

ENGINEERING AND SCIENCE LIBRARIES ANNUAL REPORT, 2004-2005

Introduction

Looking back at the year's work in ESL is a little like looking out the back of a fast-moving train. Though our surroundings on either side seem to be rushing by in a blur, the view to the rear shows a smooth, expansive, and deceptively calm landscape: the sum of many initiatives, energy, changes, moves, adjustments, and strategic choices. The view ahead also offers an interesting perspective: constantly bringing new details into view, and offering a preview of the broad but steadily changing horizon.

During this year, MIT welcomed a new president – a neuroscientist (and the first life scientist to lead MIT) – who has expressed her keen interest in supporting the organizational flexibility and interdisciplinary richness that are two of MIT's signature strengths. Also this year, the MIT Libraries embarked on implementing a major new strategic plan, calling for renewed attention to accountability and assessment in using our resources to serve MIT's needs; and boldly calling on the Libraries to help shape the future.

This year's report of the Engineering and Science Libraries reflects the framework offered by the three primary strategic directions outlined in the Libraries' strategic plan. It begins by acknowledging some of our most significant achievements in the last year. Throughout, it also highlights how ESL has been able to increase its organizational flexibility, by leveraging expertise and resources across the four engineering and science libraries in order to better serve MIT's research and learning communities. Both embedded in the report and in greater detail in tables at the end of the report, are highlights from available metrics that indicate trends in workload and changes in library users' activities. The report closes with a look at the year ahead, and in a set of appendices provides an impressive inventory of activities and contributions by ESL staff to MIT and to the information and library profession.

Highlights:

- Instruction activity grew.
- Libraries developed new service desk models.
- Merged Barker and Science processing units.
- Space for users and collections improved.
- User advocacy efforts grew.
- ESL has become more flexible, adaptable and integrated.

One of the most significant achievements of the Engineering and Science Libraries' staff this year has been to increase our participation in instructional activities that encourage effective use of our rich information resources. With a new instructional plan well underway by summer 2005, we expect to capitalize on the growing investment of our librarians and other staff in this important activity.

Reorganizing how we deploy our staff resources to provide service-point-based, user-initiated information services, particularly in Barker and Science, has been another significant achievement. We have greatly increased the number of "on-call" hours, eliminated double-staffing of Hayden reference desks through cooperation with Humanities and Access Services, and consolidated the ESL role in staffing the central virtual service point (Ask Us! Central). We have also reorganized how we manage these service points, moving towards a more flexible, integrated, and team-based approach through the Barker Service Team, and the Hayden Implementation Team.

A third major achievement this year has been to unite ESL's two Processing Units under a single supervisor, resulting in an increase of one librarian position within ESL while freeing a second FTE position for other system needs.

A fourth highlight has been the successful undertaking of significant planning efforts designed to optimize the use of both collections and user spaces. From the successful integration of Schering-Plough's collections, to Hayden Library's "Haystacks" plan for improving access to monographs, to Barker's successful bid to CRSP for new carpet to renew the faded glory of its main (fifth), seventh, and eighth floors, there have been major victories won this year on behalf of students and readers.

A fifth theme is also important to mention this year: the collective impact of effective and thoughtful user advocacy by a large number of ESL staff, resulting in a host of improvements to borrowers and readers throughout the MIT community, including introducing RefWorks, championing new electronic resources, including significant electronic backfiles, and launching online access to MIT users seeking borrowing privileges at Harvard's Countway Library.

Finally, an overall highlight this year has been the development of an increasingly flexible approach to blending the expertise and experience of the engineering and science sides of the ESL house. With several new ESL-wide groups working together – both formally and informally – and with an assortment of tools, events, and incentives to help bring our different and complementary strengths together – we are well on our way to finding the kind of synergies and benefits that our administration hoped for when the new ESL organization was launched several years ago.

Immediate, quantifiable benefits

“Focus on providing immediate, quantifiable benefits to faculty and students in the Libraries' domains of responsibility.”

Saving time of the borrower:

- Countway card applications via web.
- Library registration for incoming students automated.
- Re-deployed Hayden self-check machine to more visible location.
- Barker completed missing item inventory.
- Processing office reduced claiming backlog.

ESL staff took a lead role this year in looking for ways to save our users visits to the MIT Libraries solely for the purpose of securing library privileges. After many months of discussion and planning, in June 2005, the Science Library successfully launched a new procedure for MIT borrowers to receive Countway library privileges via email. While the number of Countway borrowers is small (under 100), this method serves as a pilot for similar arrangements with BLC Libraries that may affect many more MIT students. Meanwhile, in spring 2005, Howard Silver and other members of the Orientation Task Force began looking at options for pre-registering new borrowers in the fall. If successful, this effort could result in savings of time for every incoming freshman and graduate student. In Hayden, borrowers took to the relocated self-check out machine like ducks to water. Though budget constraints meant we were unsuccessful in securing funds to replace it with a newer, model (that also does self-check-in) this year, we are hopeful we'll do so next year. If that happens, we hope the old model will become available for use in Barker.

Missing, lost, and misplaced items also cost our users time. Improving the inventory of our “tangible” collections saves our users time. Barker's work on finding missing and lost books resulted in at least 70 “found” items, worth an estimated \$7000 (based on replacement and processing costs). ESL processing staff also worked through a major claiming backlog in Science, and updated Aleph records for almost all (over 1000) current Science journal titles Aleph records.

Improved access and navigation of onsite collections

- Hayden stacks re-organization approved and funded.

- Barker developed proposal for new reading room organization.
- Maps and signs were improved in both libraries.
- Science Library began new book covers display.

In the Hayden Library, the “Haystacks” group composed of Humanities, Science, and Access Services specialists carried out extensive measurements and analysis to inform proposals to reallocate open stacks space throughout Hayden. This was triggered by an opportunity to repurpose the basement storage room vacated by Archives. Their plan was informed by a spirit of collaboration, pragmatism, and sensitivity to the variations in MIT community library use. While requiring major weeding projects this year (including JSTOR journal backfiles, “Z” class books, *Chemical Abstracts*, and large numbers of other journals and government documents), the plan will result in growth space for both Humanities and Science for the next five years or more, and reduce the need for ongoing monograph storage by both libraries.

In Barker, staff evaluated stacks including the allocation of shelves, bookends, etc. needed to ensure efficient and well-functioning collections. In the coming year Barker will review whether Barker’s storage schedule is still the right one given how our users access electronic and print issues; and we’ll explore the efficiencies to be gained for users and staff if we are able to replace existing current issue display furniture with more flexible shelving that can display all unbound journal issues.

Meanwhile, Hayden and Barker users benefited from ongoing initiatives to enhance signage. A new circular map in Barker, and handsome, simple, and consistent way-finding signs in Hayden, including both permanent signs and stack-end display signs, made navigation easier for everyone.

Finally, new books access improved as Science began to display new book covers on first floor stack ends, where their eye-catching designs provoke curiosity while depicting the range of topics covered by Science collections. More new book efforts included a change in Science new books policy to allow users to place holds. Barker and Science are both actively looking for new, more prominent locations for their respective new book displays.

Related goals for 2005-2006 include:

- Implement Haystacks collection re-organization in basement.
- Explore new locations and programming for new books in Barker and Science.
- Within Barker’s physical spaces, improve users’ self-sufficiency in knowing and using staff services, learning about and accessing our collections, and discovering our spaces.
- Continue efforts to improve signage in Building 14. Upgrade stack signs and sign holders. Install more permanent signs.

Improved computing and study environments for library users:

- Both libraries upgraded user seating and discarded decrepit furniture.
- Barker obtained funding to replace worn carpets.
- Barker obtained funding to renovate media room.
- Science added electrical outlets to reading room tables and mezzanine seating.
- Lindgren was painted.

Library users in both Barker and Science will benefit from investments to upgrade decaying furnishings in public areas: Barker secured new chairs for public computing clusters near the entry on the fifth floor, repurposed several study carrels from Schering-Plough, and secured approval for two major facilities improvements: re-carpeting Barker’s public areas on the fifth, seventh, and eighth floors; and renovating the Barker media room. Carpet has been selected and should be replaced by the end of the summer 2005. Work began in spring to prepare the media room for renovation, and to design new group and individual media viewing spaces.

In Hayden, users benefited from IS&T's renovation in summer 2004 of the basement Athena Cluster (aided by Greg Raposa and the Hayden Facilities Group). Electrical work in July/August 2004 and in May/June 2005 resulted in outlets installed on many first floor and 1-M study tables; these outlets have proven to be very popular with users and have distributed use of electrical devices more evenly throughout the space. Other Science reading room furniture was re-organized to create a more useable and attractive arrangement; decrepit and damaged furniture was discarded, and new soft furniture and end tables were purchased for the window bays in the science reading room, replacing the reading carrels. This has opened up the view of the river and provided much needed comfortable seating.

In ESL branches, we were able to fund repairs of damaged decorative panels on Aero's compact shelving, restoring them to their original handsome design. Lindgren users were treated to fresh, colorful paint this spring thanks to efforts of the Lindgren team.

