 21" gd cond, $60; M 10-spd bike, Austrian, Campy deraill, Weinmann ctr pull, qk rls brks, qk rls hub, gd shape, $90 or best; BSR-310-AXE auto trntbl, exc, nr mint cond, $40. Ellen, x3-7723.

Raleigh Mountie f 20" bike, $20; Hoover apt prtble wshr & spin dryer, orig $250, ask $100. Call x3-7022.

Sailing Cape Dory, 10½', gd cond, ready to sail, best. x181 Linc.

Dbl bed, $100; tstr, $5; bean bg chr, $10; 2 tel tbls, $3/ea; tennis rckt, $15; baseball, $5; chr, $3; Persian crpt, $500. Mohmoud, x3-4165.

Grn bean bg chr, vy cmfrtble, $10. Nichols, x314 Linc.

SME 3009/SZ imprvd tone arm, exc cond w/all pts & accssries, list, $175, wl sell for $85. Bob, x5879 Linc.

Blu/grn rclnr chr, wdn arms, $25; 26" blu & wht f bike, $25; Rgultn ping-pong tbl w/accssries, $25; Royal prtble typwrtr, $25; 18" hand lwn mwr, $15. Dave, x5893 Linc.

Int std sz drs, 2, $7.50/ea; fldng dr, $5; 2 pin up wrght iron lmps, $5.50/ea; 2BR rugs, grn 37x60, $5.50, blu 28x48, $4; 2 grn shwr crtns, $2.50/ea, blu shwr crtn, $2.50; air hcky tbl game, $10; games, pzzls, toys, chldrns rcrds, 50c-$1.50; sm fan, $5; stcse, $2.50; var brckts & shlvs. Gunderson, x3-6085.

B&W tv, 19", uhf, vhf, gd cond, $40; M rt hnd Nrthwstrn 7 pc golf club strtr set, 1, 3, wds & 3, 5, 7, 9 irons, putter, delux vinyl carrying bg, lk nw, $40. x8-3235 Draper.

Realistic 3 band UHF/VHF, scanning monitor rcvr, 16 chnnl, nw $229.95, ask $90, about 2 mo old. Dale, x8-3337 Draper.

Bike, 3 sp, 21" frm, $30; Sears 6 strng guitar, $10. x3-3650.

Lamb PML 420 Mixer (4-2), & pwr sup, $275; Dynaco SCA 35, int amp, $85; Dynaco Quadapter, $15; Hdphns, $15; Grunding R/C set, $65; Rolling Stone Mag, 11/74-6/77, best; all prices nego. Michael, 661-3332, kp tryng.

Rust BR rug, 50x118, $15; Solid oak desk, 43x-32x30, $25; Twn bed, mttrss & bx sprng, $20; Purple easychr, mod, $10. x3-6796.

All glass 10 gal aquariums, 2, w/mtl stnd, cvrs, lgts, fltrs, htrs, grvl, $35. Paul, x7221 Linc.

Stereo syst, PE trntbl by Dual, $60; 8 trk plyr, $27; KLH rcvr, $110; Scott spkrs, $130; Entire systm $299; Dolby Noise Rdctn Unit, $65. Mike, 661-8857, lv msg.

F Raleigh bike, 3 sp, gd cond, best; Oriental design rug, 9x12, wine color, incl rug pad, $30. Phyllis, x8-1308 Draper.

Amana air cond, used 1 sum, 6000btu, $120; Burgundy vinyl sofa, $20. Emden, x3-7579.

Shag rugs, blk & off wht, 28 sq yds, $50, 12 sq yds, $20. Dave, x7689 Linc.

Vy cmfrtble lg gold couch w/fold out bed, $60. x3-7801.

Childs BR set, sgl bed, 4 drwr drssr, toy cupboard, sml tbl, $150. Call 492-2806.

Drssr, 47x22x35, 4 drwrs, ivory, $25. Hori, x3-1827.

Air cond, 4,000 btu, for 1 or 2 rms, ideal for dorm, $95. x5-9397 Dorm.

Nw pr Brazilian soccer shoes, Olimpica sz 12 — $15; Twice used pr Brazillian soccer shoes, Olimpica, sz 11, $5. Paulo, 494-8448.

Baby crrge/stroller, $50; Crib, orig $135, ask $75; Booster chr, $4; Plastic bthtub, $3; Sandbox, $12. x3-4095.

Kng sz bdsprd, yel, $15; b&w tv, $20; pole lmp, $8; 3 drwr drssr, $15; Formica top cocktail tbl, $10; 3 decorator wall lmps, $6/ea; hibachi, $1; 20 cement blocks, 10¢/ea; 3 tiered bedside tbl, $5; more. x3-7304.

Fedders air cond, 5,000btu, exc cond, $75. x8-1583 Draper.

GE self-defrstng refridge/freezer, exc cond, $100 or best. Jane, x3-6334.

Wlnt coffee tbl, $10, 2 sctns stockade fence, $25; Philco console color tv, nds pctre tube, best. x3-1782.

Briefcase, blk Samsonite Classic 100, attache, combo lock, hardly used. Call 864-0453, aft 6.

Phys Rev D, Phys Rev Letters, 1965-1970, free for the taking. David Hearn, x3-7529.

Raleigh Sprite f 5 sp 21" bike w/stnd, exc cond, $65. x3-2523, kp tryng.

RCA color tv, 19", $150, tbl, $50; chrs, 4, $10/ea; desk & chr, $30; bk case, $15; wshng mchne, $30; rcrd player, $20; vacuum cleaner, $20; coffee tbl, $25; steam iron, $7; fan, $15. Oshima, 864-5344.

Raleigh f bike 5 sp, 21", hardly used, $65; Raligh m bike 5 sp, 23", $45; 5000 btu air cond, old, $55; 10000 btu air cond, nw, $125; director's chr, blk & wht, $15. Api, 547-0490, evgs.

DR tbl, chrs, bkcse, sgl bd, playpn, crib, slide proj, misc furn, x3-7121.

Vehicles

'62 Honda mtrcycl 150cc, elec start, nw bttry, $100. Gil, x372 Linc.

'66 Dodge Coronet, 3 dr, sdn, sl 6, nw tires & snows, nw brake systm, altrntr, bttry, not too great to look at, but gd trnsprtn, make offr. x7469 Linc.

'67 Cougar, nw brake syst, runs well, $295 or best. Lee, x3-5567.

'67 VW sqbck, pr bdy, runs wl, $350 or best. Edward, x3-2538.

'69 Ford Fairlane, V8, 302, auto, pwr st, ac, 2 dr, tint gl, vinyl top, gd cond, $495, moving, must sell. Call 924-4064.

'69 Impala, vy gd cond, $1,200. x3-6823, kp tryng.

'69 Olds Delta 88, exc mech cond, 74K, nw dstrbutr & lftrs, $300 or best. Doug, x8-2818 Draper, fri.

'69 VW Beetle, fair bdy, some bdyrst, eng blwn, ask $250. Ed, x3-5944, 3:30-5:30.

'70 BMW 2002, $800. x313 Linc.

'70 Corvette cnvrtble, 4 spd, 350, nw radials, top, bttry, $3,800. Call 547-5379.

'70 Datsun 240Z, blk w/red pin stripe, mag whls & radials, CB radio incl. Leigh, 935-5860, days.

'70 Ford wgn, pwr st & brks, ac, luggage rk, trlr hitch, studded snows on spare rims, 90K, $550. Frank, x8-1576 Draper.

'70 Javelin 304, V8, nw tires, muffler, ac, rns wl, nds bdy wrk, best. Call 275-6309, aft 6.

'70 VW bus, std, radio, gd bdy, 60K, going abroad, $1,600 or best. Call 462-8900.

'71 BMI 2002, Blaupunkt stereo, auto alarm & ign cutoff, 67K, $2,950. Jeff, x3-7472.

'71 Fiat 124 Spt, exc mech cond & bdy, 5 sp, amfm, 68K, radials, fun to drive, must sell, ask $945. Wang, 868-1819.

'71 Honda 175, St Scrmblr, $300; two 15" radials, $40. John, x3-6236.

'72 Nova 4 dr sedan, auto, exc cond, nw bttry & tires, 54K, $1,400. Marion, 965-4574, evgs.

'72 Pinto, 2 dr, 4 cyl, 4 spd, std, 70K, 1 ownr, gd cond, $700, Nancy, x3-6756.

'72 Pinto, auto, radio, gd running cond, some bdy rst, lw mileage, $450 or best. Sharif, x3-6531.

