

**Library & Information Science Program**  
**Board of Visitors Report 2015**

**Faculty changes**

In spring 2015, Amelia Acker took over from Richard Cox as lead faculty for the Archives & Information Science specialization; Dr. Cox established the archives track when he joined the School in 1988 and led its successful development for more than 25 years. Tanja Bekhuis from the Department of Biomedical Informatics joined LIS in a secondary appointment; Dr. Bekhuis is a graduate of the MLIS FastTrack program and has been working with LIS part-time PhD student, Ashleigh Faith, on an ontology development project (which is featured in the poster session).

Dr. Acker was appointed to a tenure stream position as assistant professor in LIS with a secondary appointment in the Telecommunications and Networking program, following the departure of Brian Beaton at the end of the spring for a position as director of the Center for Expressive Technologies at Cal Poly (San Luis Obispo, CA) and assistant professor in the Department of History. Leanne Bowler was named as Director of the Sara Fine Institute in summer 2015; Dr. Bowler is on sabbatical leave in the fall, when she will be visiting the LSE Department of Media & Communications and Harvard University Berkman Center for Internet & Society. Kip Currier completed a three-year term as lead faculty and Co-PI for the iSchool Inclusion Institute (i3) and has taken up a new role as deputy chair of the LIS Program.

**Enrollment trends**

We enrolled 66 new students in the MLIS program in Fall 2015, which included 17 new entrants to the MLIS online program, and represents a 7% reduction on the 2014 intake of 71 students. The continuing decline in enrollments is disappointing, but the situation seems to be stabilizing, with the percentage reduction much smaller than the reductions of 27% and 24% experienced in 2014 and 2013.

Recruitment to the MLIS online program has been stable over the past three years, with intakes of 16 students in both 2013 and 2014. However, the 2013 intake represented a substantial drop (more than 50 percent) on the 2012 intake of 35 students. Feedback from interactions with alumni at conferences and other venues shows there is still a widespread belief in the professional community that we no longer have an online MLIS, following poor communication of the transition of our former FastTrack program to PittOnline.

We welcomed 2 new full-time PhD students in Fall 2015: Chelsea Gunn, who completed her MLIS (Archives specialization) at Simmons College, and then worked on digital initiatives for Newport Historical Society, RI; and Yu Chi, who completed her MS in Management Science & Engineering at Wuhan University, China. We have another new PhD student Rui Meng (also a graduate from Wuhan), who is taking courses from both the LIS and IST doctoral programs.

**MLIS online**

Our online program was ranked 8 (out of 20) for its academic excellence by TheBestSchools.org in a new national ranking of online MLIS programs.

In spring 2015, two LIS instructors, Ellen Detlefsen and PhD student Michele Leininger, won Instructor of the Year Awards from the international Web-based Information Science Education (WISE) consortium for courses taught online in 2014: Health Consumer Resources & Services (Detlefsen) and Advocacy & Marketing for Libraries (Leininger). Dr. Detlefsen has now won four WISE awards.

We continue to make good progress in transitioning MLIS courses to the PittOnline platform: another four courses have been completed since our 2014 report; an additional four courses are at various stages of transition; and three more courses are scheduled for transition in spring and summer 2016. By the start of the 2016-17 session, we expect to have 22 courses available via the PittOnline platform.

### **University collaboration**

The LIS program has many collaborative relationships across the University, which support and enrich our teaching and research activities, and enhance student learning by exposing them to different perspectives and practices. In addition to formal secondary appointments, we are cultivating informal collaborations that may in future evolve into more formal arrangements, for example with faculty in the Children's Literature Program (in the Department of English). Collaboration includes invited guest lectures, dissertation committee memberships, and supervision of individual research electives for MLIS and PhD students, in addition to faculty research collaborations; for example, Daqing He has research collaborations with faculty in the Health Information Management program in the School of Health and Rehabilitation Sciences, and is also actively seeking collaboration with people at DBMI.

Amelia Acker, Leanne Bowler, Richard Cox, and Alison Langmead are listed as affiliated faculty of the interdisciplinary Graduate Cultural Studies Program, based in the Dietrich School of Arts & Sciences. LIS courses currently cross-listed for the GCLST certificate include Archival Representation and Access (Acker), History of Books, Publishing, and Printing (Cox), Introduction to Mobile Information and Communication Technologies (Acker), and Technology in the Lives of Children and Youth (Bowler).

Liz Lyon is collaborating with faculty in a range of disciplines to introduce students taking her courses in Research Data Management (RDM) and Research Data Infrastructure (RDI) to diverse research practices and data management challenges, using an innovative approach described as "immersive informatics." During 2014-2015, Dr. Lyon placed her MLIS students in labs in Biological Sciences, Engineering, Public Health, and Renal Medicine, and is extending her network of collaborators for 2015-2016 to other areas (such as Chemistry); she also involved guest speakers from Dental Medicine, History and Bioinformatics in her classes. This type of collaboration brings mutual benefits: students gain from the collaboration by learning from practicing researchers about real-life data issues and how emerging roles such as data librarian can contribute to the research process by providing RDM advocacy, data preservation platforms, and software tools; departmental researchers also learn from the MLIS students about good data management practice.