ESL is grateful to Greg Raposa, the MIT Libraries administration, and the CRSP committee, for their tremendous support and advocacy of all these efforts to create pleasant, updated, and beautiful spaces that are more conducive to focused and relaxed work by MIT's students and faculty. We are confident that continued serious attention to creating library spaces that match the quality of MIT's students, and that significantly enhance the lives and work of MIT's engineering and science students and scholars, will come to fruition in a truly inspiring plan for a 21st century MIT library.

Related goals for 2005-2006 include:

- Recarpet Barker's 5th, 7th and 8th floors.
- Renovate the Barker Media Room, move the 5th floor Athena cluster, and reduce the footprint of the reference collection.
- Write a proposal to refurbish the furnishings in the Barker reading room with moveable shelving, new chairs and study areas, and new lighting to make it a more useable, multi-functional space.
- Continue to upgrade Science reading room furniture.
- Explore options to upgrade user space in Hayden basement, particularly along river wall.
- Work with Hayden Facilities Group to develop comprehensive emergency procedures.
- Via Hayden Facilities Group, continue to work with Facilities to address HVAC and other building maintenance issues.
- Examine use and purpose of laptop loan programs in Barker and Hayden.

Sociable spaces:

- Barker hosted graduate student social event.
- Both libraries hosted 'food for thought' events.
- Science library re-designed and re-programmed display area.
- Science developed Einstein display.

ESL continues to host celebratory and social events in Barker under MIT's great dome: in August 2004, we enjoyed the annual gala reception for incoming graduate students, co-sponsored by the Graduate Student Council and supported by the Associate Director for Public Services. Barker also hosted two other gatherings "under the dome" – during IAP, TechLink's MIT Club of Boston; and in June 2005, the 35th reunion of the Class of 1970.

Barker and Science both participated in "food for thought" events for hard-studying students; and Science hosted a fantastic display in celebration of Einstein Year, also introducing a new honorary "staff member" (Einstein stand-up) who continues to make the rounds of the first floor. All of these are warming ESL up for 2005-2006 plans, for more sociable events and celebrations to help create a sense of fun, participation, and belonging for our hard-working students.

Course support to faculty and students:

- Cooperation and experimentation at Hayden Reserves.
- ESL Instruction Plan in development.
- ESL invited to participate in 3.091 (a GIR class).
- Continued increase in instructional activity.
- Ongoing participation in course related instruction.

A traditional form of course support by libraries is providing students with access to course reserves materials. ESL staff at Barker updated documentation and information to improve reserves processes, and created a new online request form to make faculty requests easier. In Hayden, Louisa Worthington Rogers worked closely with several other Libraries and IS&T staff (Georgiana, Ginny, Christine, and Carter Snowden) to ensure a smooth transition for a challenging array of materials required by Prof. Byrne's new course, 9.91, in spring 2005. Louisa also coordinated lending tablet PC's used in an HST course. Another course that Louisa worked on, with Ginny Such's support, was an ambitious pilot conversion from paper to electronic access for a heavily used set of HST reserve materials.

Another form of course support is ESL's course-integrated instruction program. Under the leadership of ESL Instruction Coordinator Angie Locknar, we made great strides towards the Team Delta goal of having an ESL-wide instruction program in place for the 2005-2006 year. Angie began laying the groundwork for the plan by putting together an ESL Instruction group to advise her (members were Tracy Gabridge, Erja Kajosalu, Carol Robinson, and Howard Silver), and attending a national immersion program on instruction in August 2004. Several meetings of the entire ESL staff were held over the course of the year to discuss instruction issues to help shape this new program. By the end of the year, Angie had completed a draft plan with special focus on reaching ESL's undergraduates through course-integrated instruction in core courses.

A major coup in setting this plan into action was the agreement Angie developed with Professor Donald Sadoway to include a library instruction component for 3.091 (Introduction to Solid State Chemistry). This core chemistry course enrolls over 500 students (primarily first year), and interaction with students in this class will be a major achievement for the ESL and the libraries as a whole. Library involvement will occur in the fall 2005 semester.

Meanwhile throughout the year, ESL staff (and branches) organized or participated in 150 instructional and orientation events during 2004/05 reaching at least 4206 people. Sixty-two of the sessions included a hands-on component. Course web pages for many of these classes can be found at <http://libraries.mit.edu/subjects/course.html>.

A continuing highlight was ESL's team participation and coordination of instructional support for MIT's unique Terrascope freshman course (12.000, Solving Complex Problems) and its spring follow-up course (1.016, Earth Systems Engineering and Science).

Tracy Gabridge was again involved in 6.UAT, programming the content for three lectures. As the curriculum of the course evolves, library involvement may also change, so it is uncertain how Tracy and the ESL will be involved in the 05/06 academic year. Involvement in 6.UAT led to instruction for 6.121 Bioelectronics Project Laboratory, where Tracy provided evaluation and critique on the students' use of information resources in the development of their final projects. An enthusiastic response from faculty in the class spurred conversation with the Writing Across the Curriculum staff about the potential of educating writing instructors to evaluate student information usage.

Tracy's work for 6.UAT has inspired other instruction-related work, including a self-test for graduate students posted on the web by the Graduate Student Users Group (see <http://libraries.mit.edu/groups/grads/selftest.html>). Tracy provided similar guidance to grads attending the GSC's Grad Student 201 advanced orientation program.

Instruction continues to be a high profile enterprise for the libraries, especially in light of the new MIT Libraries Strategic Plan which features instructional efforts. Librarians are looking to new ways to reach their communities, and support staff members are encouraged to help. By finalizing and implementing its new Instruction Program, and building on past successes, ESL is proving to be an instruction powerhouse!

New approaches to teaching information skills:

- ESL staff experimented with chemical and biological information seminar series.
- Continued participation in IAP.
- IAPril seminar series.
- Continued support for EndNote.
- New program to support RefWorks.

In addition to providing ‘just in time’ opportunities for skill development through course-integrated instruction, ESL has tried to reach interdisciplinary researchers through lunch-time seminars focused on important subject resources, as well as information management tools that benefit students across many disciplines.

This year ESL sponsored a repeat of last year’s Chemical Information seminars in the fall semester. We tried a different venue (a classroom in Building 2) and had limited success. The spring semester we built on this seminar concept in two ways: First, we taught Biological Information seminars, held in the DIRC. These seminars were introduced as a way to bridge the overlap in biological research being done on campus; but had only limited success. A second seminar series, named “IAPril,” was wildly successful, averaging around nineteen attendees at each session. These sessions grew out of ESL’s January IAP activities, where we had a great program but so much snow that some sessions were unfortunately cancelled. The focus of these workshops was not tools, but technologies and perceived needs such as keeping current with research or when to use Google Scholar. This focus seems to work well for our community and will be investigated for other seminars; meanwhile, the IAPril workshops were adapted for the rest of the MIT campus as part of an Instruction Committee initiative for summer 2005 (“JulyAP”).

Also notable in ESL’s instructional services this year was the contribution of Howard Silver and others, including Stephanie Hartman and Olimpia Estela Caceres Brown, towards supporting two widely used reference citation management tools: EndNote, and RefWorks. Interest in EndNote seminars was high, and we expect a similar excitement around the complementary RefWorks tool. Howard has worked closely with Steve Gass, a team of other libraries staff, and the RefWorks representative to help bring this new tool to MIT students, particularly undergraduates in summer 2005. Howard created web pages to support this new service; Mat Willmott also contributed to the rollout by posting an FAQ for using LaTeX/BibTex with both RefWorks and EndNote, and by cleaning up the RefWorks template. Several ESL staff members have honed their skills with both tools. Olimpia, Stephanie, and Howard participated in using EndNote and RefWorks in support of a bibliography of MIT engineering and science textbooks. This project, part of the outreach partnership between MIT Libraries and Harvard University Libraries to assist devastated Iraqi libraries, has also enhanced our knowledge of these tools.

Creating more efficient, manageable jobs:

- Began developing new ESL ‘blueprint’.
- Merged processing units.
- Re-purposed Barker processing supervisor position to a librarian position.
- Created Barker Service Desk Team.
- Science participated in Hayden Reference Group and Hayden Implementation Team.
- Both libraries experimented with new ‘on call’ support models.
- Re-assigned professional responsibilities for selection and department liaison roles.

- Formed group to support business outreach for ESL community.

As our work and priorities evolve, it's a constant but essential challenge to ensure that staff invests their time in ways that most efficiently and effectively serve MIT. Improved self-service, including continued expansion of online access to research materials, as well as the success of Barton's Your Account features, mean fewer MIT students and faculty need the mediation of our staff to conduct routine circulation and access transactions. Journal cancellations and conversion to electronic-only access for journals have had an incremental but growing impact on processing responsibilities. At the same time, the demand for our staff time has never been higher, and ESL staff has been active in virtually every change effort, project, and expanding service both in ESL and throughout the system.

