



# MIT LIBRARIES' NEWS

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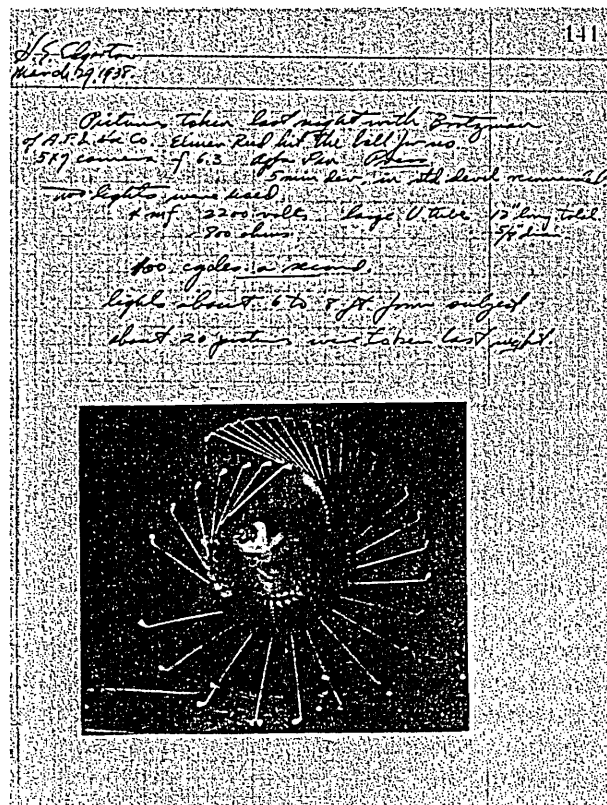
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## Edgerton Papers Available

**“W**ork like hell, tell everyone everything you know, close a deal with a handshake, and have fun” was the advice Harold Edgerton offered to others not long before his death. Doc followed his own advice, as his manuscript collection in the Institute Archives very well documents.

Throughout his life Doc Edgerton gave the Archives his laboratory notebooks, correspondence, and teaching and research records. Following his death, the remainder of his papers were given to the Archives by Mrs. Edgerton. With support from the Edgerton Foundation, the Institute Archives has just completed the year-long task

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*A page from one of Doc Edgerton's laboratory notebooks.*

## Articles Transmitted To Library Over Internet

**I**n February, the MIT Libraries began to transmit and receive full-image articles over the Internet using Ariel software developed by the Research Libraries Group. The Libraries thus joined a growing number of institutions worldwide which share information in this fashion.

Ariel software permits images to be scanned, stored on a computer hard disk, compressed, automatically transmitted to the requesting library, reformatted, and sent to a laser-printer. The main advantage of the system is the quality of the images printed; Ariel does not allow for image viewing. Charts, graphs, and photographs sent via Ariel are usually clearer and more readable than comparable fax transmissions. Telecommunication charges associated with fax are also saved by using the Internet.

Purchase of the Ariel software and the hardware necessary to run it was funded in part by a federal grant received by the Boston Library Consortium through the Massachusetts Board of Library Commissioners. MIT and several other Boston Library Consortium libraries are currently involved in an experiment aimed at reducing interlibrary borrowing/lending turn-around time through the use of Ariel.

*Paul Vermouth,  
Assistant Humanities Librarian*

## Consumer Health Collection Growing



Photo by L. Barry Hetherington.

agencies. Newsletters such as the *Harvard Health Letter* are also being added. Although much of the material is for in-house consultation, there is a small but growing circulating collection.

The consumer health collection is a good place to look for information about a health issue. Library staff can also assist you in finding relevant articles in medical journals. We welcome suggestions for additions to this new collection. Schering-Plough Library is located in E25-131. Hours are 9am-6pm, Monday through Friday.

E. Louisa Worthington,  
Life Sciences Librarian

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of preparing this rich collection for research use. Between April 1992 and March 1993 Jeff Mifflin, Archives and Manuscript Specialist, surveyed, arranged, re-boxed, and described about seventy cubic feet of materials documenting Edgerton's personal and professional life. The Edgerton papers are now stored in acid-neutral folders and containers in a climate-controlled environment to ensure longevity, and have been carefully listed and described to facilitate access to the information in the collection.

Rarely does a manuscript collection so fully capture not only the professional accomplishments but also the personality of the individual who created the records. Doc's papers document his work as a consultant and aspects of his private life as well as his teaching and research at MIT. His correspondence, published and unpublished writings, speeches, teaching notes, and trips files are included. Sound recordings of Doc's speeches and conversations and family

photograph albums in the collection provide insight into the personal background behind his accomplishments as an educator and engineer.

