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Medical Library Association Annual Meeting 2014 Chicago, IL

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#mlanet14dmtrain



Building the future of research together



The journey

Where we want to go

What we're doing now

How we got started



From: https://www.flickr.com/photos/casadequeso/11324474306

INDIANA UNIVERSITY-PURDUE UNIVERSITY INDIANAPOLIS

Data Services Program

- DSP situated within the University Library Center for Digital Scholarship (CDS)
 - Several liaisons with dual CDS appointment
- Digital Scholarship & Data Management Librarian (~60% FTE)
- Supported by Operations Team with web development and dSpace expertise
- Provide service by leveraging existing resources across campus

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About IUPUI

- Urban health sciences campus offering both Indiana University and Purdue University degrees, managed by IU
- ~30,000 students (18K undergrad, 12K grad + prof)
- Four libraries on our campus
 - University Library serves 15+ units
 - Dental, Law, & Medical School-based libraries



A brief snapshot

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COMMON GROUND

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Indiana CTSI



Accelerating Clinical and Translational Research

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Search the Indiana CTSI HUB

Are You an Investigator Needing Help?	
About	
News & Events	
Research Resources	

Training & Education Grants & Funding

Community Engagement

Volunteer for Research

Tools

Contribute

We Provide

News Alerts

Indiana Drug Discovery Alliance seeks applications for new

Clinical Research Center Access Collaboration Opportunities Community Access **Biospecimen Access** Education & Training Grants & Funding

A Letter of Support Project Development Help Research Studies Information Statistics & Data Management Help Recruitment, Feasibility & Data Request Core Technology & Lab Resources

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We Serve

Community Members Health Providers Institutional Partners New Faculty Members Research Coordinators **Research Volunteers** Scientists & Researchers Students & Postdocs

C Featured Item



opportunities, future directions [Read More]



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2014 Indiana CTSI Community Health Engagement Program Community Based Research Award Applications due May 16 Indiana CTSI 2013 Fall Core Pilot Awards recipients

announced

RFA -- due July 1

Indiana CTSI-Purdue retreat focuses on new

ICTSI: DM Service & Training

- Department of Biostatistics, Data Management Team
 - Consultations (free)
 - Data Management (fee-based)
- Master's Programs
 - Clinical Research
 - Translational Science
- Various fellowships, mentoring, awards



Common Ground

Generally

- Good data management is crucial for effective data preservation and sharing
- Research is a collaborative effort
- Research effort is wasted when data is managed poorly

Data Management

- Value of data management planning, especially defining or mapping data outcomes
- Value of good documentation
- Choosing tools that support data validation, integrity, and provenance/audit trails
- Implementing a storage and backup plan
- Use of secure, robust institutional cyberinfrastructure over local or departmental resources

Progress thus far

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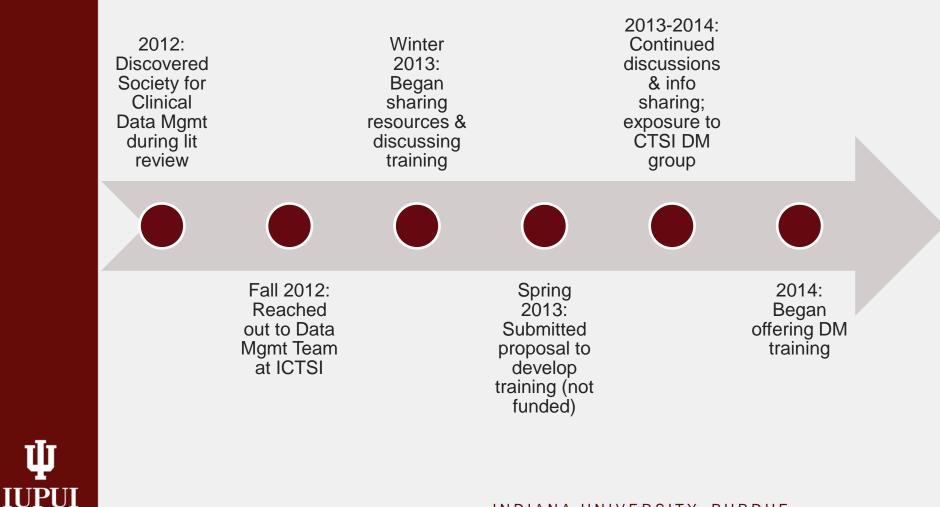
DATA MANAGEMENT TRAINING