Team Delta challenged all public service units to undertake close review of current job responsibilities, and called on us to consider new options for managing and making decisions. One early outcome of a system-wide review of Ask Us! Central staffing was to reduce the number of ESL staff involved in staffing this service point. Another system-wide review of processing units (fall 2004) revealed the potential for reallocating processing positions to better align our focus with outreach, instruction, and interdisciplinary services. Several vacancies also positioned us to rethink the alignment of responsibilities with particular jobs.

By fall 2004, a "blueprint" for building a more effective staffing model within ESL was emerging, and by late spring 2005 it had resulted in a major evolution of numerous ESL jobs and roles. The significant outcomes of this have been an increase in cross-training, staffing flexibility, and interdisciplinary skills across ESL; greater flexibility in managing the complex portfolios of our librarians (information service, instruction, collection development, outreach and liaison work, special projects, technology), including the concepts of shared portfolios, primary and back-up responsibilities, and rotating responsibilities. ESL support staff has been integral to these outcomes, playing significant and growing roles in public services, committee work, and managing and planning important initiatives. A few illustrations follow.

After Julie Fernandes' resignation in fall 2004, we reorganized the ESL processing units into a single unit under one supervisor (Maria Rodrigues). One of the two positions created by this reorganization was used to create a new information services librarian position (Stephanie Hartman), with responsibilities across ESL.

In Barker, a Service Desk Team was formed to manage not only the traditional work of reference and circulation training and scheduling, but also other elements of service in Barker as a physical service point: technology, signage and exhibits, facilities, and marketing. The team consists of the Associate Head for Engineering, the Circulation Supervisor, and our new Information Services Librarian. So far this model seems effective and has accomplished a great deal despite all three service team members being new at their respective jobs.

In Hayden, the complexities of developing an integrated service point in collaboration with Access Services and Humanities were addressed through a series of interdepartmental task groups (two generations of a Hayden Reference Group, followed by a Hayden Implementation Team). A plan to be developed in summer 2005 will result in a single service point, managed by a combined team drawing on Science, Humanities, and Access Services, and staffed by a regular cohort of staff trained to a high level of competence in services across all three units. An outcome we expect is that each year or semester, one or more librarians in Science will rotate off the service desk team, and concentrate on other priorities and projects. This will increase our ability to undertake project-based work and expand our commitment to outreach and instruction.

In both Hayden and Barker, we have significantly increased the use of "on call" hours to staff the service desk, resulting in greater flexibility and capacity without any apparent loss of service quality. Both libraries are continuing to experiment with this approach to "just in time" information needs, using good communications, regular assessment, and training and documentation to support improved service throughout the hours the Libraries are open.

Another important evolution in ESL librarian positions has been to develop more flexible and collaborative approaches to the traditional suite of subject liaison responsibilities (collections, outreach, reference, and instruction). Many of these changes are described in the next section. In addition, a trio of ESL staff (Stephanie Hartman, Angie Locknar, and Howard Silver), working with colleagues at Dewey, took on new outreach and instruction responsibilities for meeting the business information needs of engineering and science students. On top of the existing environmental sciences collaboration and Lindgren team roles, ESL is finding it possible to create opportunities for professional growth, rich collaboration, and greater capacity as an organization to respond to our many opportunities.

Related goals for 2005-2006 include:

- Implement core competency recommendations from Team Delta.
- Establish user feedback mechanisms from our user community.

Leveraging our resources

“Leverage the expertise of our staff, and the information resources we manage.”

Supporting interdisciplinary work

- Created BTeam group to study bio-related interdisciplinary activity at MIT.
- Lindgren Team entered 2nd year of operations.
- Combined selection responsibilities for chemistry and materials science.
- Developed two general engineering librarian positions.
- Divided liaison responsibilities in Electrical Engineering and Computer Science (EECS) across two professional positions.

While many services to MIT users are still rooted in deep knowledge of classically defined disciplines and fields of engineering (physics, mathematics, chemistry, computer science, etc.), the interdisciplinary breadth and interests of both students and faculty at MIT continues to grow. While all of MIT’s recent research thrusts (info, nano, macro, bio, and now energy) bring disciplines together in new ways, the extent to which biologically-related research and development has infused MIT’s work is particularly evident. Until 2004, a single librarian has been charged with delivering and planning services to the life sciences community – a model that may not scale to the new interdisciplinary demand for biological information expertise. In order to discover the range and nature of life sciences work at MIT, ESL created a small team of librarians (the “BTeam,” https://www.socialtext.net/mit-libraries/index.cgi?b_team) in summer 2004, charged with undertaking a year-long effort to extend our collective knowledge and to offer proposals for how to organize our efforts and expertise to support life sciences work across all our disciplines. Led by Howard Silver and including Louisa Worthington Rogers, Tracy Gabridge, and Erja Kajosalu, the team delivered a fascinating report to ESL in early summer 2005, with a final report and recommendations expected in fall 2005. Their findings include a profile of life sciences-related research at MIT, an examination of informatics in the life sciences, and surveys of life sciences information support in other academic research libraries. Among their findings: 53% of chemical engineers are involved in biomedical research; 55% of chemists; 22% of civil engineers; 26% of computer scientists; 27% of materials scientists; and 30% of nuclear engineers. Every field of engineering and science at MIT has some research presence in this spectrum. The work of the BTeam also dovetailed with Erja Kajosalu’s work outlining challenges and library service models related to both bioinformatics and cheminformatics.

In its second year, the Lindgren Team continued to provide a superb level of service to the EAPS Department, by combining the expertise and subject knowledge of several ESL librarians as well as the dedicated and experience of Lindgren support staff. The level of instructional and outreach activity at Lindgren, as well as substantial and significant collections support for EAPS, reflect how the multiple

perspectives of Chris Sherratt, Michael Noga, Anne Graham, and Howard Silver have enriched services to this complex and active department. Major accomplishments of the team this year included extensive outreach activities promoting use of collections and building relationships with the EAPS faculty and students; support for 12.000, EAPS' signature freshman project course; new access to GeoScienceWorld – a package of journals from geoscience societies; online access to journals from the Royal Meteorological Society; and a new interface (CSA) for GeoRef. The latter is especially exciting because it brings GeoRef into a family of CSA databases used throughout engineering science disciplines.

In a different kind of break from traditional service to disciplines, we formalized new cross-disciplinary roles in collections and outreach work this year for Erja Kajosallo and Angie Locknar. The close and growing relationship in collections support between materials science and chemistry persuaded Erja and Angie that a single librarian – Erja – could effectively handle collections support for both fields, leaving Angie time to concentrate on outreach and instruction to mechanical engineering as well as materials science. Pairing support for both these fields will give Angie a significant role in outreach within both of the Schools served by ESL, and by assuming outreach support for mechanical engineering, we've been able to refocus Darcy's energy and experience in support of technology-based services in support of multiple ESL communities. Also following the new cross-disciplinary, cross-community service model is Stephanie Hartman's position as Information Services librarian. Both these positions "concentrate" on interdisciplinary services – whether by providing engineering expertise in system-wide services like AUC, or by specializing in support of genres typical of engineering (e.g. patents, standards), or in the business information needs of engineering and science students. Finally, we began to acknowledge the immense size and influence of the EECS department by planning an expanded, coordinated support model in Barker. Tracy Gabridge will continue as liaison to electrical engineering, working closely with a new Computer Science Librarian position (under recruitment in summer 2005). This approach will allow us to expand the range of support roles to include an explicit responsibility for bridging CSAIL research programs and our own MIT Libraries digital library research staff and programs.

In the year ahead, we expect to develop and continually assess these new models of interdisciplinary support, and use our experience to inform new initiatives in support of the President's energy research initiative as well as support for informatics and data services.

Internships

- Hosted Olivia Sparks, a paid summer intern.

This year we took another step on the path to developing a regular internship program in ESL – a goal we've been working towards for several years now. Deb Helman and Erja Kajosallo developed a proposal for a funded internship program – still a goal we will be vetting and developing in the year ahead. Meanwhile we were fortunate to be able to use student staffing resources to hire a short-term summer intern, University of Arizona MLS candidate Olivia Bautista Sparks, who joined us for five weeks in June-July 2005. In addition to getting a whirlwind introduction to a wide variety of academic library issues and discussions, Olivia provided key support to ESL through her contributions to our work on a RefWorks bibliography of MIT undergraduate textbooks, and her work with Erja Kajosallo and Angie Locknar on a new web page for materials and chemical properties. We have confidence that internships and fellowships offer a great way to bring in fresh ideas and perspectives, and focus resources and attention on special projects, while giving back to the profession by supporting the development of strong academic science and engineering library professionals.

Collections

- Life sciences funding increased.
- Major backfiles acquired in digital format.
- Elsevier cancellations.
- Fluid mechanics film loops digitized.