The LIS program has many collaborative relationships with the University Library System (ULS). ULS librarians serve as instructors for elective courses, contribute guest lectures and panel presentations to elective and course courses, act as site supervisors for field placements, and provide work experience opportunities through our Partners Program and other part-time paid and voluntary assignments. Sheila Corral has contributed to the ULS strategic planning process, and in spring 2015 was invited to lead a workshop for employees from ULS, the Health Sciences Library System, and Carnegie Mellon University Libraries to consider how the three systems might collaborate over the next decade; she serves on the ULS Director Search Committee and is chair of the Senate Library Committee.

Dr. Lyon has collaborated with ULS to investigate real-world exemplars of emerging roles in data science (data librarian, data archivist, data steward), analyze knowledge, skills, and abilities needed; and map competencies to the MLIS curriculum. The project has informed staff development planning in ULS, assisted with curriculum development for our courses in RDM and RDI, and identified opportunities for new courses in areas such as knowledge management and data intelligence, possibly in collaboration with other schools (e.g., Business). Dr. Lyon is also exploring aspects of research transparency, reproducibility and trust in a pilot study that centered on librarians in the first stage and is now examining researcher awareness, attitudes and requirements, drawing on collaborative partnerships with selected departments including Chemistry, Political Science, History, and Psychology. The outcomes from this research will inform aspects of the RDM and RDI courses since transparency and reproducibility in the context of research integrity is becoming a key issue for data-intensive research.

LIS faculty, post-docs/visiting professors, and doctoral students have contributed 8 sessions to the ULS/iSchool Digital Scholarship workshop and lecture series in spring and fall 2015, showcasing their research and sharing their expertise with participants from across the campus. The program has included contributions by Amelia Acker, Sheila Corral, postdocs Matt Burton and Nora Mattern, and PhD students Wei Jeng and Jessica Benner (2 sessions each). Dr. Acker has also led digital portfolio workshops for the Office of Undergraduate Research in the School of Arts & Sciences, and has additional workshops scheduled for Engineering and TRIO Student Support Services in 2016.

### **Program evolution**

The continuing decline in enrollments for the MLIS program has made it unsustainable in its current form as it costs more to operate than the income it generates. In fall 2015, the Dean asked LIS faculty to begin the process of a more radical reshaping of the LIS program to reflect current realities in terms of nationwide trends in enrollment and placement balanced against the array of traditional and emerging professional opportunities for MLIS graduates. LIS faculty recognized that approaching this task simply as an operational cost-cutting exercise would be unlikely to work as a long-term solution and could be counter-productive if we simply reduced our course offerings, became even less attractive to students, and thus accelerated the decline of the program. We agreed the need to think strategically about the size and shape of the program in relation to our academic and professional vision and goals, the price and cost of the program to students, and its presentation and promotion to prospective students in recruitment and marketing.

While acknowledging that tinkering or quick-fix solutions will not provide a long-term solution, in view of the current budget situation, we have taken several short-term steps to contain costs, including withdrawing courses with small enrollments, cutting multiple sections of core courses, and combining on-campus and online sections where enrollments do not justify both sections. Beyond these immediate actions, several groups of faculty have been working on more fundamental changes:

- Amelia Acker led discussions with Archives & Information Science faculty (Cox, Langmead, and Mattern) resulting in agreed curriculum changes that will strengthen the digital/technical content of the specialization, better align it with other MLIS courses, and offer more flexibility in course choice, by creating three new concentrations within AIS: Ethics, Evidence, & Accountability; Digital Culture, Collections, & Repository Management; and Design & Stewardship. The changes were informed by student feedback, competitive intelligence, and employment trends, and will roll out in 2016-2017.
- Mary Kay Biagini has led a group of faculty and staff (Corrall, Day, Kavalukas, Leininger, Mahoney) tasked with reviewing our approach to recruitment and marketing, which has concentrated on defining differentiating features of our MLIS, especially the many opportunities for real-world experiential learning; improving our presence at professional conferences; and strengthening relationships with stakeholders, including Pitt undergraduate advisors. The group has articulated a distinctive “Continuum of options for “real-world, hands-on” experiential learning for MLIS students integral components of the educational experience to prepare students for professional careers” (copy appended) and introduced changes to improve the quality of field experiences and our Partners program. Its work has been informed by a review of professional literature and peer websites, and feedback gathered from students, alumni, and employers; it has now evolved into a Recruitment and Student Experience committee.
- Liz Lyon led a group of LIS faculty (including Acker, Langmead, and Mattern) in a mapping exercise to compare our current coverage of digital/technical topics with provision in other MLIS programs and emerging requirements of employers, identified from the websites of peer institutions and analysis of job advertisements, to identify gaps and opportunities for curriculum development.
- Chris Tomer has led a group of LIS faculty (Acker, Bowler, Corrall, He, and Lyon, with additional input from the ULS digital scholarship group), tasked with developing both a new curricular concentration in digital curation/data stewardship, and exploring the redesign of our MLIS core curriculum to place digital stewardship at the center, in recognition of the fact that roles, tasks, and know-how formerly viewed as specialties for a few tech-savvy librarians and archivists are now emerging as mainstream functions for contemporary information service organizations.

