

# Educating eScience Librarians

# Five notions of eScience Librarianship

- Librarians are part of eScience project teams that transcend disciplinary boundaries.
- Data services to users are more consultative than traditional reference services
- Libraries are active players and contributors in data curation and preservation for discovery and long-term access
- Proactive training for data and scholarly literacy is emerging as a response to the rapid development and changes in eScience projects in which libraries participate
- Leadership and management skills remain important for services and projects supporting eScience, while an indepth understanding of scientific data, metadata, ontologies, and technologies becomes equally important for the new eScience librarian



### Mentorship Program

Cornell University Library (CUL) operates a mentorship program for enrolled students. The partnership provides students with opportunities to be exposed to world-class science libraries, as well as innovative eScience projects. Mentorship includes:

(1) a student / librarian match for relationship building;

(2) dedicated events at Syracuse and at Cornell;

(3) opportunities for students to participate in the life of CUL via existing topical working group sessions;

(4) virtual communication, interaction, and collaboration on issues of interest; and

(5) exploration of project and internship opportunities.

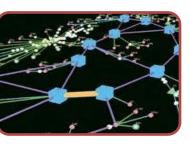


Syracuse University:Jian Qin, John D'Ignazio, Megan Oakleaf,<br/>Kevin Crowston, Andrea Wiggins, Andreas KuehnCornell University:Gail Steinhart

Goal: To design, implement, and assess an eScience librarianship curriculum in partnership with the relevant communities of practice.



Scientific Data Management (core)



Cyberinfrastructure and Scientific Collaboration (core)



Data services (capstone)

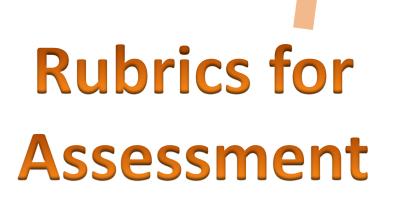


Database systems (required elective)



Metadata (required elective)

# eSLib Curriculum





To evaluate student learning outcomes for eScience Librarianship we are developing a four-pronged set of metrics that covers the following set of capabilities:

- (1) knowledge of eScience/eResearch
- (2) science data and metadata management
- (3) enabling data technologies and services
- (4) collaboration, communication, and leadership

#### http://eslib.ischool.syr.edu



To sharpen the eSLib Fellows' research skills and to expose them to the eScience environment, all of them are involved in smaller research projects under the supervision of project PI Jian Qin, co-PI Gail Steinhart, and research assistant Andreas Kuehn. Two SU librarians, Natasha Cooper and Scott Warren, are also actively involved.

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eScience Labs: fellows and project staff meet regularly to exchange information about project progress, lessons learned, and to discuss broader issues.



## Research Projects Related to Data

The research projects include: (1) Content analysis of institutional Data

(2) Requirements and tools for institutional dashboard;

(3) Data management, sharing, and dissemination Policies;

(4) Interview and survey of scientists to understand their needs and expectations for institutional support for data Management:

Open source community data agement.