Jen Ferguson jen@jasf.us

#### Education

Master of Science in Library and Information Science • Syracuse University Digital Libraries concentration

Master of Science in Biology ● Boston College

Thesis: "Analysis of S. pombe mitochondrial DNA by pulsed-field gel electrophoresis"

Bachelor of Science • Western Michigan University Biological Sciences major with Chemistry minor

## Experience: Libraries

Northeastern University - University Libraries, Research Data Services

Head, Research Data Services: 2019-present. Research Data Management Librarian: 2016-2019.

I lead the library's Research Data Services group, directly supervising four staff members with expertise in data management, data analysis, coding, GIS, and data visualization. In my time as department head, the group has grown from 3 staff members to a team of 5 staff plus 4 student positions. We work with partners inside and outside the library to support data-intensive teaching and research.

I advise on data management tools, standards, documentation, and organizational techniques to support data discoverability, reuse, and preservation. I assist researchers preparing data management and sharing plans for grant applications and promote potential solutions for storage and preservation of research data upon project completion.

I partnered with faculty colleagues in the College of Social Sciences and Humanities to plan and host <u>Data Rescue Boston</u> at Snell Library. This event attracted nearly 100 attendees and was covered by local media. Our collaboration led to further joint efforts with these faculty members to raise awareness about endangered data.

Northeastern University - University Libraries, Research & Instruction

Assistant Head, Research & Instruction, Science and Data Services: 2012-2016.

Data Services Librarian: 2011-2012.

I led the team of science, engineering, technology, health sciences, and math liaisons, directly supervising three librarians. I also served as the liaison to the biology department. Other responsibilities included instruction, research assistance, and collection development and promotion.

I co-led the libraries' launch of the Primo discovery service. I worked with Ex Libris and with library colleagues across many departments to implement Primo, optimize search results, generate documentation, and communicate with users inside and outside the library.

## Brandeis University - Library & Technology Services

Research & Instruction Liaison: 2008-2011.

I served as liaison to all science departments in support of a broad range of teaching and research activities. My responsibilities included instruction, research assistance, collections promotion and management, and support & testing of the university's Moodle-based LMS.

I initiated a new program to support senior students doing research in biology, neurobiology, and chemistry. I collaborated with science faculty to provide instruction and assistance relevant to students writing and defending senior honors theses.

I initiated and led a project that generated QR codes to promote and provide seamless access to library resources, including e-books, streaming media, databases, archival materials, and repository holdings. Codes were created in a way that allowed simple assessment via usage tracking.

## Experience: Science

### Wellesley College – Department of Biological Sciences

Research Assistant: 2006-2008.

I conducted laboratory research into the cell cycle of the yeast *S. cerevisiae*. I helped train student researchers and shared responsibility for maintaining lab records including the FileMaker database of yeast strains and characteristics.

## MIT - Department of Biology

Technical Assistant: 1998-2006. Technical Instructor: 1998.

I provided technical support and instruction for 7.02, a very large (175-200 students/year) biology lab course. I collaborated with colleagues to develop the course curriculum, teach, manage logistics, supervise undergraduate and graduate student workers, and design and troubleshoot experiments in genetics, cell biology, protein biochemistry, and developmental biology.

# Consulting & independent projects

Capstone Mentor, Data Services Continuing Professional Education • 2022

Community Expert, Fundamentals of Health Sciences Research Data Management

online course • NNLM National Center for Data Services, 2022

Lead instructor, Launching Data Services unit, RDMLA • 2018-2019

Co-teacher, Data Curation & Documentation Module, Biomedical and Health Research Data

Management for Librarians online course • NNLM Training Office, 2018

Lecturer, Research Data Management MOOC • UMass Medical Library, 2015-2016

Research Data Management Consultant • MCPHS University, 2015

Data Curator • Harvard School of Public Health, Bioinformatics Core, 2010-2011

Subject Matter Expert • Human anatomy & physiology online course, 2010

#### Platforms & tools

Research data management: DMPTool, COEUS, Open Science Framework, REDCap

Data visualization: Tableau, ArcGIS StoryMaps

Data science and manipulation: Python, Jupyter Notebooks, text analysis

Qualitative data analysis: NVivo

Project management and documentation: GitHub, Podio, Trello

Online learning platforms and object creation: Canvas, Moodle, Jupyter Books, GitHub Pages

Digital libraries/repositories: Drupal, Grouper, Fedora

Databases & library platforms: Ex Libris Primo, Springshare, ICPSR, Web of Knowledge, PubMed

Bioinformatics resources: GEO, Entrez Gene, OMIM, BLAST

#### Service: Professional

Reviewer, Journal of eScience Librarianship, 2012-present

Sponsorship committee, RDAP Summit, 2018-2021

Program lead, lightning talks, RDAP Summit, 2018

Member, OCLC Research Data Management Interest Group, 2018

Co-chair, New England e-Science Portal Editorial Board, 2013-2016

Board member & editor, New England e-Science Portal, 2010-2013

Current member: RDAP Association

Past member, Boston Library Consortium Cols: Scholarly Research & Chemistry

Past member: ACRL, SLA and ALA/MLA

### Service: Northeastern University

Chair, Summer Boost Committee, 2023

Co-chair, Primo Oversight Group, 2012-2013 and 2017-2022

Co-chair, Resource Access & Discovery group, 2013-2016

Member, Tableau Group, 2019-2020

Member, Curriculum Committee, 2016-2018

Member, Faculty Onboarding Working Group, 2017

Member, search committees for the following positions:

Dean, University Libraries and Vice Provost for Information Collaboration

Associate Dean, Research and Learning Services

Associate Director, Digital Scholarship Group

Digital Scholarship cluster hire: Developer, Data Engineer, & Semantic Data Specialist

STEM and health sciences librarians (6 positions)

Senior Web Developer

# Selected presentations, publications, and other works\*

Beales, R.D., Ferguson, J., Field, N., and Kirchhoff, A. (2023). Text analysis and the academic library. Poster presented at the 2023 Charleston Conference.