Our efforts to reshape the LIS program are still work in progress, but the general directions are fairly clear:

- Our graduates need stronger **tech competences** to compete in the current job market; and course content previously regarded as more advanced or specialized will need to be seen as the basic requirement for everyone.
- Information work is becoming more collaborative, with a shift from service-as-support to professional-as-partner/co-worker, which means graduates need a deeper understanding of the context of their interventions and skills in **relationship management**.
- Real-world hands-on experiential learning should therefore become a central, integral element of the educational experience, with **immersive informatics** learning experiences (real and virtual) embedded in the curriculum at both program and course level.
- The variety and complexity of information roles, and the scale and pace of environmental change mean that we need to move from traditional, precoordinated specializations to a postcoordinate model, where learners design their own tracks/concentrations – within a more flexible, less prescriptive framework of **themed pathways** (helped by faculty advisors).

### Significant challenges

The LIS program faces several challenges, many of which have been discussed previously:

- Declining enrollments for the MLIS program (not unique to Pitt);
- Uncompetitive tuition fee structure for our online program;
- Aging faculty, whose retirements need to be managed strategically (and sensitively);
- Uneven commitment among faculty to development and delivery of our online program;
- Providing online students with an educational experience of equivalent quality to the experience on campus, particularly real-world hands-on/immersive learning;
- Managing program renewal/reengineering, curriculum redesign, and course development while continuing to deliver the current program (also not a unique problem).

### Potential opportunities

The creation of a new academic unit (or units) offers the possibility of reopening discussions about the opportunities for a full spectrum iSchool, with strengths across the disciplines, to develop innovative interdisciplinary undergraduate, Masters, and Doctoral programs in areas of continuing and emerging interest, such as Internet Policy Studies, Translational Data Science, and Urban Informatics/Computing. Education and research programs in these and similar areas could simultaneously draw on and benefit from the humanities and social science perspectives and methodologies represented in LIS and the science and engineering methods and expertise of IST, Tele/Cyberinfrastructure, and CS faculty.

LIS faculty and students are used to considering issues holistically, and examining the social, cultural, political, and psychological dimensions of problems and issues in the information field. The LIS program can play a key role in helping the School respond to the research goals set out in *The Plan for Pitt*, using our existing multidisciplinary expertise and networks to collaborate in addressing critical social issues in education, health, and other areas; and provide the critical approach needed to understand the context and consequences of socio-technical systems.

**University of Pittsburgh**  
**School of Information Sciences      Library & Information Science Program**

**Continuum of Options for “Real-World, Hands-On” Experiential Learning for MLIS students**  
**Integral Components of the Educational Experience to Prepare Students for Professional Careers**

“Real-World” Work Experience	Description	Academic Requirements & Approvals	Compensation	Length of Experience	Student Work Requirements
<b>Integral to MLIS Program and Requiring Student Application and Approval by LIS</b>					
<b>Pitt Partners Program</b>	Sustained, supervised placement of MLIS student in a library or information service environment to gain “real-world” experience	No credit Selection facilitated by MLIS Committee	Compensated by hourly wage or stipend	3 consecutive terms beginning in Fall Term	10 OR 15 hours/week
<b>LIS 2921 Field Experience</b>	Supervised work by MLIS student in a library or information-service environment providing an opportunity to apply the skills, methodologies, and theories presented in coursework	3 credits Approval of faculty academic advisor, site supervisor, and Field Experience Coordinator S/U grade (1)	Cannot be compensated; academic credit only	1 Term (2)	<ul style="list-style-type: none"> <li>▪ 130 hours of work at site</li> <li>▪ 20 hours of seminars &amp; reflections</li> </ul>
<b>LIS 2901/2902 Individual Research</b>	Research on a student-selected and faculty-approved topic with final product in a form determined in advance by the student and faculty member.	LIS 2901 3 credits Letter grade (1) LIS 2902 3 credits Letter grade (1)	Cannot be compensated; academic credit only	1 Term	None Development of a product related to research
<b>Related to Gaining Work Experience in the Information Professions Facilitated by LIS, but Not Requiring LIS Approval</b>					
<b>Internship in an information service environment</b>	Set by institution (e.g., corporate, gov., non-profit, private)	No academic requirements No approval needed from MLIS Committee	May be compensated; if so, amount set by institution	Any length set by institution	Set by institution
<b>Paid hourly work in an information service environment</b>	Set by institution	No academic requirements No approval needed from MLIS Committee	Compensated by hourly wage set by institution	Any length set by institution	Set by institution
<b>Volunteer experience in an information service environment</b>	Based on Pitt Serves university and SIS volunteer models	No academic requirements No approval needed from MLIS Committee	No compensation	Any length set by institution	Set by institution

(1) If student is Pitt Partner, Partner site cannot be used for LIS 2921+ Field Experience except in a different area of service

(2) Must have completed 12 credits of which 6 credits must be core courses LIS 2000 and LIS 2600