Thanks to Carol Fleishauer's successful request for increased life sciences collections funding, we received a major funding supplement of \$150,000 a year in ongoing funds. Louisa Worthington Rogers and Michael Noga developed a plan for spending the new funds that allocates approximately \$60,000 towards the purchase of important electronic backfiles, with the balance of \$90,000 going to the purchase of new electronic subscriptions. This is a very significant and exciting development and it provides a badly needed infusion of new content to support the dramatic growth of life sciences research at MIT. Among the new acquisitions we will add in 2005-2006 are:

- Annual Reviews backfile
- Methods in Enzymology backfile
- Nature Archive 1970-1986
- Nature Research Journals Archive
- Cell Press archive (split cost with Whitehead)
- Wiley Neuroscience archive

As these decisions indicate, the acquisition of electronic journal backfiles is a continuing and significant trend, and responds to the growing demand of our community for seamless desk-top access to historical as well as current research literature. A number of leading publishers released major backfiles at no additional cost to libraries, among them:

- AIP (Physics of Fluids, Journal of Mathematical Physics, and Journal of Applied Physics, all back to 1968)
- PubMedCentral (a major digitizing project taking important titles back to the 1970's or 1980's (<http://pubmedcentral.com/about/scanning.html>))

In addition, we were able to secure funding through the Libraries for access to more heavily used journals archives:

- Angewandte Chemie International archive
- IOP (historic archive back to 1874)
- Nature magazine archive, 1987-1996

Other major additions in ESL this year included:

- Boiler & Pressure Vessel Code (print)
- ASCE research library (online)
- GeoScience World, an aggregate of journals from geoscience societies (online)
- ASM Alloy Center, a database of property and performance data for metals and alloys (online)
- ASM Micrograph Center, over 2,500 micrographs of alloys, important to materials scientists (online)
- CINDAS, databases on thermophysical properties of matter and microelectronics packaging materials (online)

Other significant new titles added this year included Nature Methods and Nature Chemical Biology (both online), the two latest Nature monthly research journals; NeuroReport online, one of the most important neuroscience journals; and New England Journal of Medicine online, access to perhaps the most important medical journal in the United States. Also added were Faculty of 1000, an online research service in which scientists evaluate interesting papers in their fields, primarily in the life sciences; and current access to Methods of Enzymology, one of the most popular series in the Science Library.

Equally significant during the third (and, we hope final) year of MIT's recent budget shortfalls, ESL contributed a major effort to strategic cancellation projects, beginning with a final review of cancellation decisions for Elsevier products begun spring 2004. By absorbing a 15% cut in the Elsevier portion of the serials budget, we were able to reduce the impact of a \$200,000 shortfall in FY2005 collections funding on other publishers' content. Final decisions were made in August 2004 for implementation in 2005 (see more at <http://libraries.mit.edu/about/journals/cancellations.html>). Carol Fleishauer's skillful negotiations with Elsevier allowed us to add 18 new e-only titles, and five new print and electronic titles. A total of 150 ESL titles were affected by other decisions, with Science and Lindgren canceling 48 titles outright

and converting 64 to electronic-only; Barker and Aero cancelled 30 titles outright, and converted eight to electronic-only. It is a tribute to the skill of our selectors and collection managers, as well as the growing faculty concern with the sustainability of commercial scholarly communication practices, these significant cancellations were greeted with support, and even enthusiasm, by MIT's engineering and science faculty.

Throughout the year we also began preparing for possible summer 2005 cancellations from our Spring (Kluwer, Birkhauser) portfolio, by assembling journal lists annotated with usage data, and MIT citation, publishing, and editorial relationships.

ESL also undertook a variety of collection management projects this year that when completed will enhance access to collections. These projects included the successful reformatting to DVD of Barker's several hundred fluid mechanics film loops. This effort, carried out with the support of Jennifer Banks and Heather Caldwell, as well as Maria Rodrigues and Carol Robinson, will free us from using antiquated equipment and allow these educational films to be circulated on DVD. We also began a thorough review of the Barker media collection, in anticipation of a renovation both of the Barker media room and Barker's media collection policies.

In further "care and feeding" of our legacy collections, ESL began developing proposals for reviewing remaining DDC materials in the Library Storage Annex; undertook a review of the Barker standards collection, updating our standing order and withdrawing duplicative materials; cataloged and bound JAERI technical reports in Science; and completed numerous other binding and storage projects in both Science and Barker.

Looking to the future, we face a number of opportunities and challenges. A new type of product that may have a growing role in interdisciplinary, information-saturated research communities is emerging: the customized "lecture," or "update." Morgan and Claypool has enlisted librarians across the country (among them Carol Robinson at MIT) to help develop their new product, "Synthesis," a set of high quality "lectures" providing state of the art insights into research trends and topics in computer science and several other fields. A similar product is being developed at MIT under the name "Knowledge Updates." Anna Gold and Darcy Duke have been working closely this year with editor David Game to support this exciting new information tool, currently focused on areas of biotechnology and materials science. "Knowledge Updates" are being added to Vera and will be available free of charge to the MIT community. Meanwhile, in Barker we are looking at ways to manage the risk associated with IEEE's announcement that they will no longer produce print editions of conference proceedings, in 2006. Ellen Duranceau and Tracy Gabridge have been working on licensing language to ensure long-term access to the digital versions of these core resources; Tracy, Anna Gold, and Deb Helman have been developing presentations and papers to help frame more generally the risks and options more generally that digital publishing of engineering proceedings present.

For the year ahead, our goals for ESL collections include:

- Develop collection assessment best practices, metrics, and data sources, with an initial emphasis on journals (phased deadlines through fall 2006).
- As part of this goal, develop a complete ranked list of ESL journals to support selection and other collection decisions (phased deadlines through fall 2006).
- Develop a strategic plan for acquiring significant digital journal back files, to support resource allocation and resource development, by July 2006.
- Develop an archival policy and strategy for digital engineering proceedings.
- Begin review of DDC remainders at Annex (summer 2005).
- Complete Barker media review; develop and implement new media selection policies (fall, winter 2005-2006).
- Continue to work on cross training of processing staff towards the goal of fully integrating the two units (year-long).
- Implement Aleph 16 (summer 2005)

- Support the planned comprehensive shift of the Hayden Library collections (summer 2005).
- Review the Science Reference collection (fall 2005).

Training

- Barker continued mentoring system of cross-training.
- ESL staff participated in development of core competencies project.
- Began ESL-wide outreach and training roundtable series.

ESL staff continues to strive to develop a “culture of training” as called for by the Team Delta plan. Barker’s mentoring program continues to serve an important role as a continuous, two-way approach to developing and learning new skills. Mentoring relationships have proven to be an important part of Barker’s success in expanding our on-call schedule, as well. Barker also worked to develop improved student training procedures and documentation this year. Cross-training has been an important part of the new combined ESL Processing Unit’s strategy for success. Several ESL staff members, including Jen Harter, Denise O’Malley, and Andrew Shea, have been involved in system-wide efforts to understand core training needs (“core competencies”) as well as core documentation needs in support of structured and ad hoc self-learning. In spring of 2005 ESL also experimented with creating a new, informal forum for promoting and offering training, on a variety of technical, information, and other topics. The bimonthly ESL-wide training roundtables, coordinated by Howard Silver and Linda Bowman, have included a session on Google Scholar and Scirus (from Elsevier); and a great presentation by Heather Denny on P.R. basics.

Outreach

- Participated in efforts to develop programming for Information Intersection.
- Organized Stata Center CSAIL reading room open house.
- Organized outreach roundtables.

Whether attending faculty meetings, studying research practices and trends in departments, attending or hosting research and community events, or getting feedback about resources and services to support MIT communities, ESL librarians are continually engaged in outreach.

Late summer’s orientation events and Library Week activities offer many outreach opportunities, and ESL librarians and staff were involved in a variety of planning, event coordination, and general orientation activities. The exciting new Stata Center building has given the Libraries another venue for events and visibility, through programming developed for the Information Intersection by Patty Durisin, Tracy Gabridge, and Steve Gass. A big hit has been the installation of a book drop! We are eager to see ongoing programming for this interactive space developed, and have incorporated this responsibility into the position description for a new Computer Science librarian (currently under recruitment). Another outreach initiative at Stata was organized by Tracy Gabridge and CSAIL Reading Room librarian Maria Sensale. The event was an open house and tour of the CSAIL and Philosophy reading rooms in Stata, as well as an introduction to the Information Intersection.

Another successful innovation in outreach was Tracy Gabridge and Angie Locknar’s support of a nanofabrication journal working group in EECS. The group read one article every week throughout the summer with a group of grad students and other faculty members (<http://quantum.mit.edu/njwg/>). Tracy and Angie contributed by creating web pages for the articles themselves - linking to the references, citing articles, other related links, etc., as they tracked, bibliographically, a dizzying number of associations made on the fly by attendees from EECS, materials science and mechanical engineering. Feedback from the faculty was enthusiastic.

Finally, to provide a forum for sharing information about our user communities, in spring 2005, we began a series of bimonthly “outreach roundtables,” coordinated by Louisa Worthington Rogers and Anna Gold,

with the initial two meetings focusing on science and engineering research needs met by Dewey Library, and a preliminary report from the B-Team on life sciences-related research and teaching.

Partnerships

- Worked with Harvard Science libraries on MIT-based bioinformatics seminar.
- Worked with Harvard on Iraq-inspired project to leverage access to OCW resources.
- Worked with Countway Library to modernize reciprocal borrowing practices.

