PROMOTION RECOMMENDATION THE UNIVERSITY OF MICHIGAN SCHOOL OF INFORMATION

Margaret L. Hedstrom, associate professor of information, with tenure, School of Information, is recommended for promotion to professor of information, with tenure, School of Information.

Academic 3	Degrees:	
Ph.D.	1988	University of Wisconsin, Madison, WI
M.A.	1979	University of Wisconsin, Madison, WI
M.A.	1977	University of Wisconsin, Madison, WI
B.A.	1975	Grinnell College, Grinnell, IA

Professional Record:

1995 – present	Associate Professor, School of Information, University of Michigan
2004 – present	Faculty Associate, Inter-University Consortium for Political and Social
	Research, Institute for Social Research, University of Michigan
1987 – 1995	Chief of State Records Advisory Services, New York State Archives and
	Records
1985 – 1987	Director, Special Media Records Project, New York State Archives,
	Albany, NY
1979 – 1983	Archivist, Wisconsin Machine-Readable Records Project, State Historical
	Society of Wisconsin

Summary of Evaluation:

<u>Teaching:</u> Professor Hedstrom has contributed very effectively to the teaching mission of the School of Information in many ways. Within the master's program, she has taught one of the required courses several times, and has also taught a variety of courses related to archives and electronic records, consistently receiving high teaching evaluations. She has also supervised a number of student projects and master's theses, significantly including leading several student summer projects in South Africa. More specifically, she has provided an opportunity for close to three dozen MSI students to have an intensive international service-learning experience at the University of Fort Hare in Alice, South Africa. She not only identified the projects for the students at Fort Hare, but also arranged all the logistics of their trips and raised funds to help defray the associated costs.

Professor Hedstrom played the key leadership role in developing the Archives and Records Management (ARM) specialization at the School. This is particularly notable because at the time this specialization was created, there were virtually no models for it elsewhere in the country. Professor Hedstrom designed or redesigned the courses that now make up the ARM specialization, and she helped to hire and mentor the three other faculty members who also teach ARM courses. Today ARM is one of the more popular specializations for our students, and its graduates have been very successful in finding employment opportunities.

Professor Hedstrom has chaired four Ph.D. committees to completion, and all four now hold faculty positions. She is currently supervising three more doctoral students, and she is or has

served on nine additional dissertation committees.

In 2009, Professor Hedstrom procured a five-year NSF IGERT grant (\$2.9 million) to support 51 person-years of Ph.D. fellowships in the area of open data sharing and re-use in e-science. This program supports students in the School as well as in several departments in the College of Engineering, and the development of the curriculum associated with it represents an innovative and important contribution to cross-disciplinary teaching.

<u>Research:</u> Professor Hedstrom is a seminal figure in the field digital archiving. She was the first to focus attention on the need for archival preservation of digital information. In recent years her research has migrated from outlining basic strategies for digital preservation to investigations of the advantages and disadvantages of the prevailing strategies, as well as to the development of models for new strategies and methods, based on studies of barriers data producers must overcome to willingly deposit data into archives. She has also done pioneering research on the role of archival collections in collective social and cultural memory.

In her position as Chief of the State Records Advisory Services in the State Education Department (Albany, N.Y.) from 1987 to 1995, Professor Hedstrom recognized that although increasingly greater amounts of the historical and cultural record were being produced and disseminated in digital form, technology and social institutions were failing to keep pace with the need to ensure the survival of the digital record of human culture and accomplishment. Her 1991 article, "Understanding Electronic Incunabula: A Framework for Research on Electronic Records," served as a wake-up call to the archives field about the pressing nature of digital preservation and provided them with a framework for research on electronic records issues that placed these records in a historical, social, and cultural context.

Since this seminal early work, Professor Hedstrom's influential research accomplishments have included a groundbreaking study defining and developing the concept of *significant properties*: properties of digital objects that affect their quality, usability, rendering, and behavior. Findings from follow-on studies of user reactions to digital objects preserved using three common but different methods have influenced the choice of digital preservation strategies at leading cultural heritage institutions, including the British Library and the United States Library of Congress.

Another significant area of Professor Hedstrom's research addresses collective memory and the role of archival collections and institutions in shaping a sense of the past. Her goal is "to build an empirical foundation for understanding when archival documents make a difference in what individuals and society understand about the past." A representative early article in this area enlists "the idea of an *interface* at the intersection of documentary evidence, users, and the role of archivists in the processes of appraisal, selection, and description." Furthering this investigation is recent work that provides a "synthesis of research on collective memory that is relevant to the field and propose[s] a model for building an empirically-based research program to investigate how archival documents, collections, and institutions influence collective memory."

Professor Hedstrom continues to be highly productive, and is investing in ongoing activities; her future productivity and contributions are likely to be as great or greater as in the past. For

example, she is the principal investigator (PI) on a \$20 million, three-university research center proposal to the National Science Foundation which has passed through the first three stages of review, and has received a final (site visit) review in February 2010 (outcome unknown as of this writing). Last year she was PI on a five-year, \$2.9 million IGERT award from the NSF to support a multi-disciplinary Ph.D. training and research program.