'73 Ford Grand Torino, 2 dr, vinyl top, auto, pwr st & brks, exc cond, best. Joe, x8-2897 Draper.

'73 Renault 12, frnt whl dr, radials, amfm, perf bdy, exc running cond, orig ownr lvng cntry, must sacrifice, best rsnble offer. Richard Samuels, x3-6625.

'73 Toyota pick-up, 33K, lk nw, auto, bucket sts, step & tow bmpr, $2,000. x8-4481 Draper.

'73 Honda 350, 17.6K, bgt nw & babied, orig org w/crsh bar & rear carrier, $650. Paul, x56211 Linc.

'74 Mazda RX2, auto, ac, 31K on 50K wrrnty, 4 nw radials, $2,300 or best. Call 776-0349, aft 5.

'74 Plym wgn, 60K, 8 cyl, radio, $900, ownr lvng cntry. Call 648-1580.

'74 Vega htchbk, std, mint cond, best. x3-5542.

'75 Plym Valiant, cstm, blu w/wht vinyl rf, 7K, auto, pwr st & brks, rear defogger, amfm, snows, $3,350. Brett, x3-5932.

'75 Volvo 242 DL, great cond, 30,000 mi, amfm, radials, std. Kevin, x3-4884.

'75 650cc Yamaha mtrcycl, lw mileage & gd cond, $1,000 or best. Stu, x3-4884.

'76 Fiat X19, lw mileage, exc cond, ask $4,000. Ellen, x3-2740.

'76 Ford Elite, pwr st & brks, 14K, exc cond, rsnbly prcd, x7289 Linc.

'76 Honda CB550, 31K, lk nw, $1,650 or best. Gene, x3-1830.

'76 Moped Puch, 1 mo old, less than 50 mi, nw $570, ask $500 or best, incl lock. Dave, x7541 Linc.

Housing

Bos, Chs Riv Pk, sub immed, 2-5 mos, compl furn & equipped, BR, swim, ac, tennis, nr T & shops, $420. x3-1553.

Bos, sum sub w/fall optn, $125 Jul & Aug, $165 fall, studio, Kenmore Sq area, Pete, 266-4363.

Bos, condo for sale, nwly renovated, 2BR on Beacon St, nr Mass Ave bridge, 10 min wlk to MIT, $26,000. Allen, x3-6279.

Camb, Cntrl Sq, 5 min to T, 15 min wlk to MIT, 3 rm apt sub for Jul & Aug, 1 yr lease 9/1, $180 incl util. Call 547-3755, aft 5.

Camb, Aug sub, beaut, sunny BR apt, 10 min wlk Nth of Harv Sq, vy low rent in rtrn for care of plants & cat. Martha, x3-5618.

Camb, Cntrl Sq, 3 rm apt sub 1 mo w/opt, $188. Also nd person to drv U-Haul to Corvallis, ORE, gas pd. Mr. Hacker. x3-4067.

Cam, nr Cntrl Sq, 2BR apt, sub 7/1-9/1 w/opt, ac, grbge disp, ww, lndry in bldg, $290 incl ht & ht wtr. Tim, x3-6458.

Camb, nr MIT, 2BR apt, lg K, LR, $90 + util, f only, pref grad stu, call 661-6630, morns, evgs.

N. Camb, 9/15-8/15/78, 8 rm hse, furn, dw & lndry, nr plygrnd, prk, schls, fmly only, no pets, pref non smkrs, $500. x3-2285, kp tryng.

Lex, mini-estate, 7rms, 2½B, gar, wrkshp, grnhse, ovr acre trees & grdns, appraised at $91,500. Owner, 861-8521, aft 6.

Lex, unique cust contemp, exc cond, priv ½acre wooded setting on cul-de-sac, 3-4BR, 2 liv areas, 2 frpls, 3B, com pool, $85,000, Ownr. x8-3411 Draper.

Lex, almost acre nr schls & consrvtn land, blt in '72, 10 rm Garrison, incl Florida Rm, Breezway, fam rm w/frpl, basement/BR w/wtrbed & 3 upstairs BR, fruit trees on prprty, 2 car gar, $74,900. Call 862-4506, aft 5.

Manchester, MA, 46,000 sq ft, wded lot w/15' frntge on cul-de-sac, undrgrnd util, $23,000. Pete, 887-8208 (Topsfield), aft 5.

Som, Spring Hl, spac sunny apt w/mny plnts & 2 cats, sub 7/26-9/13, $200 + util. x3-4772.

W Rox, 8 rm apt, 5BR, 2B, LR, DR, K w/frdge & dw. Bill Mac, x7075 Linc.

W Rox, 3-4BR colonial, gumwd int, 1½B, mod K, 2 frpl, lg fenced lot, fruit trees & veg grdn, lw mntnnce, util & taxes, near schools, shops, T, ask $42,500. Call 327-6539, evgs.

E Falmouth, 2BR cttge for sum rntl, nr bchs, avail Jul & Aug. Call 325-5096, evgs.

Manchester, by the sea, lg 3BR Victorian, priv yd, shrt wlk to Singing Beach, attrctve surroundings, avail 7/23-8/6, $325/wk, x8-1457 Draper.

San Diego, CA, hse for rent/lease, 3BR, 3B, beaut vw, firepl, carpets & drapes, avail from mid-sum, $575, or will consid exch for MIT area housing. Ben Saltzer, x3-4935.

ME, nr Rangely, lux contemp, 3BR hse on hge lk, superb vw ovrlkng lk, mt rng, wldrnss, swim, hike, fish, canoe incl w/rent. x8-2577 Draper.

Land in Alexandria, NH, 13 acres, b/w Mt. Cardigan & Newfound Lk, 2 hrs from Bos, $12,000. Judy, x3-6148.

Nashua, NH, Garrison hme for sale, 8 rms, frpl, 2½B, ww throughout, 2 car gar, $65,000, immed occpncy. x5561 Linc.

Wht Mts, 3BR chalet w/frpl, secl loc nr Saco Riv, 20 min to No Conway, NH, avail Aug incl Volvo tennis wk, $110/wk. Steve, x5584 Linc.

Animals

Dsprtly need gd homes for 2 beaut 3 yr old altered cats, mvng & no pets allowed, 1 lng hair calico f, 1 shrt hair orange tiger m, both litter trained. Call 484-4919.

Free kitten. Gloria, x3-5303.

Lost and Found

Found, Sat, Jun 25, blk wtch. Call 494-8918, aft 7.

Wanted

Hse to rent for mo of Aug, pref nr T. x3-1901.

Rider to San Francisco, 7/16-23, shr drvng. Marion, 965-4574, evgs.

M 10 sp bike, 24" or 25", frm, gd cond. Joy, x3-2376.

Box from Cooley's on Newbury St that wld hld 4 wine glasses. x3-5279.

Junkie old bike, 1, 3, 5, or 10 sp. Will, 266-7797, evgs, lv msg.

Used director's chrs in gd cond. x3-1704.

Staff from MIT Nutrition Dept & Harv Med Sch cndctng study this sum on effects of brkfst on schl rel behvr, nd 9-11 yr old chldrn to prtcpte, subjs wl be pd. x3-3112 for info.

People w/ or w/o car to tour USA 4-5wks in summer. Michel, 547-4485.

Used filing cbnt for office. Joan, x3-5164.

Sqush prtnrs for sum & next acad yr, intermed level. Mitch Wallerstein, x3-5128.

Visiting prof seeking furn apt in Brklne or Nwtn, for 8/1, for 14 mos, 3BR, nr T, attractive, cozy home, up to $400 incl util. x3-4347.

Riders to Minneapolis or Chicago, lv around 7/24, rm for 1 or 2, wl camp nites. x3-5896.

Over 60? Volunteers needed for nutrition study at MIT, total time committment 6 hrs, subj wl be pd. x3-5602.

Visiting MIT lctrer wishes housing exc for hme in So Wales, 9-12 mo, 9/1 or 12/1, 1977, 3BR fam hse, mod, gas cntrl htng, wlkng dist to twn cntr & schls, nr cntryside, 10 mi no of Cardiff, 160 mi from London, gd bus & train, nd Bos/Camb hme for self, wfe, 2 chldrn, nr MIT, schls, shops, exch of cars also pssble. Dr. G. White, 7, Tygwyn Rd, The Common, PONTYPRIDD, Mid Glamorgan, CF37 4AA, U.K.

Refrdg, wl move. x3-1708.

