

# Research Data Management

## Reaching Out to Faculty

Daniel C. Tsang

Data Librarian

University of California, Irvine, Libraries

[dtsang@uci.edu](mailto:dtsang@uci.edu)

©Daniel C. Tsang 2013

# ARL SpecKit 334: Research Data Management Services

<http://publications.arl.org/Research-Data-Management-Services-SPEC-Kit-334/>

## **RDM SERVICE OUTREACH & ASSESSMENT**

---

50. Please indicate which outreach methods are used to encourage faculty/researchers to use your RDM services, then select up to three of those that have been the most effective. N=53

Outreach Method	Used	Most Effective
Library staff referrals/promotion	44	7
Website links cross-posted to other library site pages	43	5
Workshops or presentations to faculty or student groups	41	19
Direct emails to faculty/researchers	35	12
Website links cross-posted to administrative sites	30	9
Research Projects (Grants) Administration referrals/promotion	30	14
Academic department administrator referrals/promotion	25	4
Website links cross-posted to academic department sites	14	2
Other outreach method	14	4
Total Responses	53	41

# Other Outreach Methods...

- Collaboration with and promotion through other campus offices like the Odum Institute and the Center for Faculty Excellence.
- Director of SPARCS (Sponsored Programs) sent email to all researchers about library services and support for RDM.
- Faculty outreach through a survey.
- Held Campus Data Summit and other promotion/outreach events.
- LCD and other social media (Twitter, blogs, etc.) are also used.
- Posting flyers in campus buildings.
- Print promotional materials
- Representation at the university's New Faculty Orientation and similar events.  
Articles in the Libraries' newsletter for faculty.
- Social media

# Other Outreach Methods continued...

- Targeted promotion techniques, e.g., open data during open access week
- Webpages and LibGuides, communication with liaison librarians
- Word of mouth
- Working with SPS has resulted in the inclusion of the repository in the data management plans of over 700 proposals to date. Awards are tracked and PIs directly contacted. Postcards mailed to all faculty and staff. Posters. Extensive outreach campaign. Subject librarians working directly with their liaison departments has been very effective, also. The Distributed Data Curation Center (D2C2) that was founded at the end of 2006, as well as librarians collaborating on interdisciplinary research grants, helped establish a reputation for the Libraries as a place to go for help with research data.

# *International Survey of Academic Library Data Curation Practices* (Primary Research Group, 2013).

From Summary of Main Findings, 15

## **RELATIONS WITH FACULTY ON DATA CURATION ISSUES**

### **Developing Data Management Plans for Grant Proposals or Personal Use**

More than half (63.33 percent) of all libraries in the sample offer advice to faculty on how to develop data management plans for grant proposals and/or personal use. This practice is more common among participants in the United States (72.22 percent) than it is among those outside the U.S. (50 percent). Furthermore, the likelihood of a library extending such advice to its faculty increases steadily as full-time equivalent enrollment increases: while just 40 percent of those libraries with less than 15,000 students maintain this practice, this figure jumps to 66.67 percent for the next enrollment range (15,000 to 29,999 students) and then increases once more to 81.82 percent for the top range (30,000 or more). RU/VH and top 150 ranked<sup>3</sup> institutions do this nearly twice as often (81.25 percent) as all other libraries in the sample (42.86 percent).

# Findings...

from *International Survey of Academic Library Data Curation Practices*, 2013, 15

## **Training Faculty in Data Management**

Just about half (46.67 percent) of all survey participants offer one-on-one tutorials to train faculty in data management. This proves to be the most popular form available to participants. Also utilized, but less popular, are workshops and seminars (used by 36.67 percent of participants), videos or web-based tutorials (23.33 percent), and formal classes (16.67 percent).

Participants in the United States particularly favor the one-on-one tutorials, as 61.11 percent of them use this method to train compared to just 25 percent of libraries in all other countries. These are also more common among larger institutions, with 63.64 percent of those with 30,000 or more students offering one-on-one tutorials compared to just 30 percent of those with less than 15,000 students. Ranking also plays a part, with 62.5 percent of participants in the highest ranking (RU/VH Carnegie Class or equivalent) offer them while just 14.29 percent of all participants listed in the “other” category use them as well.

# Findings...

from *International Survey of Academic Library Data Curation Practices*, 2013, 15.

