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FAIR and Data Management for a Multidisciplinary Research Center

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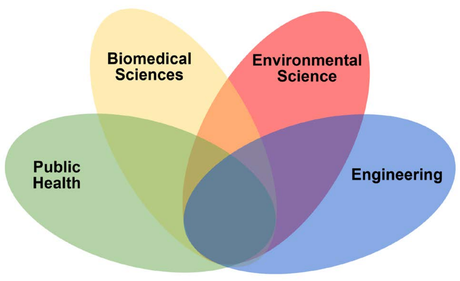
The University of Iowa Libraries

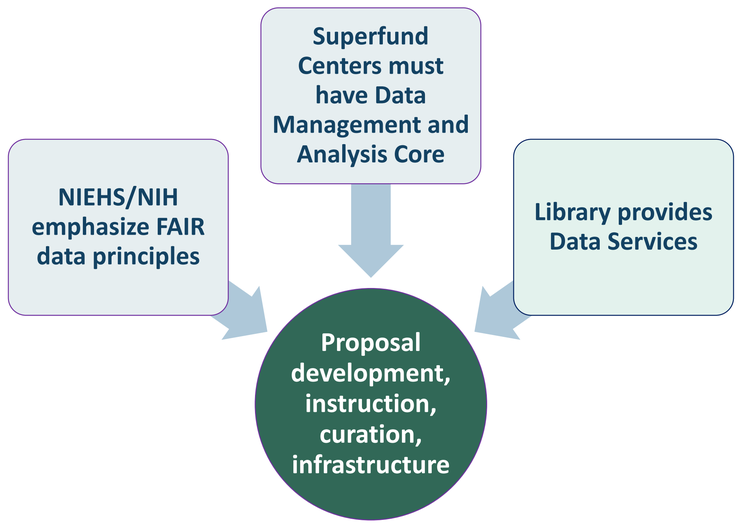
Multidisciplinary Superfund Research Center

The University of Iowa (UI) Superfund Research Program (ISRP) examines polychlorinated biphenyl (PCB) sources, exposures, toxicities and remediation, and is funded by the National Institute of Environmental Health Sciences (NIEHS), which is administered by the National Institutes of Health (NIH).

The research teams represent biomedical sciences, public health, environmental science, and engineering. Topics include sources, exposure routes, metabolism, toxicity mechanisms, and remediation.

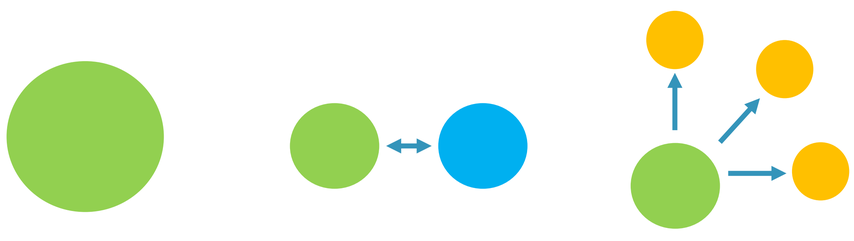


Opportunity for Collaboration & Data Services



Build Researcher Skills and Competencies

Instruction with the analytical core started this spring. We plan to follow an iterative process to ramp up instruction within the Center.



Develop, refine and share instructional designs and strategies

Coordinate instruction with the Center's Training Core

Integrate RDM and FAIR instruction with the Center's project teams

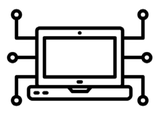
Researchers will be able to apply FAIR Principles to their practices, for example:

- Data management planning
- GUID/PID utility and implications, from discovery to citation
- Metadata and metadata standards
- Permissions and access
- Differentiating between open, closed, shared data
- Measuring the FAIRness of their data, understand implications.

Infrastructure

We plan to explore and build on infrastructure within the Libraries, the research center, and the university.

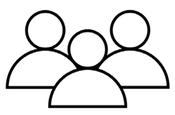
Technology



Created by Edwin Prayogi M from Noun Project

- FAIR institutional data repository
- Strategic open infrastructure investments and participation by the libraries and university

People



Created by Viral faisalovers from Noun Project

- Sustain and grow network of institutional service providers and partners
- Capacity-building in data and digital services: curation, integration, instruction; enabling, enhancing, and leveraging FAIR data
- Open Science Interest Group

Policy and communication

Created by cathy moser from Noun Project

- Institutional guidance and policies reflect FAIR principles

Credits:

- Hodson, Jones et al. (2018). Turning FAIR into reality: Final report and action plan from the European Commission expert group on FAIR data https://doi.org/10.5281/zenodo.1285272
- How to make the most of your publications in the Humanities? Discover evolving trends in open access (FOSTER Plus & DARIAH-EU. https://www.fosteropenscience.eu/node/2547
- Iowa Superfund Research Program: https://iowasuperfund.uiowa.edu/
- NIH Strategic Plan for Data Science: https://datascience.nih.gov/sites/default/files/NIH_Strategic_Plan_for_Data_Science_Final_508.pdf
- FOSTER Courses in Open Science (and mapping to FAIR): https://www.fosteropenscience.eu/courses
- FAIRSharing.org Educational section: https://fairsharing.org/educational/
- Library Carpentry: Findable, Accessible, Interoperable, and Reusable (FAIR) Data and Software: https://librarycarpentry.org/lc-research-data/
- European Open Science Cloud (EOSC): https://ec.europa.eu/research/openscience/index.cfm?pg=open-science-cloud