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Teaching Data Management to Health Science, Science & Engineering Students

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Teaching Data Management to Health Science, Science & Engineering Students

Donna Kafel, MSLIS

Project Coordinator

Lamar Soutter Library,

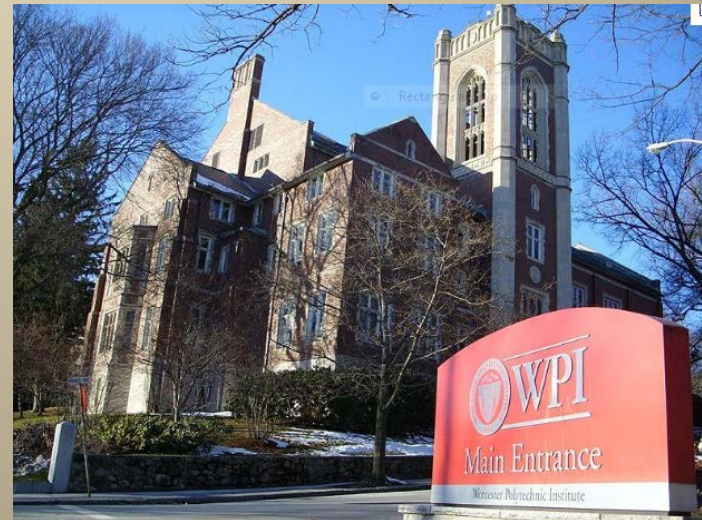
University of Massachusetts Medical School



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Planning a Data Management Curriculum

Joint project of the libraries at the University of Massachusetts Medical School and Worcester Polytechnic Institute





Initial Planning

Education Committee

- Faculty
- Librarians
- Graduate student
- Consultants: curriculum, instructional design, evaluation



Preliminary Activities

- Literature search
- Student interviews
- Faculty interviews
- Presentations by data librarians

Findings

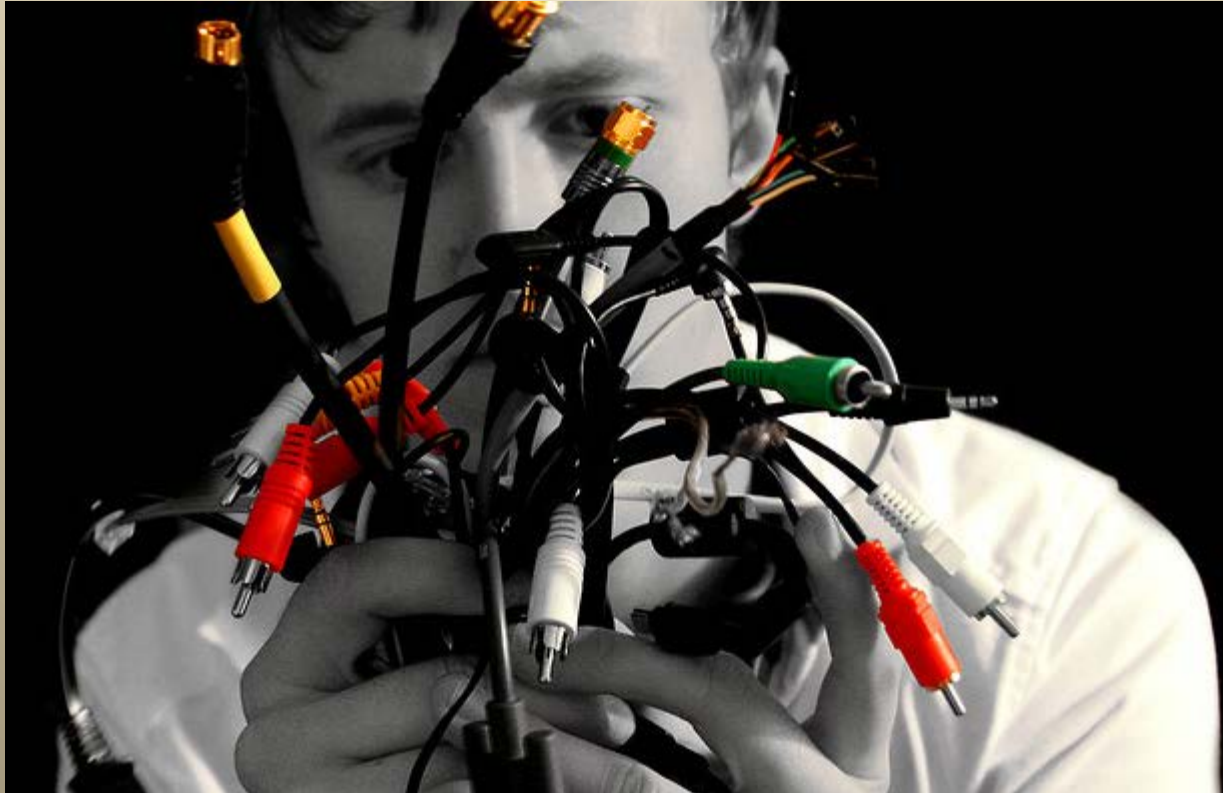


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Course Modules

Introduction:
Overview of Research Data
Management

Module 1
Data: Types, Stages, and Formats

Module 2
Metadata

Module 3
Data Storage, Backup, and
Security

Module 4
Legal and Ethical Considerations

Module 5
Data Sharing and Reuse Policies

Module 6
Archiving and Preservation

Research Case Scenarios



Photo: CDC/Taronna Maines

- Aerospace engineering
- Biomedical lab research
- Clinical study on hip replacements



Gary Meek/NSF



NASA/Michael Soluri

Customizing Data Management Instruction

- Mix and match modules as needed by discipline/course level
- Provide lesson plans for diverse modes of delivery: online, in person, hybrid
- Case based activities and assessment
- Readings
- Assignments

Next steps...

- Develop a prototype online course module
- Lesson plans and research case scenarios will be available online
- With implementation funds: develop course content, pilot modules, develop data repository for data generated from student projects

http://library.umassmed.edu/imls_grant.cfm