Roommates

Bri, f, mid 20's + for nice 2BR apt, tree-lined st, nr T, $150.50 incl ht & hot wtr, non-tobacco smkr pref, but not essntl, int: sports, plnts, arts. Ellen, x3-4881.

Camb, nr MIT & Harv Sq, frndly, indep 25 yr old f grad stu & pttme wrkr, sks 1 or 2 stus or wrkng f to shr spac 5rm furn apt, safe nghbrhd, gd lndlrd, avail immed or Sept. Beth, 492-0208, morns.

F, 24, wnts to find apt w/other f, own BR, off st prkng, priv K. Call 494-8876.

Miscellaneous

Typing, theses, etc, IBM selec. x3-2680, morns.

Wl type papers, theses, etc, tech & non-tech, IBM Correcting Selec. x3-6678,

Exp tutor in math & sci, have been tutoring chldrn for 3 yrs, priv & w/MIT, if yr chld nds tutor call & we can talk, rsnble rates. Robert, 547-8396.

Typing, reports, theses, etc, tech & non-tech, IBM Correcting Selec. Brenda, x3-6678.

Any kind of typing done. Susan, x3-4701.

POSITIONS AVAILABLE

This list includes all non-academic jobs currently available on the MIT campus. Duplicate lists are posted on the Women's Kiosk in Building 7, outside the offices of the Special Assistant for Women and Work (10-215) and Minority Affairs (10-211), and in the Personnel Office, (E19-239). **During the summer months, an interim listing of new positions will be posted at the above locations on the Wednesdays when *Tech Talk* is not published (July 13, July 27, August 3, August 17, August 24).**

Personnel Interviewers will refer any qualified applications on all biweekly jobs as soon as possible after their receipt in Personnel.

Persons who are NOT MIT employees should call the Personnel Office on extension 3-4251.

Information on openings at Lincoln Laboratory (Lexington, Ma.) is available in the Personnel Office.
Employees at the Institute should continue to contact their Personnel Officers to apply for positions for which they feel they qualify.

Dick Higham	*3-4278*
Pat Williams	*3-1594*
Carolyn Scheer	*3-1595*
(Secretary — Ann Perkins)	
Virginia Bishop	*3-1591*
Mike Parr	*3-4266*
Ken Hewitt	*3-4267*
(Secretary — Paulette Chiles)	
Sally Hansen	*3-4275*
Lewis Redding	*3-2928*
Richard Cerrato	*3-4269*
(Secretary — Jenni Liebman)	

Sponsored Research Staff, temp., in Earth and Planetary Sciences to perform analysis of basaltic rocks. Responsibilities will include sample grinding and preparation; dissolution of sample; analysis by isotope dilution and mass spectrometry. Will also perform microprobe analysis of glass and analysis by x-ray fluorescence and gas chromatography. Position requires experience in basalt petrography. Familiarity with geochemical analysis helpful. Temp. through Dec., 1977. R77-118 (7/6).

Sponsored Research Staff in Sloan School System Dynamics Group to assemble, organize and maintain computer files of a large-scale computer simulation model of the U.S. economy. Selected applicant will be trained in IBM Time Sharing command language, JCL, DYNAMO and Prime and will participate in technical documentation, technical drawing and user assistance. Bachelor's degree, computer programming experience and attention to detail required. Interest in social systems modeling, economics and system dynamics desirable. R77-119 (7/6).

Academic Staff, Technical Asst., in Biology to do research involving the isolation and physical characterization of key components of the blood coagulation systems. Will also study molecular mechanisms by which components interact in fulfilling their physiological roles. A Bachelor's degree and good laboratory skill required. A background in physical chemistry or biochemistry preferred. C77-29 (7/6).

Academic Staff, Technical Asst., in Biology to prepare solutions, gels for electrophoresis; assist with various experimental procedures. Will also handle some laboratory management duties. Position requires a Bachelor's degree in Biology or Chemistry. 32 hrs./wk. C77-30 (7/6).

Academic Staff, Technical Asst., in Biology to prepare and purify radioactively labeled neurotoxins to use in studies of membrane proteins from neural tissue. Other duties include maintenance of *Drosophila melanogaster* stocks; preparation of culture media; autoradiographic processing of slides and performance of various other laboratory operations. B.S. or M.S. in Biochemistry, Biology or Chemistry and experience in protein chemistry is required. Applicants should be familiar with routine biochemical procedures including column chromatography, centrifugation techniques, electrophoresis and isotopic techniques. Familiarity with eukaryotic genetics helpful. C77-31 (7/6).

Admin. Staff, Asst. Editor, for *Technology Review,* (MIT Alumni Association) to participate in all editorial activities: solicit and evaluate articles; edit and illustrate articles for publication; write brief accounts of current developments based on journal articles, seminars or other sources. Will be responsible for editorial management of one or more magazine sections. Applicants should have a degree or equivalent experience in a science or engineering field, as well as at least one years's experience in science writing for semi- and non-technical audiences. A77-44 (7/6).

Admin. Staff, Staff Accountant, in the Comptroller's Accounting Office to be responsible for accounting activities involving internal cost audits of research contracts and grants; coordinating accounting, cash flow and audit functions with Office of Sponsored Programs and other MIT departments; preparing billing, fiscal and financial reports as required. B.A. in Accounting, or equivalent combination of education and experience required. Ability to communicate well with a wide variety of people also necessary. A77-45 (7/6).

Admin. Staff, Assistant to the Director, of the Admissions Office will do analytical studies of the admissions market and selection process. Will also assist in regular functions of the admissions process; interview prospective students; prepare related correspondence; travel to recruit students. A minimum of a bachelor's degree with a background in mathematics and statistics is required. The ability to write under time pressure, experience with computers, management and social science course work is desirable. A77-11 (7/6).

Admin. Staff, Editor in Chief at the MIT Press to supervise the activities of the Acquisition and Editorial groups in the development of its book publishing program. Responsibilities include: solicitation of manuscripts for publication process; handling of personnel related functions (hiring, salary, etc.); development of budgets, and monitoring of expenditures; interaction with MIT faculty and others to make publishing decisions. Applicants must have formal education and/or professional training in staff administration, budgeting, procedures, systems and control development, long range planning. Familiarity with marketing of an academic list, and with production design fulfillment operations also necessary. A background in scientific, technical, medical, business publishing desirable. A77-43 (7/6).

Admin. Staff, Assistant Director, in the Office of Sponsored Programs will be responsible for proposal review, grant and contract negotiations and post award administration; act as liaison with a number of MIT academic departments and/or research laboratories. A Bachelor's degree, or equivalent combination of education and experience, as well as sponsored program administration and university accounting experience required. MIT experience preferred. A77-39 A77-40 (6/22).

Admin. Staff, Assistant to the Wage and Salary Administrator, Office of Personnel Relations, to participate in a variety of compensation related activities, particularly administration of the Staff Classification and Compensation Program. Duties include participation in defining new positions, reclassifications, appeals. Will also coordinate the salary review process; assist in analysis of all types of wage and salary issues, development of data necessary for decision making and in formulation of solutions. A Bachelor's degree, or equivalent combination of education and experience, wage and salary or related personnel experience preferred. Candidate must also have well-developed writing skill to produce clear, comprehensive material in a minimal amount of time. A77-41 (6/22).

Admin. Staff, Editor, in the MIT Press to edit manuscripts and prepare them for publication. A Bachelor's degree in mathematics or a science, plus at least 3 years experience as an independent technical editor required. A77-42 (6/22).

Sponsored Research Staff, in the Center for Cancer Research will instruct others in use of electron microscope and in preparation of samples for electron microscope. Techniques include nucleic acid electron microscopy; ultra microtomy; negative staining of particulate samples. Will also be involved in research projects involving electron microscopy. A Bachelor's degree, experience in use of electron microscope, familiarity with above techniques, and a background in cellular and molecular biology required. R77-114 (6/22).

Sponsored Research Staff in the Cancer Research Center cell biology group. Will provide tissue culture and specialized media for the group; prepare, sterilize and test solutions to specification with stringent quality control. A Bachelor's degree in chemistry or biology, or equivalent educational and laboratory experience required, as well as ability to manipulate chemical formations. Applicants must be able to work independently. R77-115 (6/22).

Systems Programmer in the Harvard/MIT Division of Health Sciences and Technology to support on going projects in the development of microprocessor based instruments. Duties include maintenance, documentation and development of existing computer hardware and software (Data General NOVA-line based program development systems and Intel 8080 based microcomputer); user assistance; development of special applications packages; writing user-manuals; general systems support. Working knowledge of operating systems, assemblers, interpreters and higher level languages required as well as experience developing such software, and programming small computers in machine language. Knowledge of NOVA and/or 8080 assembly language and hardware design helpful. R77-109 (6/22).