The core of the collection is the series documenting Edgerton's research activities in his laboratory at MIT, his research and development work for the U.S. military in World War II, and his field work around the world, applying flash photography and sonar techniques to underwater exploration. His laboratory notebooks are a consistent record of his research at the Institute from 1930 to 1990. They illustrate through notes, diagrams, data, and photographs the step-by-step evolution of his ideas, tracing their development from inspiration to finished plan or product. Notebook entries reveal the excitement generated among Edgerton's colleagues by his early demonstrations of stroboscopic phenomena and show how techniques developed in his lab found useful applications in a wide range of disciplines.

In addition to scientific data, the notebooks contain pictures of Doc's students and colleagues, capturing the spirit of all those

The Schering-Plough Library is developing a consumer health collection as an information resource for the MIT community. Supported in part by two generous donations by Catherine Stratton in addition to MIT Libraries funding, the collection includes basic medical references, dictionaries, and books geared to the general reader on such issues as coping with family illness, medical ethics, health and aging, and preventive medicine and fitness. Medicare and medicaid regulations and information on access to health care are available.

In addition to this core group of references, we are developing a collection of pamphlets from the National Institutes of Health (NIH) and other health

who gravitated to and worked with him. Information in the laboratory notebooks is supplemented by travel notebooks describing field work at underwater sites, research project and technical specification files, correspondence with colleagues, reprint files, and other interrelated materials. Such systematically-maintained research notes spanning an entire career, showing disappointments as well as successes, and intuition and serendipity as well as painstaking observation, are an especially valuable resource for learning about how advances in science and technology are made.

The MIT Archives actively seeks collections such as the Edgerton papers, providing multifaceted documentation of MIT faculty members and their contributions. Helen Samuels, Institute Archivist, invites current or retired faculty to consider donating their records to the Archives. Call 617-253-5690 for further information.

Jeff Mifflin,  
Archives/Manuscript Specialist



Director of Libraries, Jay K. Lucker, accepts a 1993 Library Buildings Award for Rotch Library at the American Library Association's (ALA) Annual Conference in New Orleans, June 26th. The award, given jointly by the American Institute of Architects and the American Library Association, recognizes distinguished design achievement by an American architect for a library. Schwartz/Silver Architects of Boston designed the addition to Rotch Library, which was completed in December 1990. (From left to right: James Neal, representing ALA; Jay Lucker; Warren Schwartz, architect; Robert Silber, architect; and Anders Dahlgren, representing ALA.) Photo courtesy of Oscar & Associates, Inc, Chicago, Illinois.

## AAAS Sub-Saharan Africa Program

The American Association for the Advancement of Science, with support from the Carnegie Corporation of New York, the Ford Foundation, and the Agency for International Development, has been engaged in a number of important programs for libraries in Africa. The AAAS Sub-Saharan Africa Journal Distribution Program provides subscriptions to more than 150 journals in the sciences and humanities to some 200 university and research libraries in 38 countries. As a result of the AAAS effort, over 3,000 subscriptions reach African institutions that do not have easy access to current literature. The prestigious and immensely valuable journals provided through this effort are published primarily by AAAS affiliated societies and are made available to AAAS at little or no cost. Recipient institutions are identified through in-country needs inventories, supplemented by advice from donor societies and from experts on research conditions in Africa.

In 1991, the AAAS added a small number of CD-ROM databases to the Journal Distribution Program, and through the AAAS Project for African Research Libraries is engaged in promoting the use of CD-ROM through seminars and workshops. The first such seminar took place in October 1992 when the Research Council of Zimbabwe invited AAAS to arrange a CD-ROM seminar at a three-day symposium for scientists from southern Africa. A similar seminar was held in Accra, Ghana, in January 1993 at the Eighth General Conference of the Association of African Universities. Both seminars covered what CD-ROM can do for the researcher, how CD-ROM works and hardware needed, costs and funding strategies, and CD-ROM initiatives in Africa.

Early in August, I participated in a Workshop on Strategic Planning for African University Libraries that focused on planning for the utilization of new and emerging information technologies and the improvement of information and document delivery. In addition to reporting on developments at MIT, I led a session on applied strategic planning in research libraries.

Participants were mainly the chief librarians or deputy librarians from university libraries in Eritrea, Mozambique, Ethiopia, Kenya, Zimbabwe, Zambia, Swaziland, Botswana, Tanzania, Malawi, and South Africa. Other organizations represented besides MIT were the Association of African Universities, the University of Nottingham, and the Latin American and Caribbean Center for Health Information. The program was organized and directed by Lisbeth A. Levey, Director of the African Research Libraries Project at the AAAS.