Recent and Significant Publications:

- Hedstrom, M. and Niu, J. (2008). "Incentives to Create 'Archive-Ready' Data: Implications for Archives and Records Management." In *Proceedings of the American Archivists (SAA) Research Forum*. San Francisco, CA.
- Niu, J. and Hedstrom, M. (2008). "Documentation Evaluation Model for Social Science Data." In *Proceedings of the Annual Meeting of the American Society for Information Science & Technology (ASIS&T)*, Columbus, OH.
- Hedstrom, M. and King, J.L. (2007). "Epistemic Infrastructure in the Rise of the Knowledge Economy." In B. Kahin and D. Foray (Eds.), *Advancing Knowledge and the Knowledge Economy*. Cambridge, MA: MIT Press, pp. 113-134.
- Hedstrom, M., Lee, C.A., Olson, J.S., and Lampe, C. (2006). "'The Old Version Flickers More': Digital Preservation from the User's Point of View." *American Archivist* 69:1, pp. 159-187.
- Ross, S. and Hedstrom, M. (2005). "Preservation Research and Sustainable Digital Libraries," *International Journal of Digital Information* 5:4, pp. 316-324.
- Hedstrom, M. (2002). "Archives, Memory, and Interfaces with the Past," *Archival Science* 2, pp. 21-43.
- Hedstrom, M. (1991). "Understanding Electronic Incunabula: A Framework for Research on Electronic Records," *American Archivist* 54, pp. 334-354.

Service: Professor Hedstrom's service record is distinguished. At Michigan, she initiated the School's Archives and Records Management Specialization and served as its coordinator for 12 years. She has served on every standing committee at the School. Her University of Michigan service contributions are at the highest levels and include election to the Executive Board of the Rackham School of Graduate Studies, membership on three dean/director level search committees, advisory committee membership for the Gerald R. Ford Presidential Library, the Museum Studies Program, and a special committee on the University's intellectual property policy. She serves on the Executive Board of the University of Michigan Press and chairs a review panel, appointed by the Institute for Social Research, on the future of the Inter-University Consortium for Political and Social Research.

Nationally and internationally, Professor Hedstrom contributes to the practice of digital archiving in ways that draw the praise and attention of leaders in the field. One of Professor Hedstrom's external reviewers wrote that she "has been appointed to every major panel, commission, [and] advisory group of significance formed in the United States to address the topic of digital preservation." Another praises her work as a member of a Commission of the American Council of Learned Societies on Cyberinfrastructure in the Humanities and Social Sciences, and notes that the Commission's report has had influence abroad as well as in the United States.

External Reviewers:

Reviewer A: "Margaret is undoubtedly one of the leaders in digital archiving, probably the most prominent person in this field in the United States....She synthesizes various aspects of the field into a deep understanding, in which she combines respect for tradition with insights about the future."

Reviewer B: "She is clearly one of the top dozen researchers in North America ... and in my opinion has done a good job in moving this field forward."

Reviewer C: "...I find nearly anything she writes to be useful to me personally and certainly to the professionals who are concerned with the knowledge supporting archival studies."

Reviewer D: "In my opinion most if not all of Hedstrom's writings are extraordinar[ily] original and highly significant."

Reviewer E: "...[T]he splendid work she has been doing recently ... on cultural memory organizations and their role in structuring and transmitting collective memory ... forms part of what I think is a vitally needed, badly neglected and highly challenging multidisciplinary synthesis that should be creating the core intellectual underpinnings of the work of School of Information broadly. Overall, Professor Hedstrom's work is first rate: insightful, rigorous, influential, and clearly presented."

Reviewer F: "Professor Hedstrom's scholarly publications in the field of digital archiving have had enormous influence on both archives and libraries. From a theoretical framework, she moves into practical advice that helps practitioners understand what they need to do to continue to be stewards of the collections for which they are responsible. ...I am happy to submit this letter of strong support for Professor Hedstrom's promotion to full professor. She has made an enormous contribution to scholarship and to the profession."

Reviewer G: "[She] is an uncontested leader in developing archival sciences further and discovering new ways for the development of the necessary theoretical basis helping the profession to redefine its place in the digital world. She articulates new ideas and initiates fruitful discussions..."

Reviewer H: "Dr. Hedstrom's five page list of invited speaker/keynote presentations clearly speaks to her reputation in the field. Note [that] the speaking venues have been diverse, international, and prestigious."

Reviewer I: "...Hedstrom is a prolific writer on the vitally important topic [of] ensuring that the digital record survives. Too few of those who are participating in this momentous change in recording techniques recognize that the fragility of the digital medium puts the cultural memory of future generations increasingly at risk. [She] is one of the few who writes cogently and persuasively about the problem and with a broadminded vision and urgency about the need for and nature of workable solutions."

Internal Review: A promotion and tenure subcommittee produced an internal report on Professor Hedstrom's suitability for promotion. They described her as the founder and ongoing recognized leader of the field of digital archiving, and an educational leader, a strong teacher, and an effective mentor. They unanimously recommended her promotion. The full promotion and tenure committee of the School, consisting of all governing faculty at the rank of professor, also voted overwhelmingly for promotion.

Summary of Recommendation: Professor Hedstrom has been an excellent classroom teacher and successful Ph.D. mentor. She has also served as an educational leader, providing an important international service-learning experience for the School of Information masters' students, building the Archives and Records Management specialization in the master's program, shaping the doctoral foundations curriculum for the School, and developing and procuring funding for an interdisciplinary IGERT program. Professor Hedstrom is a seminal figure in the field of digital archives research and practice. Her research has been highly influential for other important scholars in this field, and has had important practical impact for the development of digital information archives and for preservation practices. In addition, Professor Hedstrom's record of service to the School, the University, and the world beyond is exemplary. With the overwhelming support of the promotion and tenure committee of the School of Information, I enthusiastically recommend that she be promoted to professor of information, with tenure, School of Information.

Martha E. Pollack

Dean, School of Information

May 2010