Sponsored Research Staff, Experimental Physicist, in the National Magnet Laboratory to do research in superconducting magnet technology: transient heat transfer in one-and-two phase helium near 4.2° K; mechanical disturbances in superconducting magnets; studies of liquid helium management problems in case of magnet failures. Bachelor's or Master's degree in physics, electrical engineering or mechanical engineering required. Laboratory experience also necessary. Programming experience desirable. R77-113 (6/22).

Sponsored Research Staff in the National Magnet Laboratory to design magnetic field coils for a tokamak fusion reactor study. A Bachelor's or Master's degree in electrical engineering or physics, experience in the use of large digital computers for the solution of engineering problems required. Some experience in calculation of magnetic fields desirable. R77-112 (6/22).

Sponsored Research Staff, temporary, in the Lab for Nuclear Science to do post-doctoral research in experimental high energy physics. Candidates must have knowledge of multi-wire proportional chambers; Cerenkov counters; high pressure vessels; fast electronics; mini-computers and theoretical physics. A Ph.D. in experimental high energy physics is also required as well as abilty to spend long periods at foreign and domestic sites (i.e. Switzerland, Germany). Travel may be on short notice. Knowledge of German or French preferred. Position is for 1-3 years. R77-110 (6/22).

Exempt, Asst. Food Production Supervisor, in the Food Service to assist in all areas of responsibility including daily production, inventory and quality control, purchasing and sanitation. Position requires a degree or experience in food production area of food service, technical knowledge of menu planning, quantity food preparation, quality control and food purchasing procedures. Irregular hours and weekend work may be necessary. E77-27 (7/6).

Exempt, Claims Investigator for the MIT Health Plan to be responsible for inital investigation and processing of claims submitted from physicians, hospitals and patients; interpreting Health Plan contract and policies and procedures of Blue Cross/Blue Shield in order to approve claims; directing communication with hospitals, Blue Cross/Blue Shield and Health Plan members; maintaining claim logs and preparing weekly and monthly claim reports. College training and 2-3 years health care insurance experience required. Excellent oral and written communication skills and ability to use own judgement also necessary. E77-28 (7/6).

Secretary IV-V to the Special Asst. for Woman and Work, Office of the President and Chancellor will handle a wide range of responsibilities to assist in providing service to students, faculty, employees and others who interact with the Special Assistant: answer inquiries on phone and in person, referring individuals to other offices as necessary; manage a busy appointment calender; arrange large group meetings; order and catalogue books; maintain files; review financial statements for accuracy. Will also handle general secretarial duties including manuscript typing. Position requires the ability to exercise sensitivity and discretion, and to identify priorities. Knowledge of MIT desirable. B77-290 (7/6).

Secretary IV to a Materials Science and Engineering faculty member to type technical material; schedule appointments; make travel arrangements; maintain accounts; handle administrative responsibilities for large undergraduate course; provide secretarial assistance to additional staff members as required. General secretarial skills required as well as ability to deal well with a wide variety of people in a busy setting. Familiarity with MIT helpful. B77-297 (7/6).

Secretary IV to three Chemistry Dept. professors to type correspondence, technical reports, grant proposals and course material; arrange appointments and travel; monitor research accounts. Excellent typing and organizational skills and ability

to set priorities required. Two to three years secretarial experience preferred. B77-301 (7/6).

Secretary IV in the Libraries Administration section to handle secretarial duties for 2 professional staff members: type correspondence, tables, charts; arrange appointments and travel; order supplies; process equipment service requests and maintenance contracts. Secretarial school training or college training plus 2 years secretarial experience required. B77-169.

Secretary IV to campus Architect and professional staff in Physical Plant. Will type various material and verify accuracy of its content; develop format for manuscripts and assure grammatical accuracy; arrange travel; maintain complex filing system, budget preparation; perform other duties as required. Secretarial school training and experience, or equivalent combination of education and experience required. B77-285 (7/6).

Secretary IV to the Director and research staff members in the Center for Advanced Engineering Study to type correspondence, manuscripts, reports; edit drafts; maintain filing system; answer phones; xerox; make travel arrangements; maintain project accounting records. Excellent typing skill including technical typing ability required as well as ability to communicate well with a wide variety of people. B77-292 (7/6).

Secretary IV to academic staff member in the Center for Policy Alternatives involved in projects related to environmental/occupational health, law and policy, and on teaching in technology and law. Will handle general secretarial duties including typing; organizing proposals; monitoring accounts; coordinating projects and arranging travel. Excellent typing, shorthand (or willingness to acquire shorthand) and organizational skills required as well as ability to set priorities and work independently. Interest in above subject matter desired. 37½ hrs./wk. B77-284 (7/6).

Secretary IV to Science Librarian and professional staff: type correspondence, reports, other materials; maintain a petty cash fund; order supplies; file; handle meeting room reservations and other assignments as necessary. Secretarial school training plus 2 years experience, ability to handle routine as well as special work assignments required. B77-282 (7/6).

Secretary IV in the Sloan School Systems Dynamics Group to type papers, correspondence, and manuscripts on correcting selectric and/or uncomplicated computerized typing/editing equipment from drafts and occasional tapes for research group; maintain and update master document file; handle some telephones, appointments, travel arrangements, records and filing. Ability to work under pressure. Excellent typing required; good command of English grammar helpful. Two years applicable working experience, or equivalent, preferred. Willingness to learn use of editing equipment also necessary. B77-171 (7/6).

Secretary IV in Nutrition and Food Science to faculty members and research staff studying subjects such as appetite regulatory mechanisms, chemistry of food systems. Will handle general secretarial duties including transcription of machine dictation. Good secretarial skills required. Familiarity with medical/biological terminology helpful. Secretarial school training preferred. B77-269 (7/6).

Secretary IV to 2 Economics Department faculty members to handle secretarial duties related to academic program and to publication of a professional journal: type correspondence, class materials; maintain files; arrange travel and appointments; maintain records of received manuscripts; prepare related correspondence. Excellent typing skill, willingness to learn technical typing required. Applicants should have ability to organize work and to work without close supervision. B77-270 (7/6).

Secretary IV in Linguistics and Philosophy headquarters to handle all general secretarial duties including: typing manuscripts, proposals; maintaining student records; answering student inquiries; arranging travel. May have some editorial responsibilities. Good typing, shorthand or machine transcription ability required. B77-272 (7/6).

Secretary IV in the Medical Department to work for two social workers and share in secretarial duties for the Psychiatry Service. Duties include typing; arranging appointments; scheduling conferences; compiling statistics and coordinating social service/Psychiatric service joint programs. Good typing skill required; college training and/or equivalent work experience preferred. Sensitivity in dealing with people also necessary. 37½ hrs./wk. Non-smoking office. B77-256 (6/22).

Secretary IV to Political Science faculty member studying migration of Mexicans and Latin Americans to U.S.: type class material, reports, correspondence; maintain files; arrange meetings and travel. Position requires fluent Spanish and English, as well as excellent secretarial skills and knowledge of basic bookeeping. Applicants should have at least 3 years responsible secretarial experience. Secretarial school training preferred. B77-267 (6/22).

Secretary IV in the Medical Department to perform secretarial services for a Physician and for the Ear, Nose and Throat clinic: answer phones; arrange appointments; transcribe medical reports; maintain files; cover for other secretaries as necessary. Excellent general secretarial skills, ability to work with people in demanding situation, and previous secretarial experience required. 37½ hrs./wk. B77-261 (6/22).

Secretary IV to a Nutrition and Food Science faculty member studying malnutrition/behavior relationships. Will handle general secretarial duties including shorthand transcription. Excellent secretarial skills, secretarial experience or formal training required. Some knowledge of medical/biological terminology desirable. B77-262 (6/22).

Secretary III-IV to 3 Economics Dept. faculty members to type course material and manuscripts including technical and mathematical content; answer phones; answer student inquiries; arrange meetings. Good typing skill required. College and/or secretarial school training preferred. B77-273 (7/6).

Secretary III-IV in Nuclear Engineering headquarters to type correspondence and other material; maintain files and records; arrange appointments, meetings, travel; interact with students and faculty. Typing skill, ability to set priorities required. B77-279 (7/6).