Formal classes are used by 25 percent of all participants outside the United States, while only 11.11 percent of those in the U.S. use them. This trend is reversed for workshops and seminars, however: 44.44 percent of institutions in the United States use these to train faculty in data management, compared to 25 percent of those outside the U.S. Whereas half of all RU/VH (or top 150 ranked) institutions in the sample offer such workshops or seminars, this is true of only 14.29 percent of all RU/H (or top 400 ranked) participants. For videos and web-based tutorials, usage is more common among the largest universities (with 30,000 or more students) than it is among the smallest ones (less than 15,000 students): 36.36 percent for the former, 10 percent for the latter.

# The Problem of Data: Management and Curation Practices Among University Researchers, CLIR, 2013

## Key Findings

- None of the researchers interviewed for this study have received formal training in data management practices, nor do they express satisfaction with their level of expertise. Researchers are learning on the job in an ad hoc fashion.
- Few researchers, especially among those who are early in their career, think about long-term preservation of their data.
- The demands of publication output overwhelm long-term considerations of data curation. Metadata and documentation are of interest only if they help a researcher complete his or her work.



# Key Findings...

- There is a great need for more effective collaboration tools, as well as online spaces that support the volume of data generated and provide appropriate privacy and access controls.
  - Few researchers are aware of the data services that the library might be able to provide and seem to regard the library as a dispensary of goods (e.g., books, articles) rather than a locus for real-time research/professional support

# Recommendations...

- Data curation systems should be integrated with the active research phase (i.e., as a backup and collaboration solution).
- In the area of privacy and data access control, additional tools should be developed to manage confidential data and provide the necessary security. Most importantly, policies must be developed that support researchers in this use of these technologies.
- Many researchers expressed concerns surrounding the ethical re-use of research data. Additional work is needed to establish best practices in this area, particularly for qualitative data sets.

# Recommendations

- There is unlikely to be a single out-of-the-box solution that can be applied to the problem of data curation. Instead, an approach that emphasizes engagement with researchers and dialog around identifying or building the appropriate tools for a particular project is likely to be the most productive.
- Researchers must have access to adequate networked storage. Universities should consider revising their access policies to support multi-institutional research projects.
- Educational or other training programs should focus on early intervention in the researcher career path for the greatest long-term benefit.
-

# UC Irvine Libraries Initiatives

- The UCI Libraries are partners with the Office of Information Technology (OIT) and the Office of Research in an effort to define the long term direction and priorities for research computing and electronic research services on this campus.
- A committee made up of UCI faculty, and staff from the Libraries and OIT, has made a set of recommendations to campus administration based on an online survey and focus groups with faculty. Among the proposals made are the need to develop a much faster network for the movement of research data across campus and externally; more support staff to enhance services offered, such as management, preservation, and organization of research project data; and development of a research data storage system for long term, secure storage of both raw and processed data sets.

# *Faculty Assessment of the State of Research Computing (FASRC) at University of California, Irvine (2013)*

“Most critical research computing need”

- Our assessment is that long-term research data storage, and associated data management, is the single most critical research computing need not being met on campus.
- The FASRC committee believes that a well-run data storage service would allow many faculty groups to coordinate data storage using a centralized system, foster research collaboration, and provide access to archived research data.
- Faculty expressed a need for having a secure place to archive their data, if not centrally, elsewhere on or off campus.
- As a major component of the University’s scholarly product, research data must not only be stored securely but preserved and curated in trusted repositories so that the data remain accessible to the research community after a project is completed. Such accessibility enables secondary analysis of research data originally collected by University faculty and researchers

# Finding faculty for potential partnerships

- NSF awards to your institution

<http://www.nsf.gov/awardsearch/>

- NIH funded grants to your institution

<http://report.nih.gov/award/index.cfm>

- Data Management Plans
- Past faculty contributing content to institutional repositories
- Google Scholar
- Data Citation Index

# Talking Points with Faculty

*UCI Libraries draft in progress*

## **Questions to ask Faculty**

- Can you tell me a bit about your research and what sort of data is involved?
- Are you collecting your own or re-using existing data?
- Where is your data currently stored?
- What software and tools do you use to manage or analyze your data?
- Do you currently share your data? Would you like to share it in the future?
- Do you link your datasets to associated research publications?
- How is your research funded and does the funding agency require data sharing or preservation?
- Have you completed a Data Management Plan?