I will be returning to Africa next year to serve as a consultant for a new AAAS initiative linking CD-ROM databases and document delivery. As part of this program the MIT Libraries are being linked with the libraries of the University of Zimbabwe to experiment with a number of document delivery methods. We also plan to promote similar "twinning" between other African university libraries and North American research libraries.

Jay K. Lucker,  
Director of Libraries



Helen W. Samuels, Institute Archivist and Head of Special Collections in the MIT Libraries, has received the 1993 Waldo Gifford Leland Prize for her book *Varsity Letters: Documenting Modern Colleges and Universities*. The prize, given by the Society of American Archivists, is for a North American publication of "superior excellence and usefulness in the field of archival history, theory, or practice." The book was designed by Betsy Chimento of MIT Design Services. Photo by L. Barry Hetherington.

## Journal Cancellations (Redux)

The continuing increase of journal prices at a greater rate than the increase of the Libraries' budget has necessitated the third major cancellation project since 1988. The Libraries are now beginning to find it necessary to reduce book buying levels as well.

The tables which follow illustrate general book and journal inflation rates over the last five years and increases to MIT Libraries' book and journal budgets over these same years. The book and journal inflation data comes from two large vendors of library materials [Blackwell North America (BNA) and Faxon] and is derived from databases of materials supplied to U.S. academic libraries.

### Book Price Inflation

	89	90	91	92	93	Average
BNA Database Inflation	6.5%	4.3%	4.6%	12.5%	1.8%	5.9%
MIT Book Budget	6.9%	4.7%	8.3%	7%	0 cont. 7.7% one-time	5.4% or 7%

### Journal Price Inflation

	89	90	91	92	93	Average
<u>Faxon Data</u>						
Domestic	+9.3%	+7.5%	+6.1%	+11.3%	+10.3%	+8.9%
Foreign	+3.3%	+5.1%	+21.1%	+14.3% (U.K.) -6%(other)	+24.5%	+11.4%
MIT Journals Budget*	+8.9%	+7.4%	+10.5%	+5.5%	+6.9%	+7.8%

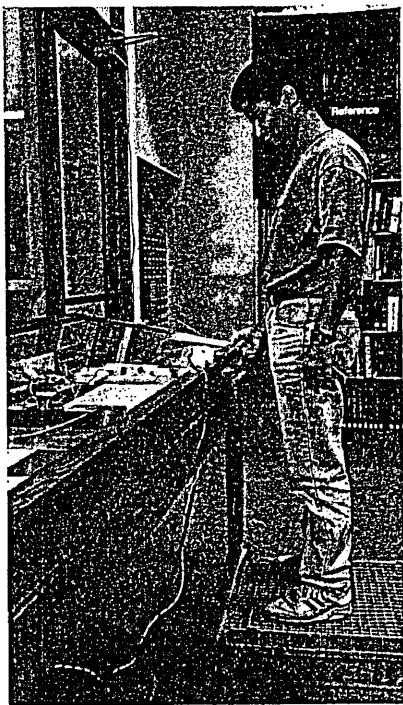
\* MIT's journal subscriptions are approximately half domestic publications and half foreign publications.

(The great fluctuations in the price increase rates for foreign journals reflect changes in the value of the dollar; however, there also seems to be a constant and considerable profit accrued by the large European sci-tech publishers. Elsevier, for instance, recently reported a 13 percent profit for last year.)

During 1992/93, the Libraries' subject specialists once again worked with faculty departments to identify journal titles for potential cancellation. In order to compensate for the continuing gap between the rate of inflation and the increases to the Libraries' materials budget, an additional 490 titles (out of 8,800 paid subscriptions) were cancelled. Five hundred more titles have been identified which will probably have to be cancelled next year. The Libraries' book buying power is also declining as a larger percentage of the budget is required for journal subscriptions. Last year a one-time inflation allocation was supplied from the Libraries' general funds. This year, there are no funds available to continue that allocation or to provide for this year's inflation. Our book budget for 1994 will be the same as it was for 1992.

While article delivery only partially compensates for journals on the Libraries' shelves, copies of articles from cancelled journals may be ordered directly through one of the FirstSearch document suppliers available to you on the campus network. The Interlibrary Borrowing Service can also obtain copies of articles for you. The use of Fax and Internet delivery for articles held at Yale, Harvard and Boston Library Consortium member libraries has improved the responsiveness of the Interlibrary Borrowing service in the last few years, as has the use of commercial document suppliers. Contact any reference librarian for further information on these services.