Secretary III-IV in Meteorology to faculty and research staff: type correspondence, manuscripts including some technical material; arrange travel and appointments; maintain a small departmental library (order books, journals; maintain records; keep shelves in order). Excellent typing and organization skill required. College training helpful. B77-286 (7/6).

Secretary III-IV in the Electrical Engineering and Computer Science Dept. to handle varied secretarial duties including: typing; scheduling department conference rooms; processing requests for keys; maintaining department personnel records using an on-line interactive computer system; sharing responsibility of answering Department headquarters phones. Selected applicant will be trained in the use of interactive computer system. General secretarial skills, ability to set priorities and to work with minimal supervision required. Familiarity with computer systems helpful. B77-298 (7/6).

Secretary III-IV in the Economics Dept. for 2-3 professors to type research reports, class material, correspondence from handwritten draft and machine dictation; organize articles to be submitted to various journals; maintain files and correspondence of faculty recruiting committee. Excellent typing and organization skills, good knowledge of English grammar required. B77-293 (7/6).

Secretary III-IV in the Architecture Dept., Architecture Machine Group. Will provide secretarial service to group involved in various computer research projects; act as receptionist; maintain files and records; arrange meetings and travel. Excellent secretarial skills, command of English language required. Some college and/or secretarial school training preferred. 37½ hrs./wk. B77-268 (6/22).

Secretary-Clerk III in Energy Laboratory administrative office: type correspondence, financial reports, forms; coordinate assembly of proposals and signature process; provide general clerical assistance to administrative officer, personnel officer and fiscal office; assist others with typing in peak periods, answer phones. High school graduation, or equivalent, plus some clerical/secretarial experience required. Typing skill and facility with figures also necessary. B77-287 (7/6).

Secretary III to faculty and research members in the Center for Space Research: type correspondence, technical reports, course material; develop and maintain files. Position requires good general secretarial skills, and flexibility for changing work assignments. Keypunching ability helpful. B77-266 (6/22).

Library Asst. IV in the Science Library to handle procedures related to the reserve system: collect, order or borrow required material, consulting with faculty as necessary; maintain statistics. Will also assist in catalogue searches; make catalogue record changes as directed; handle other assigned duties. Good typing skill, ability to organize and complete work with a minimum of supervision required. B77-274 (7/6).

Sr. Library Asst. IV in the Processing Office of the Barker Engineering Library. Will process all incoming monographs, monographic serials and other materials in multi-media formats: verify catalog records; direct student assistants in various assignments; oversee organization of card catalog, maintenance of special file and creation of bulletin board displays; prepare material for reclassification and withdrawal. Library experience in a cataloguing/technical processing departmnet, some graduate library science courses, or bibliographic experience required. Typing and organization skill also necessary. B77-276 (7/6).

Library Asst. IV in the Science Library to search catalogues for prospective purchases; verify orders; process incoming monographs and serials; process materials for special locations; maintain statistics; supervise student assistants; maintain special files. Typing skill, accuracy with detail, experience in library records required. B77-280 (7/6).

Library General Asst. III, part time, in the Student Center Library to process reserve book lists: record receipt; check library holdings. Will also request reprints from divisional libraries; assist at bookchecking desk; perform other related clerical assignments. Ability to organize work and to work with minimal supervision required. 20 hrs./wk. (9AM-1PM, M-F). B77-281 (7/6).

Library Asst. III in Dewey Library to be responsible for shelving and maintenance of library's general book collection; handling inter-library loan requests; conducting inventories of book collections and searches for library material reported missing; assisting at Circulation Desk as required. Ability to organize a variety of tasks and attention to detail required. Ability to work with minimum supervision and physical stamina for stacking shelves also necessary. Occasional evening and weekend work may be required on a pre-arranged schedule. B77-294 (7/6).

Sr. Accounting Clerk IV in the Systems Dynamics Group of the Sloan School of Management to verify accuracy of accounting statements and handle related follow-up; compute xerox billings; issue petty cash; type budgets; answer visitors inquiries, or refer to others; order, index and distribute publications. Typing skill, ability to work independently, and facility with figures required. B77-289 (7/6).

Sr. Clerk III in Nutrition and Food Science headquarters to handle various duties: type correspondence, forms, proposals; handle xerox billing; file; prepare student payroll reports; act as messenger to and from campus locations. High school graduation or equivalent, good typing skill and facility with figures required. B77-278 (7/6).

Sr. Clerk III in the Student Loan Office, Comptrollers Acctg. Office to answer borrower inquiries by letter, telephone or in person on billing status and other matters; receive mail and take required action; record payments; review borrower accounts and make adjustments. Applicants must have ability to learn and apply a complex loan system and be familiar with the use of computer systems. Typing and communication skills also necessary. B77-291 (7/6).

Sr. Clerk III in the Personnel Records section to process forms related to changes in employee status; employee termination; new employees; act as liaison with other personnel sections and payroll office regarding employee records; perform other related clerical duties and special projects (i.e. annual reviews) as required. High school graduation, or equivalent, plus three years clerical experience required. Good typing skill, accuracy with detail and ability to deal well with people on the phone and in person also necessary. B77-296 (7/6).

Cashier III, in Comptrollers Accounting, Cashier's Office. Will receive and disburse cash; prepare receipt slips; log mail receipts; cash personal checks; prepare checks for deposit; prove cash fund. At least two years related experience, ability to handle a large volume of cash transactions with accuracy, to work effectively with others, and to use an adding machine required. B77-299 (7/6).

Sr. Clerk III in the Registrar's Office to assist in processing degree applications; order diplomas; maintain records of awarded degrees; assist students in preparing government forms. Typing skill, accuracy with detail required. Ability to proofread and some college training desirable. B77-263 (6/22).

Sr. Clerk III in the Registrar's Office to process student records; type and mail various notices; assist in verifying students' credits and in preparing diplomas. Excellent typing, ability to deal effectively with a wide variety of people required. Position begins 8/15/77. B77-264 (6/22).

Sr. Clerk III in the Registrar's Office to assist students and others to obtain information, transcripts, etc.; answer phones and respond to or refer inquiries; type correspondence; maintain files. Position includes extensive student contact. Good typing skills required. Experience in clerical research desirable. Position begins 8/15/77. B77-265 (6/22).

Clerk II-III, file clerk, in the Accounts Payable section of the Comptrollers Accounting Office: will file various material using alphabetic and numeric systems; secure materials from files as requested; maintain folders; label drawers and assure general order of files. Will also handle other general clerical duties as required. Ability to handle alphabetic and numeric filing with accuracy required. B77-271 (7/6).

Hourly, Polisher, in Physical Plant to clean and apply protective finishes to all types of floor surfaces. Must know proper use of detergents and other compounds applied to floors. 4PM-Midnight (H77-101); 11PM-7AM (H77-105).

Hourly, Laboratory Aid, part-time, in Chemical Engineering to collect, wash, rinse, sterilize various types of laboratory glassware; use related equipment; store clean glassware; keep laboratory areas clean and orderly. Applicants must be consientious, reliable and able to follow directions. High school graduation, or equivalent, also necessary. 10 hrs./wk. H77-109 (7/6).

Hourly, Custodian, in Physical Plant to keep assigned areas in a clean, secure and presentable condition, and to perform other related duties as assigned by the supervisor. 11PM-7AM and 3PM-11PM shifts. Irregular shifts. H77-99, H77-100, H77-102, H77-103, H77-104, H77-106 (7/6).

Technician A, hourly, in the National Magnet Laboratory to build, assemble and test experimental equipment including vacuum and cryogenic systems. Graduation from a 2 year day technical school, or its equivalent, and a minimum of 2 years applicable experience required. Ability to use all common hand and machine tools, familiarity with silver soldering and epoxy techniques, and experience with vacuum and cryogenic systems also necessary. 40 hrs./wk. H77-93 (6/22).

Glassware Washer, part-time, in Harvard-MIT Program in Health Sciences and Technology to collect, wash, rinse, sterilize various types of laboratory glassware; use related equipment; store clean glassware; keep laboratory areas clean and orderly. Applicants must be conscientious and able to follow directions. High school graduation, or equivalent, also necessary. 12 hrs./wk. 8AM-12N M,W and F. H77-97 (6/22).

The following positions were still available at *Tech Talk* deadline. The date following each position is the date of the most recent *Tech Talk* issue in which the position was described.