Gaps in DM Service & Training

- Most graduate program curricula do not offer cover data management
 - Exceptions: Biostatistics, Biohealth Informatics, CS
- ICTSI MS program are too lengthy and expensive for many
- No DMP support offered

Building the relationship

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Developing the DM lab

- Identify stakeholders/target audience
- Develop learning outcomes
- Identify core content
 - Proven, effective strategies
 - Generalizable practices
- Identify key campus resources

More about the lab

- Monday, May 19: Poster #116: Improving data management in academic research: Assessment results for a pilot lab. <u>http://hdl.handle.net/1805/4415</u>
- Coates, H. L. (2014). Building Data Management and Repository Services: The IUPUI Approach. Presented at the Doing it Your Way: Approaches to Research Data Management for Libraries: New York, NY. <u>http://hdl.handle.net/1805/4396</u>
- Coates, H. L. (2013). Developing a data management lab: Teaching effective methods for health and social sciences research. Poster presented at the Data Information Literacy Symposium: West Lafayette, IN. <u>http://hdl.handle.net/1805/3569</u>
- Coates, H. (2012). Practical data management: Enabling graduate students and staff to function as ethical actors. Presented at the 2013 conference of the Association of College and Research Libraries, Indianapolis, IN. <u>http://hdl.handle.net/1805/3273</u>



Laying a foundation

- 1. For a working relationship with a strong research support unit that is part of wide-reaching network (institutionally, state-wide, and nationally)
- 2. For a shared understanding of data management needs at IUPUI

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BUILDING THE FUTURE... TOGETHER

Where do we go from here?

Mission Overlap

Distinct Roles?

- Navigator
- Educator
- Network hub

Existing Needs

- Data management training
- Data sharing support and infrastructure
- Data preservation and curation services and infrastructure
- Support for emerging incentives

Navigator

- Directing researchers to available cyberinfrastructure
 - Build awareness of resources
 - Appropriate referrals
- Providing a personalized service layer on top of infrastructure or core services

Educator

- Provide practical training relevant to emerging technologies
- Encourage DM behaviors that support data integrity, preservation, curation, sharing, citation, etc.
- Demonstrate data competencies as a valuable skill set



Network Hub

- Keeping administrators informed
- Facilitating a campus-wide conversation of relevant data issues
- Coordinate various experts to support projects
 - Tiered Services
 - Informationist
 - Project Development Teams
- Practice role for the library as a physical or virtual space?

Reflecting





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Ongoing challenges

- Competing for time/attention of researchers and data management team
- Communication across a diverse and complex campus
- Limits of DSP staffing
- Balance point-of-need v. proactive outreach

Looking ahead to the future

- Provide practical data management training to researchers, particularly predoctoral students & early career faculty
- Collaborate to provide shared mechanisms for data sharing, registration, and tracking impact
- Foster a campus-wide conversation about data stewardship at the level of the institution, individual researchers, and research/professional communities

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Resources

- Holmes, K. L., Lyon, J. A., Johnson, L. M., Sarli, C. C., & Tennant, M. R. (2013) . Library-based clinical and translational research support. *Journal of the Medical Library Association*, 101(4), 326-335.
- Committee to Review the Clinical and Translational Science Awards Program at the National Center for Advancing Translational Sciences; Board on Health Sciences Policy; Institute of Medicine; Leshner, A.I., Terry, S.F., Schultz, A.M., et al. (Ed). (2013). The CTSA Program at NIH: Opportunities for Advancing Clinical and Translational Research. Washington (DC): National Academies Press (US). Available from:

http://www.ncbi.nlm.nih.gov/books/NBK144067/