# Library Services: Potential Areas of Collaboration with Faculty

All of the steps involved in the research data lifecycle

- Collecting
- Describing
- Organizing
- Analyzing
- Preserving and archiving
- Sharing



# OC Data Portal

Potential UCI Libraries project

- Example of collaboration with faculty
- At risk faculty created Orange County, California, environmental data directory is likely to be transferred to UCI Libraries and reconstituted as a totally new, OC Data Portal
- We envision OC Data Portal as eventually becoming a one-stop gateway to a wide variety of datasets relating to the diverse environmental, social and demographic landscape of the county

# Resources

*Spec Kit 334: Research Data Management Services*, by David Fearon. Washington, D.C.: ARL Publications, 2013. ISBN 1594079013 URL: <http://publications.arl.org/Research-Data-Management-Services-SPEC-Kit-334/>

*International Survey of Academic Library Data Curation Practices*. New York: Primary Research Group, 2013. ISBN:978-1-57440-245-2

*The Problem of Data: Management and Curation Practices Among University Researchers*, by Lori M. Janke and Andrew Asher. Washington, D.C.: Council on Library and Information Resources, 2013  
<http://www.clir.org/pubs/reports/pub154/problem-of-data>

*Faculty Assessment of the State of Research Computing (FASRC) at University of California, Irvine*. Irvine, CA: UC Irvine Office of Research, Office of Information Technology and The Libraries, 2013.  
<http://sites.uci.edu/fasrc/files/2012/11/Faculty-Assessment-of-the-State-of-Research-Computing-Report.pdf>

*Research-DataMan Listserv*

<https://www.jiscmail.ac.uk/cgi-bin/webadmin?A0=RESEARCH-DATAMAN>

*Forthcoming:*

- *Delivering Research Data Management Services: Fundamentals of Good Practice*, by Graham Pryor. London: Facet Publishing, 2013. ISBN 1856049337
- *Research Data Management: Practical Strategies for Information Professionals*, by Joyce M. Ray. West Lafayette, Indiana: Purdue University Press, 2014. ISBN 1557536643

# Forthcoming

**Starting the Conversation:  
University-wide Research Data Management Policy**

Edited by Ricky Erway

OCLC Research Library Partnership  
Data Curation Policy Working Group

# Members of the working group

- Daniel Tsang, chair — University of California, Irvine
- Anna Clements — University of St. Andrews
- Joy Davidson — Digital Curation Centre
- Mike Furlough — Pennsylvania State University
- Amy Nurnberger — Columbia University
- Sally Rumsey — University of Oxford
- Anna Shadbolt — University of Melbourne
- Claire Stewart — Northwestern University
- Beth Warner — Ohio State University
- Perry Willett — California Digital Library

# Thank you!

資深圖書館員曾振鍛獲獎, *Chinese Daily News*, 18 August 2013



**北美華人風雲誌**

**資深圖書館員曾振鍛獲獎**

【雨灣訊】

August 18, 2013 09:00 AM | 3844 次 | 0 評 | 13 圖 | 0 書

雨灣加大資深圖書館員曾振鍛 (Daniel Tsang), 最近獲美國政治與社會科學研究組織 (Inter-university Consortium for Political and Social Research) 選為今年的傑出服務獎得主, 以表彰他多年來收集、整理社會科學研究資料庫的貢獻。

美國政治與社會科學研究組織是美國規模最大的社會科學資料庫, 該組織每兩年選出一位傑出服務獎得主, 並在該會年會中頒獎表揚, 過去16位傑出服務獎得主包括任職耶魯大學、麻省理工學院及柏克萊加大等名校的學者。曾振鍛自1986年起即擔任該組織在雨灣加大的代表, 為南加州地區的社會科學研究學者及學生提供有關如何使用該資料庫的協助。

來自香港的曾振鍛獲有密西根大學圖書館碩士, 他在雨灣加大負責總圖書館有關政治、經濟與亞美研究的資料庫, 他曾於2004年獲選為傅爾布萊特學者 (Fulbright Scholar), 並前往越南實地了解當地的圖書及研究資料庫, 他也發表過許多與越南難民及美國越南裔社區相關的文章。

雨灣加大圖書館資深館員曾振鍛, 榮獲美國政治與社會科學研究組織傑出服務獎。(雨灣加大提供)