ADMINISTRATIVE STAFF:
A77-3, Systems Prog., Info. Processing Serv. (2/16).
A77-15, Director, MIT Alumni Fund (4/13)
A77-20, Prog. Analyst, Info. Proc. Serv. (5/4).
A77-21, Systems Prog., Info. Proc. Serv. (5/4).
A77-29, Asst. Labor Relations Mngr., Personnel Relations (6/1)
A77-31, Director, School of Eng. (6/8)
A77-32, Mngr., Text Sales, MIT Press (6/8)
A77-33, Prod. Mngr., MIT Press (6/8)
A77-34, Admin. Asst., Architecture (6/8)
A77-35, Admin. Dietician, Food Serv. (6/15)
A77-38, Appl. Prog., Admin. Comp. Serv. (6/22)

BIWEEKLY:
B77-102, Sec. IV, Sea Grant Prog. (6/1)
B77-151, Sec. IV, Aero/Astro. Dept. (5/4)
B77-155, Sec. IV, Industrial Liaison Prog. (5/11)
B77-175, Sec. IV, Dean for Stdn. Affairs (5/25)
B77-179, Sec. IV, Biology (5/25)
B77-182, Section Head V, Barker Eng. Lib. (5/25)
B77-183, Sec. IV, Sloan School (5/25)
B77-191, Sec. III-IV, Off. of Pres. & Chanc. (6/2-2)
B77-196, Sr. Clerk IV, Alumni Assn. (6/1)
B77-201, Sec. IV, Alumni Assn. (6/1)
B77-215, Sec. IV, Math Dept. (6/8)
B77-218, Sec. IV, Biology (6/8)
B77-219, Sec. IV, Energy Lab. (6/8)
B77-221, Reactor Oper. IV, Nuclear Reactor Lab. (6/15)
B77-226, Sec. IV, Plasma Fusion Ctr. (6/15)
B77-232, Sec IV, Devel Office (6/15)
B77-235, Sec. IV, Har/MIT Div. of Hlth. Sci. & Tech. (6/22)
B77-239, Sec. III, Sloan School (6/22)
B77-242, Section Head V, Rotch Library (6/22)
B77-245, Sec. IV, Lab. for Nuclear Sci. (6/22)
B77-246, Sec. IV, Economics (6/22)
B77-249, Sec. IV, Civil Eng. (6/22)
B77-250, Acctg. Asst. V, Acctg. Office (6/22)
B77-252, Sr. Clerk III, Acctg. Office (6/22)

ACADEMIC STAFF:
C77-4, Tech. Asst., Biology (4/6)
C77-18, Asst. Radiation Protection Off., Medical Dept. (5/4)
C77-23, Mngr. of Financial Serv., Medical Dept. (5/25)
C77-25, Staff Asst., Libraries (6/1)
C77-28, Asst. Coordinator, Medical Dept. (6/22)

SPONS. RES. STAFF:
D76-17, Biochemist, Res. Lab. of Elec. (2/25)
D76-121, Res. Engineer, Energy Lab. (7/28)
D76-188, Postdoc. Sci., Ctr. for Space Res. (10/13)
D76-225, Sci. Applications Prog., Lab. for Nuclear Sci. (5/4)
D76-232, High Energy Physics Res., Bates Linear Accelerator (1/5)
D76-233, High Energy Physics Res., Bates Linear Acceleraotr (1/5)
D76-243, Metallurgist, National Magnet Lab. (1/12)
R77-16, Prog. Mngr., Energy Lab. (2/9)
R77-17, Systems Theory Res., Elec. Syst. Lab. (2/9)
R77-22, Astro Physics Res., Ctr. for Space Res. (2/16)
R77-33, postdoc. res., Physics, Ctr. for Theoretical Physics (3/9)
R77-34, postdoc. res., Physics, Ctr. for Theoretical Physics (3/9)
R77-35, postdoc. res., Physics, Ctr. for Theoretical Physics (3/9)
R77-36, postdoc. res., Physics, Ctr. for Theoretical Physics (3/9)
R77-37, High Energy Physics res., Bates Linear Accelerator (3/9)
R77-49, Res. Eng., Energy Lab. (3/23)
R77-51, Sr. Res. Eng., Energy Lab. (3/23)
R77-53, postdoc. res., Physics, Res. Lab. of Elec. (4/6)
R77-67, Sr. Design Eng., National Magnet Lab. (4/13)
R77-72, Instrumentation Physicist/Eng., Energy Lab. (4/27)
R77-73, Plasma Physicist, National Magnet Lab. (4/27)
R77-74, Plasma Physicist, National Magnet Lab. (4/27)
R77-75, Nuclear Magnetic Resonance Res., National Magnet Lab. (4/27)
R77-79, Postdoc. Res., Physics, Lab. for Nuclear Sci. (5/4)
R77-80, Postdoc. Res., Physics, Lab. for Nuclear Sci. (5/4)
R77-82, Applications Analyst, Energy Lab. (5/4)
R77-85, Comp. Specialist, Energy Lab. (5/11)
R77-91, Sr. Accelerator Physicist, Lab. for Nuclear Sci. (5/18)
R77-92, Elec. Eng., National Magnet Lab. (5/18)
R77-93, Biophysicist or Medical Physicist, National Magnet Lab. (5/25)
R77-94, Design Eng., National Magnet Lab. (5/25)
R77-95, Biophysicist, Biology (5/25)
R77-97, Chemical Eng., Energy Lab. (6/1)
R77-98, Elec. Eng., Hlth. Sci. & Tech. (6/1)
R77-103, Asst. Prog., Lab. for Comp. Sci. (6/22)
R77-104, Staff Dir., Urban Studies & Planning (6/22)
R77-105, Managing Dir., Energy Lab. (6/22)
R77-106, Asst. for Oral History, Library (6/22)

EXEMPT:
E77-3, Mech. Shop Super., Physical Plant (1/26)
E77-11, Resident House Mngr., Housing & Food Serv. (4/13)
E77-19, Circulation Mngr., Alumni Assoc. (5/4)
E77-23, Inpatient Nurse, Medical Dept. (6/8)
E77-24, Admin. Asst., Campus Housing (6/8)

HOURLY:
H77-29, 2nd. Class Engineer, Physical Plant (3/9)
H77-58, Tech. A, Bates Linear Accelerator (6/8)
H77-76, Tech. A, National Magnet Lab. (6/22)
H77-83, Reprod. Worker A, Graphic Arts (6/15)
H77-85, Heat & Vent Mech. B, Physical Plant (6/15)
H77-89, HVAC Designer/Draftsperson, Physical Plant (6/22)
H77-90, Arch. Designer/Draftsperson, Physical Plant (6/22)
H77-91, Arch. Designer/Draftsperson, Physical Plant (6/22)
H77-92, Arch. Designer/Draftsperson, Physical Plant (6/22)

The following positions have been FILLED since the last issue of *TECH TALK*:

H77-71	Cook
B77-152	Sec. IV
A76-45	Admin. Staff
B77-173	Edit. Asst. IV
B77-165	Tech. Asst. V
B77-223	Sr. Clk.
E77-5	Prog.
R77-99	Spons. Res.
B77-222	Sec. IV
E77-16	Admin. Asst.
B77-231	Clk. IV
E77-21	Admin. Asst.
B77-177	Sr. Clk. III
R77-100	Spons. Res.
B77-244	Clk. III
B77-213	Clk/Recept. III
C77-10	Tech. Asst.
B77-167	Admin. Asst. V
B77-241	Sr. Lib. Asst. IV
B77-259	Sr. Clk. III
B77-240	Sr. Clk. IV
B77-210	Sec. V
B77-277	Sr. Clk. IV
E76-41	Principal Oper.
E77-13	Eng. Asst.
B77-225	Sec. IV
B77-189	Keypunch Oper.
E77-14	Tech. Asst.
B77-176	Sec. III
B77-212	Sec. III
B77-236	Sec. IV
B77-248	Sec. IV
B77-255	Sec. III
C77-26	Acad. Staff
R77-26	Spons. Res.
B77-227	Sec. IV
B77-203	Sec. IV
B77-70	Sec. III-IV
B77-138	Sec. III
B77-253	Sr. Clk. IV
H77-107	Bartender
B77-260	Sec. IV

The following positions are on HOLD pending final decision:

B77-106	Sec. III
H77-82	Audio Vis. Oper. B
C77-22	Acad. Staff
C77-27	Acad. Staff
A77-22	Admin. Staff
A77-30	Admin. Staff
B77-228	Tech. Asst. IV

Medical Coverage, Rates Increase

Changes in deduction rates for hospitalization and medical insurance coverage and an increase in the in-hospital maternity coverage of the Blue Cross-Blue Shield Master Medical Plan have been announced by John M. Wynne, vice president for administration and personnel. The improved maternity coverage will be effective July 1 and the new deduction rates on various dates in July according to payroll category.