In the course of the year we have continued to build relationships with the Harvard University Libraries. A fall 2004 joint meeting of MIT and Harvard science and engineering librarians yielded new opportunities to exchange specific information skills and teaching opportunities, including Dr. David Osterbur's guest appearance at MIT to offer a bioinformatics workshop attended by about a dozen MIT graduate students and postdocs. Anna Gold and Erja Kajosalu worked with Harvard's science libraries and Science Commons to jointly sponsor a 2-day visit by Peter Murray Rust to audiences at MIT and Harvard, including a standing-room only audience in CSAIL, in March 2005. We also continued to partner with Harvard on their initiative to rebuild academic libraries in Iraq, culminating in a very important and useful meeting with a dozen Iraqi educators and academics in June 2005 at Harvard and also at MIT. Our strategy of leveraging the richness and supporting context of MIT's OpenCourseWare to deliver a bibliographic product (a database of textbooks used in MIT's undergraduate science and engineering curriculum) so far appears to be on the right track, especially now that the University of Baghdad has received a complete copy of the OCW database through the generosity of an MIT alumnus. Other Harvard-MIT partnerships have come through our work with Countway Library: one initiative has been to move the process of applying for reciprocal borrowing privileges to the web and email. Other Countway-MIT relationships are being fostered through the office of the Director (exhibit planning and collaborations in support of Broad Institute affiliates).

ESL also contributed to international community partnerships in Kenya and Honduras. The Science Library facilitated efforts by Eric Mibuari and the MIT Public Service Center to obtain surplus computer equipment and ship it to Laare, Kenya to create a successful public computing center. Craig Thomas, Barker, and Ruben Madrigal, STS, contributed to the project. Olimpia Estela Caceres Brown continued her efforts to obtain and ship surplus computer equipment, school supplies and medical equipment to Honduran public schools and hospitals.

Shaping the future

“Work to shape the future.”

Technology:

- Created full-time LTE position in Science.
- Revised Barker librarian position to include support for technology-based services.
- Experimented with wiki technology to support staff productivity and communication.
- Pioneered adoption of RSS technology within MIT Libraries.
- Supported online collection of service desk statistics.
- Participated in MIT-wide evaluation of support for database applications.
- Developed documentation to support RefWorks applications.

Technology trends in the library community and the sophistication of the user community served by ESL have led us to realign staff responsibilities to accommodate more technology planning, experimentation, and project implementation.

We were delighted to have support of Steering Committee for increasing Olimpia Estela Caceres Brown's work from half time to full time, effective in fall 2004. This has alleviated to a great extent the stresses and constraints both of Olimpia's responsibilities and those of .25 LTE Matt Sikorski. As a result, Matt has been able to devote more attention to leading facilities and signage initiatives in Hayden and Science, while still providing critical back-up and support for technology in Science.

A second staffing decision that will allow us to focus on technology-based services is a plan to reconfigure Darcy Duke's position in Barker to include technology planning and integration in support of the delivery of information services. Darcy has been a leader at MIT in implementing interactive and collaborative technology, teaching and supporting RSS technology and playing an important role in organizing NEASIST's successful spring event on wikis, blogs, RSS, and related technologies. In addition to her work promoting blogs and RSS at MIT, Darcy will be taking the lead in implementing a new ESL-wide wiki on the SocialText platform. Wiki technology is easy to learn and looks like a great way to support ESL-wide collaboration and communication. The BTeam started down the wiki path earlier this year (on the SeedWiki platform). Our experience so far is that SocialText appears to be a more robust platform for our wiki applications. Experimenting with this platform internally will also provide us with valuable experience we can use to advocate and plan new uses of this flexible and interactive tool.

Through the efforts of our LTE's, ESL has also been active in database development, support and planning. Craig Thomas extended his support for service desk statistics collection and reporting from an initial pilot in Barker to a system-wide project. While this project presented challenges it also provided invaluable lessons in technology project management and raised important issues regarding project management and technology support system-wide. Craig's expertise in FileMaker technology also led to his selection for the Institute-wide DDADP group (Departmental Database Applications Development Project Team), whose recommendations include the formation of a new IS&T unit to help support departmental database design, development, and operation. In Science, LTE Olimpia Estela Caceres Brown has taken a lead role in documenting and supporting bibliographic database tools – EndNote and RefWorks.

Another ESL technology initiative this year was our successful bid to undertake experimental work with a pair of PC tablets. PC tablets are beginning to appear in a variety of pedagogical settings at MIT; they are popular in applications that depend on portability, visually-based interactivity, and collaboration. Howard Silver is coordinating the PC tablet with technical support from Olimpia. Our goal is to use the tablets for staff projects and experiments that will help develop an understanding about the potential value of this technology for library staff and users.

Selected technology goals identified in ESL for 2005-2006 are:

- Experiment with new online content technologies in serving up libraries content to the ESL community.
- Become familiar with technologies in use by our communities to support information needs, such as for data initiatives like GIS or informatics, etc.
- Continue to advocate for use of good user interface practices and incorporation of new tools into tools and resources important to the ESL community.
- When experimenting with the use of technologies in the local environment, communicate and advocate for wider implementation and adoption of successes.
- Work to integrate Libraries research projects into services/outreach provided in ESL. (like DSpace)
- Develop projects to test tablet PCs.
- Make Mimio Xi available for student check out by fall term.
- Develop full technology plan for revamped Barker Media Room
- Continue to automate and support public workstation self-management strategies, and experiment with local server for workstation management and software upgrades.

- Increase cooperation and communication among ESL LTEs and also within Hayden.
- Shift to flat screen monitors as standard for staff machines.
- Improve Crossfire/Scifinder public station front-ends to verify MIT ID numbers.

Research program

- Research component of new CS librarian position.
- Participated in DSpace early adopter study.
- Participated in development of NSF funding application.

One of our most exciting developments this year was the decision, supported by Steering Committee, to incorporate an explicit role for the new Computer Science librarian to work closely with the DLRG and with CSAIL researchers, both to examine new ideas, and to help put into operation and practice the research being conducted for the Libraries.

Throughout the winter and spring, several ESL staff worked with Margret Branschofsky to interview DSpace “early adopters” regarding their experiences, and to support an MIT-CMI funded research effort to determine the impact on DSpace adoption of providing full deposit support to selected faculty and departments. The departments who agreed to work with the project were Math, Mechanical Engineering, and Materials Science. Margret has been working with a number of faculty in these departments to identify materials suitable for deposit in DSpace; we look forward to learning the results of this important research.

A number of ESL staff participated in developing a draft NSF proposal submitted by MacKenzie Smith, to conduct research on archiving digital data in computational and systems biology. Though unsuccessful in the first round, we are hopeful that we can play a supportive role in shaping future submissions with similar goals.

Scholarly communication

- Began informatics services research project.
- Supported visit by Peter Murray Rust.
- Participated via presentations and attendance at national meetings.

ESL was active this year in outreach to faculty regarding scholarly communication issues. Erja Kajosalu was among the librarians who advised chemistry faculty about some of the contentious and difficult issues regarding chemistry journals. Darcy Duke and Erja both participated in supporting the development and publishing of the new Libraries web site on scholarly communication, under Carol Fleishauer’s leadership. Anna Gold and Erja Kajosalu worked with administration support to bring in Peter Murray Rust to speak about the Semantic Web and new models for scholarly publishing that will provide richer and more functional access to the data embedded in scientific journal articles.

At professional meetings and as advisors to society publishers, ESL librarians have also worked to shape debate and actions in support of a more sustainable, effective system of scholarly communications, among them Erja Kajosalu, Michael Noga, and Anna Gold. With particular support from Erja, Ann Wolpert, and Carol Fleishauer, Anna presented an invited paper at an October 2004 workshop sponsored by the National Research Council, addressing the needs of scholarly publishing in chemistry. One result of this was establishing a contact with Dr. Peter Murray Rust, who subsequently was a joint guest of MIT, Science Commons, and Harvard Libraries in well-attended talks in winter 2005.

Data and informatics

- Submitted CSBI funding proposal.
- Formed ESL data initiatives group (to begin September 2005)
- Continued developing working relationships with Data and GIS services in libraries.

This was a year where the funding world sat up and began to pay serious attention to issues around archiving digital scientific data. Anticipating this important issue, MacKenzie Smith developed a draft NSF grant proposal to conduct research on biological data archiving with CSBi. Although that effort was not successful, it is likely to be resubmitted in modified form in 2005-2006. By informing ourselves and discussing these issues among ourselves and with experts like MacKenzie, we have in ESL begun to prepare ourselves to launch a new ESL Data Initiatives Group in September 2005. This group will undertake a 9-month effort to learn about the data environment at the Institute, to develop basic scientific data referral services, and to learn more about scientific data archiving practices. The group's work, coordinating closely with MacKenzie and our other MIT Libraries data experts (Lisa Sweeney, Kate McNeill-Harman) will likely inform decisions about the infrastructure we need to consider within the Libraries. Together these plans, set in motion during 2004-2005, will enable ESL to implement many new and interesting ideas in the upcoming year.

