







#### RESEARCH DATA MANAGEMENT UNIVERSITY OF OKLAHOMA UNIVERSITY LIBRARIES

MARK LAUFERSWEILER
RESEARCH DATA SPECIALIST
UNIVERSITY OF OKLAHOMA UNIVERSITY LIBRARIES



#### WHY WE ARE HERE: DATA SHARING

### Office of Science and Technology 2013

- Increasing Access to the Results of Federally Funded Scientific Research
- Agencies with over \$100 million research and development expenditures



































#### INSTITUTIONAL REPOSITORY

- ShareOK
  - Primarily documents
    - Dissertation
    - Thesis
    - Publications
      - Faculty, staff, and student
  - Limited research data
    - Citizen Science specimen sample photos



# EDUCATION/TRAINING WORKSHOPS

- Software Carpentry/Data Carpentry Foundation member
  - Software Carpentry 3 per semester
  - REU (Research Experience for Undergraduates)
  - Workshops in support of BioSurvey NRT grant
- Research Data Management classes/hands-on
  - Tips, tricks, and tools
    - Workflow best practices
  - DMPTool
- ResBaz (Research Bazzar)
  - Focuses on creating opportunities for researchers to share their digital skills
  - Two day event



#### RDM CONSULT

- OU Faculty, staff, and students can schedule appointments with UL staff for DMP consultation
  - Liaison Librarians
  - Research Data Specialist
  - Digital Scholarship Specialists
  - Informatics Specialist
  - CLIR Fellowship postdoc (starting September)
- open office hours @ Digital Scholarship Lab
- Innovation HUB
  - Innovation @ EDGE
  - Virtual Reality
  - 3D printing
  - Circuits



#### SCHOLARLY COMMUNICATIONS

## Digital Identity ORCID ID

- Adoption increasing with publishers and large repositories
  - Integrations with
    - SCOPUS, CrossRef, ResearcherID
    - Dryad, PLOS
    - AGU, APS
- UL and OU is an ORCID member
  - Integration with
    - ShareOK
    - Digital Object Identifiers













#### SCHOLARLY IP

#### Digital Object Identifiers

DOI def: unique alphanumeric string assigned by a registration agency (International **DOI** Foundation) to identify content and provide a persistent link to its location on the Internet.

- UL assists researchers with registering
  - South Central Climate Science Center (5)
  - OK Mesonet (3)
  - The Anthropocene Biosphere (21) symposium serries
- Promotes sharing of research output
  - Citable reference Dataset authors/producers, data release date: Dataset title, version. Data archive/distributor, access date in standard AMS format, data locator/identifier (doi or URL).



#### DATA REPOSITORY NEED

- Systems better suited for data formats
  - CSV, NetCDF, GRIBB, HD5, Excel, SQL
  - Systems to consider
    - CKAN/DKAN
    - IRODS
- Build what community needs
  - Research Computing and Data Advisory Group
    - Survey
    - Data interviews
    - Use case based
    - Best practices



#### HOW IS UL DOING?

- √ Curatorial role for data stewardship
- ✓ Establish a robust digital repository
- ✓ Advocacy for open access and appropriate IP policies
- ✓ Consulting services to the community regarding data management plans
- ✓ New unit not a traditional library but rather an information hub for research
- ✓ Educational opportunities
- ✓Open access/copyright