The Master Medical in-hospital maternity coverage will be increased from the present maximum of $400 to a maximum of $1,000. Mr. Wynne said the increase would bring the coverage into close alignment with the actual charges made by hospitals in this area.

A number of factors combined to increase the cost of the Master Medical coverage including generally higher hospitalization and medical costs, increased utilization by the plan members, the improved maternity coverage and the new coverage for mental and nervous conditions which was announced last September. Mr. Wynne said, however, that there are indications the rate of increase in these costs is slowing due, at least in part, to cost control measures initiated recently by Blue Cross-Blue Shield. The new deduction rates and the changes in the rates are as follows:

Master Medical Plan

Payroll	Family Coverage Rate	Family Coverage Changes	Individual Coverage Rate	Individual Coverage Changes
Monthly				
Staff	$49.00	+$4.00	$19.00	0
Exempt	15.46	+2.09	5.41	+.36
Biweekly	7.14	+.97	2.50	+.17
Weekly				
Union	3.37	+.28	1.25	+.09
NonUnion	3.56	+.47	1.25	+.09

Mr. Wynne noted that the family rates for union and non-union employees on the weekly (hourly) payroll differ because the improved maternity coverage has not been made effective to the former. He said the improvement would be offered to these members through the various unions which represent them at the rate shown in the table for the non-union members.

MIT Health Plan

Payroll	Family Coverage Rate	Family Coverage Change	Individual Coverage Rate	Individual Coverage Change
Monthly				
Staff	$49.00	+$1.50	$19.00	-$1.00
Exempt	15.46	-.41	5.41	-.64
Biweekly	7.14	-.18	2.50	-.29
Weekly(all)	3.56	-.10	1.25	-.14

Camp Director Peter Close with charges on opening day.

200 Day Campers Begin Summer of Fun at MIT

Approximately 200 boys and girls began the first quarter of the 1977 season of the MIT summer day camp on Monday, June 27.

The 1977 season is divided into four two-week sessions. There are spaces available for girls for the second quarter beginning on July 11 and extending through July 22. Applications are still being accepted for both boys and girls for the last two quarters, July 25-Aug. 5 and Aug. 8-19.

The camp is open Monday through Friday, 9am-4pm, for children between the ages of six and 14. Children are divided into groups according to age, and the program arranged to meet the needs of the individual age group.

Tuition is $80 per quarter or $290 per season. Parents with more than one child can pay a combined total of $290 for eight weeks attendence. Transportation is not supplied by the camp but a list of parents interested in arranging car pools is available upon request. Campers must bring lunch each day.

The day camp program affords each youngster an active schedule of physical recreation and creative activity. The activity, geared to the interest and abilities of the children include: archery, arts and crafts, swimming, painting and various group activities. Sailing is available to qualified swimmers and rifle instruction to those with parental permission.

For further information and application forms, call Jill Gilpatric, assistant camp director, x3-2913.

Artist's Fantasy Has Far-Reaching Possibilities

An artist's fantasy—to be able to draw with her eyes—has led to development of an ocular-driven communication system that has far-reaching possibilities not only for artists but also for the severely handicapped.

The artist is Derith Glover whose studio is at the Center for Advanced Visual Studies (CAVS) at MIT. She collaborated on the project with Richard Warren, director of the Center for Advanced Rehabilitation Engineering at the C.S. Draper Laboratory in Cambridge. The project is one of many cooperative efforts between MIT and Draper, known as the MIT Instrumentation Lab before its 1973 separation from the Institute.

The basic hardware is a simple modification of standard video equipment—a video camera and television monitor—and represents a major simplification when compared with other systems used for monitoring eye movement. (Several more elaborate systems have been developed for aeronautical applications, such as pilot command and control systems based on the pilot's eye movements. Dr. Laurence Young, professor of aeronautics and astronautics at MIT, and David Sheena, a former MIT graduate student, are two people at MIT who have pioneered the development of such systems.)

Although eye-movement monitors are not new, their application in this project is. Ms. Glover is exploring the artistic possibilities of the system. Eye movements alone can be used to draw an image on a video monitor with a long-persistence phosphor. If a design is drawn several times, the image will remain for five to six minutes. When a video tape recorder is attached to the monitor, it records the process for later replay and photographic study. Artists are intrigued because the system provides a more direct link between themselves and their art work. An artist can also make a "video collage" by using a standard video lens with the monitor.

Mr. Warren is interested in the prosthetic and therapeutic aspects of the project. The system is designed so handicapped people—those with spinal injuries or quadriplegics—may be able to use their eyes to write on the monitor. Many people with spinal injuries can communicate now only by moving their eyes to the left or right to indicate yes or no.

The machine could possibly help children with reading difficulties. For example, children's eyes could be trained to follow a sequence of words as they are lit up across the screen.

The system capable of achieving all this is designed with a few standard parts—a video camera, light bulb and television monitor.

The camera can switch orientation from right to left and has a conventional lens with an extension that allows close focusing on the camera of one eye.

A 30-watt light bulb, placed to the right of the monitor, produces a corneal reflection in the shape of a spot. Because the eye is not spherical, the spot moves as the eye moves and is detected by the camera.

In the system currently undergoing test and evaluation, the video monitor's picture tube, unlike a regular television tube, has three long-persistence phosphors, light sensitive chemical compounds with very slow decay—on the order of two minutes.

Ms. Glover and Mr. Warren decided how to build their system after going through what they describe as a series of "bizarre experiments." It was built with used materials and components found at the Center for Advanced Rehabilitation Engineering and CAVS.

The system they developed is unique, in part, because it's inexpensive, easy to operate and assemble, and can be maintained by an untrained individual.

The existing system, including a video tape deck, cost $800. A duplicate system built with new equipment would cost $1,000. Were the system mass produced, it could cost less.

"Other systems may be cheaper, but not as generally useful for non-quantitative application," Ms. Glover said. "With our system, we can leave the light on all day and it won't bother us. Some infra-red systems are very effective, but can only be used for about five minutes without discomfort. Our system is very sensitive to vertical motion whereas many others are not. Finally, ours is a non-invasive system that doesn't touch the body."

"There's a lot of work still to be done," Mr. Warren said, "and many technical problems to explore. For example, video-feedback could have serious implications for those with a history of epilepsy. Bio-feedback, of which this is a simple example, is known to promote seizures in many otherwise normal individuals."

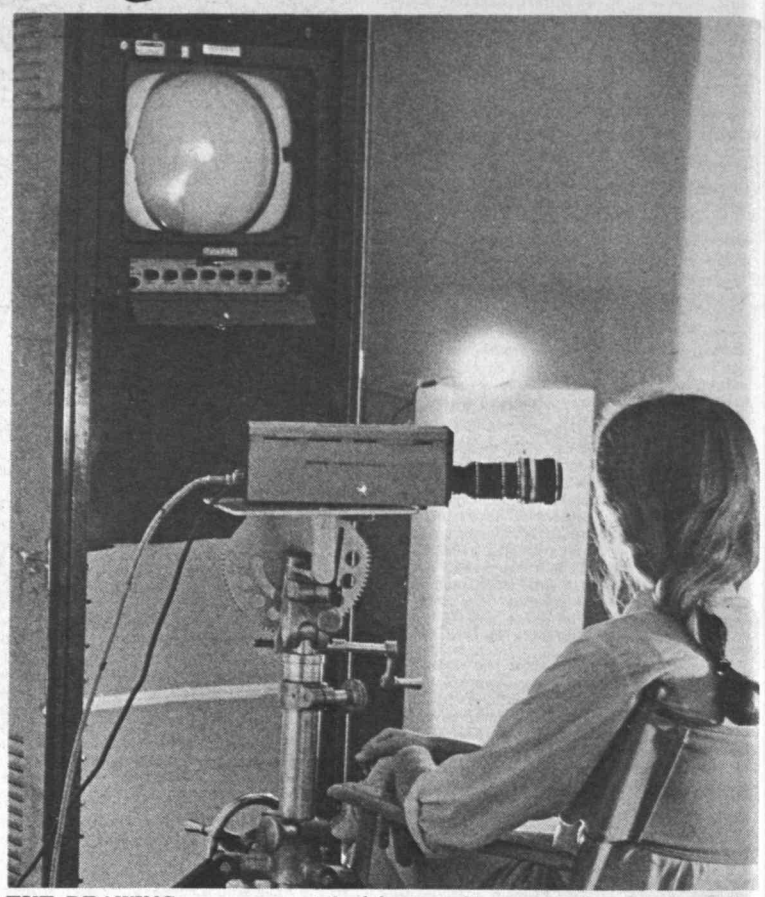
Technical refinements now under consideration include attaching a computer to the system in order to turn on machinery whenever the spot is focused on a particular point.