Ferguson, J. (2023). Teaching text analysis and data science in the library. Charleston Conference Proceedings, 2022.

Ferguson, J. (2023). Launching data services. Guest lecture for Data Services Continuing Professional Education Fall 2023 cohort.

Ferguson, J. (2023). Opportunities lost: Tracking denied service requests to advocate for more resources. Poster presentation at the ACRL New England Annual Conference, Worcester, MA.

Ferguson, J. (2023). Data mining & delivery via API: Challenges & strategies for future collection development. "And They Were There – Reports of Meetings, 2022 Charleston Conference," *Against the Grain*, 35(3), 47.

Ferguson, J. (2023). Opportunities lost: Tracking denied service requests to advocate for more resources. Poster presentation at the 2023 RDAP Summit.

Ferguson, J., and Kirchhoff, A. (2022). Teaching data science and text analysis in the library. Presentation at 2022 Charleston Conference.

Ruediger, D., Ferguson, J., Bharti, N., Ivey, S., and Gorham, R.B. (2022). Data support services needs in the DIY era. Panel presentation at RDAP Summit 2022.

Ruediger, Dylan, et al. (2021). Big data infrastructure at the crossroads: Support needs and challenges for universities. Ithaka S+R.

Ferguson, J., Kryder, K., Macalino, J., and Unis, J. (2021). Big data and data science research at Northeastern University.

Davis, H., Ferguson, J., and Moore, J. (2021). Understanding data teaching and research support needs. Presentation at the NERCOMP Annual Conference.

Ferguson, J. (2020). IPI in action. Guest lecture for LIS-532S, Foundations of IPI practice. Simmons University, Boston, MA

Ferguson, J., and Walker, P. (2020). Steal this curriculum: resources for teaching & learning about digital privacy. Presentation at NEASIST's Annual Winter Conference, Boston, MA.

Bettinger, E., Ferguson, J., Patterson, B., Rowell, C.J., Walker, P., and Wildenhaus, K. (2019). CryptoParty: Strengthen your digital privacy toolkit. Workshop presented at the DLF Forum, Tampa, FL

Ferguson, J. and Morin, R. (2019). Unit 4: Launching Data Services. Research Data Management Librarian Academy.

Ferguson, J. (2019). Beyond the DMP: Research data management and other library -based support and services are referenced throughout grant proposals. Poster presented at the RDAP Summit, Coral Gables, FL.

Ferguson, J. (2019). What are they saying about us? References to library support & services in grant proposals. Empirical Librarians Conference, Richmond, VA.

Corbett, H., Ferguson, J., and Sweeney, S. (2018). Intel inside: Using researchers' data management plans to guide development of support services. NERCOMP Annual Conference, Providence, RI.

Corbett, H., and Ferguson, J. (2018). Citation analysis: How we did it, and what we'd do differently. Empirical Librarians Conference, Knoxville, TN.

Corbett, H., Ferguson, J., and Sweeney, S. (2017). Keeping up with perpetual motion: Research lifecycle support services in academic libraries. Presented by H. Corbett at FORCE 2017, Berlin, Germany.

Corbett, H. and Ferguson, J. (2017). Assessing return on investment in licensed e-resources through citation analysis. Poster presented at NERCOMP Annual Conference, Providence, RI.

Ferguson, J. and Rust, A. (2016). Do funding agency data policies conflict with text mining license terms? Poster presented at the University of Massachusetts and New England eScience Symposium, Worcester, MA.

Boissy, R., Ferguson, J., Morrow, J., and Rust, A. (2015). Text mining support: Are we there yet? Presentation at TERMS of Engagement: Managing Collections & Electronic Resources Lifecycles, ACRL/NEC ERMIG & CDIG, Cambridge, MA.

Ferguson, J. (2015, 2014, 2013). Research data management: resources and tools. Guest lecture for LIS-532G, Scientific Research Data Management. Simmons College, Boston, MA.

Ferguson, J. (2013). Module 2: Types, formats, and stages of data. In *New England Collaborative Data Management Curriculum*. UMass Medical School Lamar Soutter Library & Partners.

Ferguson, J. (2013). A spectrum of scale: support for data needs in the sciences and social sciences. Presentation at New Roles for Supporting Digital Scholarship in Academic Libraries - ACRL/NEC SCIG. Boston, MA.

Ferguson, J. (2013). Lurking in the lab: Analysis of data from molecular biology laboratory instruments. *Journal of eScience Librarianship*.

Ferguson, J. (2012). Lurking in the lab: Analysis of data from molecular biology laboratory instruments. Poster presented at the International Association for Social Science Information Services & Technology (IASSIST) 2012 Conference, Washington, DC.

Ferguson, J. and Woodrum, A. (2012). Quick, quantifiable QR codes. Presentation at Computers in Libraries, Washington, DC.

Ferguson, J. (2012). A tale of two projects: The hands-on of data curation. Presentation at Understanding E-Science: A Symposium for Medical Librarians, Houston, TX.

Ferguson, J. (2012). Description and annotation of biomedical data sets. *Journal of eScience Librarianship*.

Ferguson, J. (2011). A tale of two projects: The hands-on of data curation. Presentation at the annual meeting of the Association of Academic Health Sciences Libraries, Denver, CO.

<sup>\*</sup>Full list with links available here: <a href="https://sites.google.com/view/jasf/home">https://sites.google.com/view/jasf/home</a>