Carol Fleishauer,  
Associate Director for Collection Services



Student tests his capacitance using experimental equipment in the Science Library. Photo by L. Barry Hetherington.

## Enriching The Halls of MIT

In November 1992, the Science Library became a test site for the first in a series of interactive displays designed and sponsored by the Edgerton Center. Corridor Lab, as the Edgerton Center Project is called, is to line the hallways of MIT with showcases containing experiments illustrating various aspects of engineering and science.

Project leader John King and Jason Hintersteiner are responsible for the display currently in the library. In describing the project, they remark, "The first few boxes are about capacitors, capacitance and the storage of electrical energy, which were central to the strobos and sonars that Professor Edgerton invented and used." This display was designed with the help of students in Freshman Seminar 8A06 called "Enriching the Halls of MIT with Experiments in Boxes."

The display enables an individual to measure his or her electrical capacitance in picofarads. Over 4,000 times faculty, students and visitors to the Science Library have stood on a box, grounded themselves, charged up and then measured and calculated their capacitance. Several individuals recorded their values on the provided data sheets and these results are being compiled and written up. The article will be mounted on glass panes above the display case and the designers are planning to submit a more in-depth article to the *American Journal of Physics*.

The next display will focus on the value of negative feedback in electronics and is scheduled to be in place by the end of the year. The second display is certain to be as interesting and informative as the first and is expected to enjoy the same level of popularity. The MIT Libraries is very pleased to be a part of such an important project and looks forward to its continued involvement.

Suzanne T. Weiner,  
Assistant Engineering & Science  
Librarian

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## Liaison Program Enters Third Year

The Libraries' History of Science Liaison program teaches basic library skills and provides course-related reference assistance to Con-course Program freshmen enrolled in *SP341 Introduction to the History of Science*. The program was set up in 1991 after instructor Gilbert Whittemore approached Humanities Librarian Theresa Tobin with a request for librarian participation. Dr. Whittemore had heard of the successful Psychology Liaison Program and hoped to provide a similar experience for his students.

Specific recitation section periods are set aside for library instruction, which is integrated into the syllabus. This year, instruction will include an introduction to the Libraries and to online resources, completion of an exercise designed to teach use of the MIT CD-ROM catalog and location of library materials at MIT, and training in the use of specific reference sources. Librarians will also provide one-on-one reference counseling concerning individual term paper topics, and will staff a library help-desk during times when students are likely to be working on term-paper bibliographies.

Students in SP341 will also visit the Institute Archives for an introduction to rare scientific books and archival materials.

Student evaluations of the program have been very positive. So also has been the reaction of Dr. Whittemore, who has written that the integration of the library sessions with the course content "enabled students to pursue their own research and writing on a more sophisticated level than they would have achieved if left to their own devices."

Paul Vermouth,  
Assistant Humanities Librarian

## *New Endowed Funds Established*

The Libraries have received three new endowed funds in the past few months. The Nathan H. and Sarah A. Gordon Philanthropic Trust has provided, in conjunction with the Bever family, \$40,000 to establish the Michael Berliner Bever Library Fund in Resource Management. Professor Emeritus Bever, a dominant figure in the area of materials science and engineering, served as editor of the standard reference in the discipline, the *Encyclopedia of Materials Science and Engineering*. He is also considered one of the founders of the study of recycling. Books and electronic materials on recycling and management of materials will be purchased with the income from the fund.

The Dr. George J. Bair Memorial Fund, established by Dr. Bair's widow, Florence, will be used to purchase books on glass, ceramics, and related materials. Dr. Bair, a member of the class of '36, devoted his working life to the study of glass and received a citation from the Navy for developing a glass substitute for mica during World War II.

A memorial tribute has been established by the family of Richard Lawrance, class of '40, PhD '48. The Richard Butterworth Lawrance Memorial Book Fund will fund the purchase of books in the area of physics.

Endowed book funds can be established for a minimum of \$5,000. Bookplates bearing the name of the fund are affixed to each book and electronic materials show the name of the fund on the opening screen. A list of the materials purchased with the fund is compiled annually and sent to the donor. Inquiries concerning endowed book funds may be addressed to Jay K. Lucker, Director of Libraries, Room 14S-216, Office of the Director of Libraries, MIT, Cambridge, MA. 02139: telephone (617) 253-5297.

*Carol A. Zoppel,  
Assistant to the Director*

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