"The computer also makes it possible," Mr. Warren said, "to transform a visual scene on the monitor according to the way one's eyes scan that visual scene. As a simple illustration, one can imagine a picture of the *Mona Lisa* that 'smiles' slightly when one looks at the eyes and 'winks' slightly when one looks at the mouth. The system can, in effect, dynamically 'drive' the viewer's eyes through a visual scene with a control loop closed upon the viewer."

Ms. Glover's and Mr. Warren's immediate plans are to get better equipment for the machine and to make it less expensive. Then they'd like to take it to veterans hospitals and into the schools. They are currently doing a feasibility study to determine how great the need is for such a machine.

Designing simple, easy-to-repair aids for the handicapped is part of the philosophy of the Center for Advanced Rehabilitative Engineering.

"By teaching the handicapped to design, build and maintain their own aids, we're letting them really participate in their own lives," Mr. Warren said.



EYE DRAWING appears on television monitor, part of an ocular-driven communication system that has far-reaching possibilities for both artists and the severely handicapped. Light bulb, to the right of the monitor, produces a corneal reflection in the shape of a spot. The spot is detected by the camera and its movements are recorded on the monitor. Demonstrating the system is Derith Glover, an artist at the Center for Advanced Visual Studies. She collaborated on the project with Richard Warren, director of the Center for Advanced Rehabilitation Engineering at the C.S. Draper Laboratory in Cambridge.

—Photo by Calvin Campbell

New Program Aims To Prevent Dropouts

(Continued from page 1)

man, a counselor at the Cambridge Cluster School who will work with paraprofessional helpers. Several MIT graduate students eligible for work study will be hired to serve as technical assistants.

Positive Attitude

"Project STILE is a new approach, but it has a history," Ms. John said. "It has its roots in John Terry's experience as director of Upward Bound—his attempts to instill in teachers and kids a positive attitude toward each other and to the learning atmosphere.

"Based on his Upward Bound experience, John did a doctoral dissertation on the effects of teachers' expectations on students' performance," she said.

Dr. Terry received the PhD this spring from the Community Social Psychology Program at Boston College.

"My dissertation showed me that there are ways and means of working in the school system to develop much more powerful techniques for teaching," he said.

"My interest in the project has a history too," Ms. John said. "It started when I looked around my elementary school. Some kids were at the top and some always got the short stick educationally. When I got to college and started reading sociology, I found answers for a lot of my questions about who's on top and who's on the bottom. The way the system was working, you would always get kids who are alienated," she said.

Dr. Terry added that an exciting component of Project STILE is the Community Advisory Council.

Broad Involvement

"We want to take a body of research, both experimental and quasi-experimental, and design and develop a real program that can actually be implemented," he said. The Council, incorporated into the program to accomplish this end, will have 18 or 19 members—teachers, parents, students, school administrators and two university representatives. The university representatives are Dr. Judah Schwartz, professor of engineering science and education at MIT, and Dr. Robert Rosenthal, professor of social psychology at Harvard.

When the teachers who complete the summer phase of Project STILE return to the classroom in September, their progress will be monitored.

"The real test is what we can accomplish in the academic year. That's when we'll really work out the nuts and bolts of the system," Dr. Terry said.

The Massachusetts Office of Education has awarded a grant of $62,500 for the program's first year of operation. The Cambridge School Department will assume some financial support for the program's second year of operation, and increase its financial support for the program's third year.

A second group of 20 teachers will begin Project STILE in July, 1978, and a third group in July, 1979.

"Our idea is to build a real cadre in the schools of teachers who can help and reinforce each other," Dr. Terry said.

Visiting Faculty

The following appointments of visiting faculty members have been announced:

Keith Boyer as visiting professor in the Department of Physics for seven months, effective May 1, 1977.

C. Roland Christensen as visiting professor in the Sloan School of Management, part-time, for two years, effective Sept. 1, 1977.

Yu-Chi Ho as visiting professor in the Department of Electrical Engineering and Computer Science for nine months, effective Sept. 1, 1977.

Daniel P. Loucks as visiting professor in the Department of Civil Engineering for nine months, effective Sept. 1, 1977.

Avram Bar-Cohen as visiting associate professor in the Department of Mechanical Engineering for one year, effective July, 1, 1977.

Philip C. Clapp as visiting associate professor in the Department of Materials Science and Engineering for one year, effective July 1, 1977.

Christoph Haehling von Lanzenauer as visiting associate professor in the Sloan School of Management for three months, effective June 1, 1977.

William E. Taylor as visiting associate professor in the Department of Economics for four and one-half months, effective Sept. 1, 1977.

Carmen Besterman Takes Community Relations Post

Carmen Rivas Besterman, conference coordinator and assistant director of conference services at the University of Miami, has been appointed special assistant to the chairman of the MIT Corporation.

Ms. Besterman will do community relations work in collaboration with Walter L. Milne, assistant to the chairman and special assistant to the president for urban affairs. She will also be responsible for coordinating the use of MIT facilities by outside groups.

Within the Institute, Ms. Besterman will have staff responsibility for the Community Service Fund, MIT's charity to support volunteer efforts in the community. The Community Service Fund annually collects and allocates some $30,000 to local agencies engaged in education, job-training and social service.

A native of Venezuela, Ms. Besterman grew up in a diplomatic family, attending school in New York and Switzerland. She is fluent in English, Spanish and French.

Before joining the University of Miami, Ms. Besterman was assistant director in charge of programs at the International Center of Florida and sales and catering representative for the Dupont Plaza Hotel in Miami.

She represented the University of Miami for the United Fund and was a member of the Latin American Women's Committee of the Museum of Science in Miami. She also was chairman of the Community Involvement Committee and the Cultural Program Committee of the International Center of Florida, and a member of the Coral Gables Chamber of Commerce.

Ms. Besterman has four sons.

Sinsheimer Named UCal Chancellor

Robert L. Sinsheimer, MIT '41, has been appointed chancellor of the University of California at Santa Cruz effective September 1, 1977, Regents' Chairman William K. Coblentz has announced.

Dr. Sinsheimer received the SB, SM and PhD degrees from MIT, all in biology, and was a member of the MIT staff from 1942-49. He is currently chairman of the Division of Biology at the California Institute of Technology, a position he has held since 1968.

"Robert Sinsheimer is a scholar of world-wide renown," UC President David S. Saxon said, "and his appointment is in keeping with my commitment to excellence for the University of California."

Forrester Wins Goode Award

MIT Professor Jay W. Forrester has received the 1977 Harry Goode Memorial Award presented annually by the American Federation of Information Processing Societies to honor and encourage outstanding contributions to the information processing field.

The award was presented to Dr. Forrester, Germeshausen Professor of Management at the Sloan School of Management, at the recent AFIPS convention in Dallas, Tex.

The selection of Professor Forrester was "in recognition of his pioneering achievements in the development of random-access, coincident-current magnetic core storage, which is now the standard memory device for digital computers; for his innumerable contributions in the design and construction of Whirlwind 1, one of the first high-speed digital computers; for his landmark achievements in the development of computer modeling and simulation techniques, including their application to a wide range of social systems; for his leadership in the development of the field of system dynamics and its applications in exploring alternate policies at the industrial, urban, national and international levels; and for his many additional contributions to the development of information processing, its applications to social systems, and the dissemination of information on such developments through a series of papers and books."

WGBH to Air Five Lectures

Five broadcasts remain in a special Cambridge Forum/WGBH Radio series—heard Saturdays, from 6 to 7pm—on the "World Change and World Security" lectures delivered at MIT during the winter and spring.

Lectures still to be broadcast are:

July 9—Roberto de Oliveira Campos, Brazilian Ambassador to Great Britain, "The New International Economic Order."

July 16—Georgi A. Arbatov, Director of the Institute of US and Canadian Studies, Academy of Sciences, USSR, "The Challenge of the Next Two Decades."

August 6—Canon Burgess Carr, Secretary General of the All Africa Council of Churches, "Africa's Moral Imperatives."

August 13—Robert S. McNamara, President of the World Bank, "The World Population Problem."

August 20—United States Senator Frank Church, "Arms Energy and the Atom: the Lethal Dilemma."