Meanwhile, Anne Graham has continued to develop her knowledge and experience with GIS through frequent meetings and work with GIS experts Lisa Sweeney and Daniel Sheehan; while in fall 2004, Erja Kajosalu began a study of cheminformatics and bioinformatics developments and library service models. The main focus of our efforts this year has been on learning – and sharing what we learn – in order to inform our activities and ensure we focus on achievable and significant benefits to MIT. One form of learning is to bring in guest speakers and teachers. Peter Murray Rust's March 2005 visit was one of these; Erja has also arranged for a July 2006 visit by cheminformatics specialist and NLM fellow Jeffrey Loo. We welcomed Harvard librarian and bioinformatics specialist David Osterbur in spring 2005 as a guest lecturer in our series of spring life sciences information seminars. In March 2005, Erja Kajosalu attended an NCBI session on molecular biology information resources. In June, Anna Gold attended a day-long workshop on international scientific data standards at the Joint Conference on Digital Libraries; and this September, Louisa Worthington Rogers will attend the National Library of Medicine's 2005 fellowship program in "biomedical informatics" in Woods Hole.

The year ahead

Though we are only a few weeks into the summer, the 2005-2006 year ahead is already taking shape, and finding structure and direction in a variety of local and system-wide initiatives:

- ❖ This summer, Barker and Science staff are developing tangible, interesting local public service goals that will enliven the experience of our visitors,
- ❖ We are finalizing a new organizational structure in ESL that will help us increase our focus on communities and relationships beyond the MIT Libraries.
- ❖ We are deeply engaged in the important system-wide discussions regarding our organizational support for digital library programs and initiatives.
- ❖ We have nearly completed a new ESL-wide instruction plan, to launch in fall 2005.
- ❖ We are about to launch a new collaborative staffing model in the Hayden Library.
- ❖ We are firmly committed to thoughtful and usable assessment in public services and collections areas.
- ❖ We look forward to participating in a close analysis of the match between our communities' needs and the space opportunities identified by CRSP.

We are engaged in and inspired by the major directions articulated by our new strategic plan, and look forward to partnering with our colleagues inside the MIT Libraries and throughout the campus in carrying forward ambitious and innovative programs in the year ahead.

ESL – Selected Statistics, 2005-2006

SELECTED INDICATORS	Aero	Barker	Lindgren	Science	Total
Reference at desk	2,248	2,765	448	4,596	10,057
Circulation (regular and reserves)	4,585	30,745	8,668	53,855	97,853
Door count	23,002	84,063	20,606	333,647	461,318
Instruction attendees	76	1,257	147	557	4,206
Instruction sessions	4	17	5	66	150
Collection budget – serials	\$61,003.00	\$753,946.00	\$190,053.00	\$1,784,976.00	\$2,789,978.00
Collection budget - monographs	\$13,799.00	\$204,578.00	\$30,102.00	\$226,788.00	\$475,267.00
Current journal titles - electronic	27	712	167	1,863	2,769
Current journal titles – total	104	1,551	367	3,061	5,083
FTE	2	13.5	see Science	14.5	30
Core community – total	465	3,536	see Science	3,093	7,094

DOORCOUNT	2001	2002	2003	2004	2005	CHANGE-1yr	CHANGE-5yr
Aero	24,500	25,577	27,917	27,463	23,002	-16.24%	-6.11%
Barker	115,318	81,139	92,910	122,251	84,063	-31.24%	-27.10%
Lindgren	24,612	24,406	20,355	21,001	20,606	-1.88%	-16.28%
Science	344,855	317,917	350,675	357,301	333,647	-6.62%	-3.25%
Hayden-24	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Schering-Plough	25,208	23,187	21,607	20,958		n/a	n/a
Total ESL	534,493	472,226	513,464	548,974	461,318	-15.97%	-13.69%
Total Libraries	n/a	n/a	n/a	866,663	757,370	-12.61%	n/a
ESL % of total	n/a	n/a	n/a	63.34%	60.91%	-2.43%	n/a

Notes:

- Science doorcount beginning FY2004 includes Humanities Library but not 24-hour study.
- Aero 2001 estimated from ARL sample weeks chart.
- Schering-Plough closed June 2004.
- 24 hour room statistics not available.
- 2005: hours reduced system-wide by an average of 9% due to budget cuts, July 2004 - June 2005

Discussion: Overall doorcount continues to drop, with Lindgren showing the smallest one-year drop. Some reduction may be due to reduced hours, system-wide, effective July 2004. There may be an error in Barker's 2004 doorcount, but in any case Barker's doorcount trends are puzzling.

CIRCULATION

LIBRARY	ITEM	2001	2002	2003	2004	2005	CHANGE 1yr	CHANGE 5yr
Barker	In-house use	62,156	54,407	55,969	21,813	17,145	-21.40%	-72.42%
	Loans (reg+res)	n/a	38,960	39,428	34,249	30,745	-10.23%	n/a
	Returns (reg+res)	n/a	43,244	43,752	44,782	41,183	-8.04%	n/a
	Bookpage requests	110	136	139	123	175	42.28%	59.09%
Lindgren	In-house use	4,805	4,196	2,666	3,099	2,097	-32.33%	-56.36%
	Loans (reg+res)	n/a	9,732	8,683	8,709	8,668	-0.47%	n/a
	Returns (reg+res)	n/a	n/a	n/a	7151	6,701	-6.29%	n/a
	Bookpage requests	n/a	n/a	n/a	29	26	-10.34%	n/a
Science	In-house use(Sci+Hayden)	163,851	121,509	97,234	76,573	67,193	-12.25%	-58.99%
	Loans (reg+res)	n/a	36,565	39,298	55,790	53,855	-3.47%	n/a
	Returns (reg+Hayden res)	n/a	n/a	n/a	61,656	60,896	-1.23%	n/a
	Bookpage requests	n/a	n/a	n/a	566	697	23.14%	n/a
Schering-Plough	In-house use	6,019	4518	3416	1,717	see Science	n/a	n/a
	Loans (reg+res)	n/a	2369	2405	2,872	see Science	n/a	n/a
	Returns (reg+res)	n/a	2731	2695	4,771	see Science	n/a	n/a
	Bookpage requests	n/a	3	6	10	see Science	n/a	n/a
Total ESL	In-house use	n/a	n/a	n/a	108,601	91,967	-15.32%	n/a
	Loans (reg+res)	n/a	n/a	n/a	106,408	97,853	-8.04%	n/a
	Returns (reg+res)	n/a	n/a	n/a	125,971	115,987	-7.93%	n/a
	Bookpage requests	n/a	n/a	n/a	742	909	18.37%	n/a
	Countway cards	n/a	n/a	n/a	97	86	-11.34%	n/a
	ILB requests filled	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total Libraries	Bookpage requests	n/a	n/a	n/a	1165	1770	51.93%	n/a
ESL % of Total	Bookpage requests	n/a	n/a	n/a	63.69%	51.36%	-12.34%	n/a

NOTES

Loans=circulations without renewals, reserves and regular loans

Science in-house use does not include unbound journal re-shelving (done by processing office)

Discussion: While all trend data we are gathering is not available here, what we have to date indicates that demand for Bookpage, though still modest, is the service with the highest rate of growth. Regular circulation is dropping, possibly due to fewer bound journal loans as issues become available electronically. In house use is dropping most precipitously (also likely due to electronic access of journals).

REFERENCE

LIBRARY	ITEM	2001	2002	2003	2004	2005	CHANGE 1yr	CHANGE 5yr
Aero	ref at the desk	n/a	n/a	n/a	1891	2248	18.88%	n/a
	ref away from desk	n/a	n/a	n/a	1022	739	-27.69%	n/a
	ask us - local	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	other at the desk	n/a	n/a	n/a	503	n/a	n/a	n/a
Barker	ref at the desk	6,278	5033	3939	3034	2765	-8.87%	-55.96%
	ref away from desk	n/a	798	1213	1241	692	-44.24%	n/a
	ask us - local	140	143	198	209	145	-30.62%	3.57%
	other at the desk	1754	1508	1221	1504	1312	-12.77%	-25.20%
Lindgren	ref at the desk	2,171	1,391	693	349	448	28.37%	-79.36%
	ref away from desk	n/a	n/a	n/a	182	298	63.74%	n/a
	ask us - local	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	other at the desk	n/a	n/a	n/a	207	240	15.94%	n/a
Science	ref at the desk	8,493	8293	7501	5490	4596	-16.28%	-45.88%
	ref away from desk		783	908	670	918	37.01%	n/a
	ask us - local	127	255	297	195	256	31.28%	101.57%
	other at the desk		2646	3627	2008	1222	-39.14%	n/a
Schering-Plough	ref at the desk	2,574	2,028	656	471	see Science	n/a	n/a
	ref away from desk	n/a	n/a	568	455	see Science	n/a	n/a
	ask us - local	n/a	n/a	11	27	see Science	n/a	n/a
	other at the desk	n/a	n/a	177	373	see Science	n/a	n/a
Total ESL	ref at the desk	n/a	n/a	n/a	11235	10057	-10.49%	n/a
	ref away from desk	n/a	n/a	n/a	3570	2647	-25.85%	n/a
	ask us - local*	n/a	n/a	n/a	n/a	582	n/a	n/a
	other at the desk**	n/a	n/a	n/a	4595	2774	-39.63%	n/a
Total Libraries	ref at the desk	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ESL % of Total	ref at the desk	n/a	n/a	n/a	n/a	n/a	n/a	n/a

NOTES

Lindgren & Schering-Plough 2001-2002, and Lindgren 2003 reference stats calculated from ARL sample data. Estimate combines reference and other.

*does not include counts from branches

**does not include counts from Aero

Discussion: (Reference)

Science/Hayden: There is no good way to compare our reference statistics in 2004-2005 to those of previous years. In past years, we counted the number of questions that were asked at the Science reference desk. This year, we distributed the questions asked at the reference desk based on the content of the question. Many questions which had previously been counted as Science reference questions became humanities questions or N/A questions (subject was neither science nor humanities).

From October to June, many questions that came in on the Ask Us! – Central phone line were given the “science” designation, and so are counted as part of Science reference questions, although they should be counted separately, as Ask Us! – Central questions.

One advantage to this year’s statistics is that we can now see how many questions with science content are being answered at the circulation and reserves desks in Hayden. The numbers have gone down since last year, but the cause is not clear. There could be a shift to away-from-the-desk help (those numbers have risen). There could also be an effect due to the new method of statistics collection.

Away-from-desk numbers bounced back up from last year, partly due to a shift in Countway Card applications away from the desk. There may also be more referrals, due to our experiments with on-call and single staffing. Patrons may be directly contacting their subject specialists more often as well.

In terms of email reference, the number of questions submitted to the Science queue in RequestTracker and handled by Science members of the Ask Us! – Central team both increased this year. This may signify a greater interest in desktop access to library expertise. Reported numbers for Science Ask Us! for both 2004 and 2005 include only questions in the Science RT queue.

A more detailed breakdown of FY 2005 questions follows:

FY 2005: Science reference questions at the reference desk: 3486

FY 2005: Additional science reference questions (circ/reserves desks): 861

FY 2005: N/A reference questions at the reference desk: 1110

FY 2005: Hum reference questions at the reference desk: 951

FY 2005: “Other” questions at the reference desk: 1222

FY 2005: 256 questions in the Science queue in RequestTracker

FY 2005: 437 Ask Us questions were handled (answered, referred, consulted on, followed up) by Science staff

Barker: A portion of the decrease in Barker away-from-desk statistics from 2004 to 2005 can be attributed to a change in practice with the Volpe Transportation Center. This year they began to charge their users for the service of getting information from the MIT Libraries as a cost recovery effort to cover the cost of their contract with us. Requests from the DOT are sharply down this year, about 72%. A factor affecting the Ask Us Local statistics is the separate accounting of Ask Us Central statistics (including off-campus questions) during this fiscal year. In past years those numbers were included in local counts, whereas now they are accounted for centrally.

INSTRUCTION								
LIBRARY	ITEM	2001	2002	2003	2004	2005	CHANGE 1yr	CHANGE 4yr
<i>ESL-ALL</i>								
	Total Sessions		82	137	182	150	-17.58%	82.93%
	Total Attendees		2453	4022	3920	4206	7.30%	71.46%
	Course-integrated sessions				33	27	-18.18%	n/a
	Course-integrated attendees				130	166	27.69%	n/a
	Course-related sessions				48	44	-8.33%	n/a
	Course-related attendees				470	182	-61.28%	n/a
	Independent seminars attendees				297	182	-38.72%	n/a
	Orientation/Tours attendees				1379	1764	27.92%	n/a
	Special events attendees				1375	867	-36.95%	n/a
	Special workshops attendees				269	329	22.30%	n/a
	# Staff involved				27	22	-18.52%	n/a
	Sessions with hands-on				70	62	-11.43%	n/a
	Sessions in DIRC				52			n/a
<i>Aero-Astro</i>								
	Sessions				2	4	100.00%	n/a
	Attendees				36	76	111.11%	n/a
<i>Barker</i>								
	Sessions		20	42	30	17	-43.33%	n/a
	Attendees		1257	1891	537	1257	134.08%	n/a
<i>Lindgren</i>								
	Sessions	2	3	2	5	5	0.00%	150.00%
	Attendees	55	90	125	135	147	8.89%	167.27%
<i>Schering-Plough</i>								
	Sessions	31	26	30	42	n/a	n/a	n/a
	Attendees	105	45	61	83	n/a	n/a	n/a
<i>Science</i>								
	Sessions	14	53	57	38	66	73.68%	371.43%
	Attendees	377	1061	1992	449	557	24.05%	47.75%
<i>ESL</i>								
	Sessions				5	18	260.00%	n/a
	Attendees				52	225	332.69%	n/a
<i>ESL-System-wide participation</i>								
	Sessions				60	34	-43.33%	n/a
	Attendees				2628	1944	-26.03%	n/a
<i>IAP</i>								
	Sessions				15	13	-13.33%	n/a
	Attendees							n/a
<i>Instruction for Undergraduates</i>								
	Sessions				41	69	68.29%	n/a
	Attendees				566	1084	91.52%	n/a
<i>Instruction for Graduate Students</i>								
	Sessions				29	37	27.59%	n/a
	Attendees				360	564	56.67%	n/a

Appendices:

Staff: Personnel changes

Recruitments:

Tracy Gabridge, Associate Head ESL for Engineering
Denise O'Malley, Barker Circulation Supervisor
Mat Willmott, Library Assistant, Aero/Astro
Computer Science Librarian, Barker (in process, June 2005)

New and changed positions:

ESL Information Services Librarian – Stephanie Hartman
ESL Processing Unit Supervisor – Maria Rodrigues
Science LTE – Olimpia Caceres Brown (.5 to 1.0)

Promotions:

Tracy Gabridge, to Librarian III (Associate Head ESL for Engineering)
Erja Kajosallo, to Librarian III

Resignations:

Julie Fernandes, October 2004, Barker Processing Assistant
Deb Helman, December 2004, Associate Head for Engineering
John Hume, September 2004, Barker Circulation Supervisor
Graham Stetler, June 2005, Library Assistant, ESL Processing Unit
Oliver Zeff, August 2004, Library Assistant, Aero/Astro

Intern:

Olivia Bautista Sparks, Science, June 2005-July 2005

ESL teams – participation:

Barker Service Desk Team

- Tracy Gabridge, Denise O'Malley, Stephanie Hartman

Barker Signs Group

- Anne Graham, Diana Daigle, Carol Frederick

Bteam:

- Howard Silver (chair), Louisa Worthington Rogers, Erja Kajosallo, Tracy Gabridge

ESL Collections Coordinating Group:

- Tracy Gabridge (to March 2005), Anna Gold (chair) Stephanie Hartman (to February 2005), Erja Kajosallo (March 2005-), Michael Noga, Carol Robinson, Maria Rodrigues

ESL Instruction Planning Task Force:

- Angie Locknar (chair), Tracy Gabridge, Erja Kajosallo, Carol Robinson, Howard Silver

ESL Management Team:

- Anna Gold, Howard Silver, Deb Helman (to December 2004), Tracy Gabridge (March 2005 -)

ESL Outreach Roundtable Coordinators:

- Louisa Worthington Rogers, Anna Gold

ESL Training Roundtable Coordinators:

- Howard Silver, Linda Bowman

Lindgren Team:

- Howard Silver (head), Chris Sherratt, Michael Noga, Linda Sobottka, Anne Graham, Michael Noga, Joe Hankins, Olimpia Caceres Brown

Hayden Facilities:

- Matt Sikorski (chair), Howard Silver, Linda Sobottka

Hayden Signage:

- Matt Sikorski

Hayden Reference Group:

- Jen Harter, Maria Rodrigues

Hayden Implementation Team:

- Jen Harter, Howard Silver

Hayden-Soc (Committee Without a Name)

- Jen Harter

Haystacks:

- Howard Silver, Michael Noga, Maria Rodrigues

System-wide service:

Aleph Upgrade Testing for Serials Acquisitions:

- Diana Daigle

Aleph Circulation and Training and Documentation Group:

- Denise O'Malley, Maria Rodrigues (co-chair), Mat Willmott

Ask Us! Central Team:

- Jen Harter, Darcy Duke, Stephanie Hartman, Remlee Green, Deb Helman (to Dec. 2004)

BAG:

- OPAC coordinator, Tracy Gabridge (to May 2005), Darcy Duke (May 2005 -)

Branch Managers Group:

- Eileen Dorschner, Chris Sherratt

Circulation Committee:

- John Hume (to November 2004); Denise O'Malley (January 2005 -), Joe Hankins

Collection Managers Group:

- Carol Robinson, Michael Noga

Computer Support Group:

- Craig Thomas, Olimpia Caceres Brown, Matt Sikorski

Disabilities Access Group:

- Anne Graham (to April 2005), Olimpia Caceres Brown, Jackie Harrington (April 2005 -)

DLG/TSAC:

- Anna Gold

DSPACE Advisory Group:

- Louisa Worthington Rogers, Deb Helman (to December 2004), Carol Robinson (December 2004 -)

DSPACE Policy Advisory Group:

- Anna Gold

Faculty User Group

- Carol Robinson

Graduate Student Users Group

- Anna Gold (chair), Eileen Dorschner, Angie Locknar

Instruction Committee:

- Angie Locknar (chair), Anne Graham

Library Advisory Committee on Workplace Issues (LACWI)

- Maria Rodrigues

Library Council:

- Anna Gold

NERD:

- Michael Noga, Deb Helman (to December 2004), Carol Robinson (December 2004 -)

Orientation Task Force:

- Stephanie Hartman (2005 coordinator), Howard Silver, Anna Gold, Angie Locknar

Piggy-back Task Force:

- Erja Kajosalu

Processing Committee:

- Maria Rodrigues (chair), Remlee Green, Stephanie Hartman, Graham Stetler (current members); also Linda Sobottka and Diana Daigle

PSMG:

- Anna Gold, Anne Graham (for Instruction Committee)

Reference Committee:

- Jen Harter, Deb Helman (to December 2004), Denise O'Malley

Researchers/Postdocs Users Group

- Howard Silver (chair), Erja Kajosalu, Louisa Worthington Rogers, Michael Noga

Rewards and Recognition:

- Craig Thomas, Joe Hankins

Scholarly Communications Website:

- Darcy Duke, Erja Kajosalu

SFX/Verde Task Force:

- Tracy Gabridge

Team Delta:

- Angie Locknar, Stephanie Hartman (core team)
- Signage Task Force: Darcy Duke, Diana Daigle
- Service Desk Statistics: Craig Thomas
- Service Desk Task Force (Core Competencies): Jen Harter, Andrew Shea
- C2D2: Jen Harter, Denise O'Malley

Technology Advisory Group (TAG):

- Mat Willmott, Erja Kajosalu, Olimpia Estela Caceres Brown

Undergraduate Student Users Group

- Stephanie Hartman

Web Advisory Group:

- Darcy Duke

Web Contacts:

- Matt Sikorski, Darcy Duke, Stephanie Hartman

Institute service:

DDADP, Departmental Database Applications Development Project Team

- Craig Thomas

Women's League

- Carol Frederick

Working Group on Support Staff Issues

- Diana Daigle, Julie Fernandes, Carol Frederick, Joe Hankins, Jackie Harrington

Working Group on Recycling

- Diana Daigle

Professional activities

Service to professional organizations:

- Eileen Dorschner - Chair, Aerospace Section, SLA, member SLA Engineering Division; member, ASEE-ELD Membership Committee, Session Moderator 2005 annual meeting; librarian representative to AIAA Publication Committee
- Darcy Duke - chair and member of the NEASIS&T Program Committee (organized symposium fall 2004 at MIT, "Freedom vs. Control: Rights Management in the Digital Age," planned spring symposium on RSS and other new networked tools for syndication, aggregation, and collaboration; liaison between ASEE/ELD and ASIS&T
- Joe Hankins - Simmons alumni group
- Jen Harter – organizing committee for LISA V; membership coordinator for SLA – PAM.
- Erja Kajosallo - Assistant Chair of ACS/CINF Program Committee (2005-2006); chair 2007-2008; invited to run in 2005 to become the chair of ACS/CINF (2006-2008).
- Michael Noga - Chair, Geoscience Information Society Collection Development Issues Committee; Member, Mary B. Ansari Best Geoscience Reference Work Committee; Member, GeoScienceWorld Library Advisory Board; Member, AGU Publications Committee Library Advisory Group

Teaching:

- Angie Locknar, Simmons College: appointment as adjunct professor for fall 2004, teaching LIS 484, Literature of Science and Technology.
- Howard Silver, Simmons College: appointment as adjunct professor for spring 2006, teaching LIS 484, Literature of Science and Technology.
- Craig Thomas, Boston College: continuing adjunct appointment teaching presentation technologies and skills

Graduate study and academic courses:

- Tracy Gabridge and Erja Kajosallo – MIT biology course
- Remlee Green, MLIS program, Simmons College (continuing)
- Stephanie Hartman, MLIS program (completed)
- Andrew Shea , MIT courses in architecture
- Howard Silver, PhD program, Simmons College (continuing)
- Linda Sobottka, MLIS program, Simmons College (continuing)
- Mat Willmott – completed two courses towards MS in mathematics (Northeastern)

Papers / Presentations / Symposia

Gabridge, Tracy A, 2004. "Enhancing Resource Discovery features in Metalib: Ideas for a self-teaching interface"(presentation). ARL/Metalib Portal Implementors Group (ARMPIG) Annual Meeting, Cambridge.

(Gabridge, 2004). Barbera, Patricia Durisin and Gabridge, Tracy A. (2004). MIT Libraries' Information Intersection on the Stata Center Student Street (presentation). Beyond the Building: Taking the Library to Our Users, the 8th annual Dartmouth October Conference, Hanover, New Hampshire.

Gabridge, Tracy A., Gold, Anna K., and Helman, Deborah (2005). Archiving Digital Engineering Proceedings (presentation). American Society for Engineering Education Annual Conference, Engineering Libraries Division, Portland.

Gabridge, Tracy A., Hennig, Nicole, Lubas, Rebecca, and Wenzel, Sarah (2005). When a Librarian's not there to Ask: Creating an Information Resource Advisory Tool (conference paper and presentation). Currents and Convergence: Navigating the Rivers of Change, ACRL 12th National Conference, Minneapolis.

Gabridge, Tracy A. (forthcoming 2005). Machine learning (book chapter) in Literature Search Strategies for Interdisciplinary Research ed. by Linda Ackerson (Scarecrow Press).

Gold, Anna, 2005. "Moving to the Academy in Mid-career: A Short Field Guide for the Experienced Librarian," in: The Successful Academic Librarian: Winning Strategies from Library Leaders, in press August 2005, Information Today.

Gold, Anna, 2004. "Chain reactions: Archives and the value chain in chemistry's scientific communications," Paper given at NRC symposium, October 2004, Are Chemistry Journals too Expensive and Inaccessible? NRC, 2005.

Kajosalo, Erja, 2004. "Experiments in Teaching Information Skills to Chemical & Engineering Students", web poster at SLA Chemistry Division Forum Web Conference, December 6-12, 2004, <http://forum.lib.lsu.edu/slachem/>

Kajosalo, Erja and Margret Branschofsky, 2004. "DSpace as an Institutional Repository", presentation at the 228th ACS National Meeting in Philadelphia, PA, August 22-26, 2004, <http://www.acscinf.org.cinf/meetings/228nm/228nm33.pdf>

Kajosalo, Erja, 2004. "Experiments in Teaching Information Skills to Chemical & Engineering Students", poster at the 228th ACS National Meeting in Philadelphia, PA, August 22-26, 2004, <http://www.acscinf.org.cinf/meetings/228nm/228cinfabstracts.htm#69>

Kajosalo, Erja, 2004. "Chemical Information Instruction: several approaches to reach chemists and chemical engineering students", presentation at 18th Biennial Conference of Chemical Education, Ames, IA, July 18-22, 2004, <http://www.chem.iastate.edu/bcce/>

Kajosalo, Erja, 2004. Scholarly Publishing: Initiatives and Electronic Publishing, E. Kajosalo, Organizer, L. R. Solla, Organizer, Presiding, 228th ACS National Meeting, Philadelphia, PA, August 22-26, 2004, <http://www.acscinf.org.cinf/meetings/228nm/228cinfprogram.htm>

Kajosalo, Erja, 2004. Posters on Chemical Information Instruction, Cosponsored with Presidential Event, E. Kajosalo, Organizer, 228th ACS National Meeting, Philadelphia, PA, August 22-26, 2004, <http://www.acscinf.org.cinf/meetings/228nm/228cinfprogram.htm>

Kajosalo, Erja, 2004. Handbooks Go Digital, Erja Kajosalo, Organizer, 18th Biennial Conference of Chemical Education, Ames, IA, July 18-22, 2004, <http://www.chem.iastate.edu/bcce/>

Kajosalo, Erja, 2004. Chemical Information Instruction, Armstrong, William and Erja Kajosalo, co-organizers, A joint web conference of SLA Chemistry Division and the ACS Division of Chemical Information. December 6-12, 2004. <http://forum.lib.lsu.edu/slachem/>

Noga, Michael Mark, 2004. "The status of regional geoscience literature published outside North America," presentation, Geological Society of America annual meeting, Denver, Colorado, November 11, 2004.

Noga, Michael Mark. 2005. "Conference proceedings in geoscience journals: What's the use?" In: *GSIS Proceedings* 34 (2003), 19-39.

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Maria Rodrigues, Infinite Mile Award, MIT Libraries
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Howard Silver

**Anna Gold, Head Librarian
Engineering and Science Libraries**