Discovering Research Data Resources at IU

IU Research Data Commons

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Interested in Research Data? Explore your options at IU

Planning Research

Sharing & Archiving

Acquiring Data

Policies & Procedures

Storage, Compute & Analysis

The Research Data Commons

The IU Research Data Commons

Your front door to research data resources at IU

- New initiative of the **Vice President of Research**, in collaboration with the IU Libraries, UITS, and others
- Recently launched a new website at researchdata.iu.edu with FAQs, resource catalog, featured data resources, event listings, and more.
- A growing collection - and you can help

Frequently Asked Questions

RDC FAQs

- Over 40 answers to commonly asked research data questions
- Each question guides you to additional information on the topic and the relevant university office or person
- Have a question that you would like to see answered? Please let us know!

Yes! You will get a copy of all of these slides as soon as the meeting is over and we will post this recording to our website within a few days.

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Resource Catalog

Resource Catalog

- Features over 160 resources across IU campuses as well as publicly available resources
- Covers areas such as resource guides, policies & compliance, storage & compute, software, and more
- We are continuing to build this catalog. If you are aware of a resource that isn't listed, please let us know! Email: iurdc@iu.edu

Research Data Commons
Indiana University

Resource Catalog

Explore all the resources available to you for working with your data @ IU

| All Fields ∨ | consultation | All Campuses ∨ |

Biostatistics Consulting Center →
Provides study design & data analysis for health-related research

Center for Evaluation, Policy, & Research →
Rigorous evaluation expertise and services across multiple sectors

Copyright Consultations →
Assistance with copyright, licensing & digital publishing support

Data Management and Data Methods Consultations →
Consulting on data management plans, methods, tool & processing

Department of Biostatistics and Health Data Science Core →
Support for grant/protocol & budget development & study design & analysis
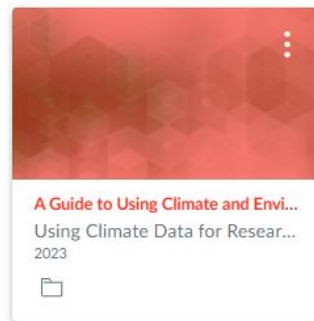
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Featured Data Program

Locally created resources for the IU community to learn about data available for reuse.

Currently, five published self-paced Canvas tutorials.

- A Guide to Using CoreLogic at IU
- A Guide to Using INPC (Indiana Network for Patient Care) and Electronic Health Records (EHR) For Research at IU
- A Guide to Using HCUP (Healthcare Cost & Utilization Project) Data at IU
- A Guide to Using Climate Data for Research
- A Guide to Using AllofUS at IU

More in development!

A Guide to Using HCUP (Healthcar...
HCUP
2023

A Guide to Using INPC (Indiana Ne...
Pilot INPC Training Module
2023

A Guide to Using AllofUs at IU
Pilot AllofUs Training Module
2023

A Guide to Using CoreLogic at IU
CoreLogic
2024

A Guide to Using Climate and Envi...
Using Climate Data for Resear...
2023

A Guide to Using Criminology Dat...
Pilot Criminology Research Da...
2023

Events around IU campuses

IU RDC maintains [an events listing](#) for all shareable events related to research data - across units and campuses.

You can also browse:

https://events.iu.edu/iurdc/all

Open Access Week Events

The annual international Open Access Week (OA) is an opportunity for the academic and research community to discuss the benefits and challenges of OA. Libraries across the IU campuses are hosting various events and programs for OA Week.

- October 21st - 25th: Take the OA Week Challenge

- October 22nd: Open Access Week Lunch and Lecture

- October 23rd: Faculty Conversation about Open Access

- October 25th: Live Q&A for Open Access Week Challenge

Monthly RDC newsletter

- New **events** around IU's campuses
- New featured **data resources** available for reuse
- **Funding** opportunities - internal and external
- **New resources at IU** related to research data from UITS, libraries, and the RDC
- **Policy and procedure** updates
- Opportunities to **get involved** in the RDC through workgroups, committees, etc.
- Sign up on our Contact page

Research
Research Data Commons

In this issue:

- Letter from the director
- New Data FAQ Portal and Resource Database
- Self-paced learning courses on resources at IU
- IU joins HELIOS Open
- Register for webinar series on data resources
- Events around IU campuses

Letter from the director

Welcome back! As we transition to the academic year, many in our community may have questions about research data resources at IU? We have answers! I encourage you to explore our updated website at researchdata.iu.edu, where you'll find valuable information FAQs, a resource catalog, and event listings.

Read more →

Questions?

And a quick poll...

Library Resources

IU Libraries

IU Libraries are specific to campuses, but have some cross cutting resources.

Subject librarians are major resources!

Three major resources for those in Bloomington and Indianapolis are research data librarians:

- Heather Coates, IUI University Library Digital Scholarship and Data Management Librarian, also Research Data Steward for all of IU)
- Levi Dolan, Ruth Lilly Medical Data Services Librarian
- Ethan Fridmanksi, IUB Data Services Librarian

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The role of the IU Research Data Steward

Heather Coates, IUI University Library

1. Collaborates with the Research Integrity Office, HIPAA Privacy Officer, Human Subjects Office, and other administrative units to develop comprehensive guidance for research data management at IU.
2. Supports researchers in complying with funder and publisher data policies,
3. Manages the IU Indianapolis DataWorks data repository
4. Provides training to faculty, staff, and students on good data practices
5. Works with the IU RDC in leadership capacity

If you have a question about data classification and policy, you should contact her.

TOOLS YOU CAN USE

The Data Storage & Handling Tool (DSH) helps researchers understand how their data is classified (more on this later) and what kind of storage and handling services they may use.

Platforms for Sharing & Archiving Data

Which data repository?

- Does the funder require or specify?
  - ▶ Does the journal require or specify?
    - ▶ Is there a disciplinary or data-type specific data repository?
      - ▶ Is an institutional data repository available?
        - ■ Choose a generalist repository

You have options at IU, but there are many considerations for how to share your data.

Sharing & Archiving

Major Library data resources

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GUIDES

- [Managing and Sharing Research Data](#)
- [Ruth Lilly Medical Library Research Data Services](#)
- [IUI Library Guide Finding Statistics and Data](#)
- [New Electronic Resources List](#)
- [Open Scholarship at IUB Libraries](#)

CONSULTATION SERVICES

- [Ask a Librarian](#)
- Data Management Plan Consultations from IUB, IUI, and Ruth Lilly

TRAINING & EVENTS

- [Scholars Commons Workshops](#)
- [Ruth Lilly options in Lab Notebooks, NIH Data Management & Sharing, Systematic Reviews, Citation Management](#)

SERVICES & TOOLS

- [Data Management Plan Tool](#)
- [IUB ScholarWorks](#)
- [IUI Scholarworks](#)
- [IUI DataWorks](#)

In development: Data Catalog, DataCore

Information Technology Resources

UITS Research Technologies

Offers access, training, and support for <u>a wide variety of research needs</u>

176 departments and over 331 disciplines use IU's advanced research cyberinfrastructure provided and supported by RT.

Over 1,800 IU researchers who use IU supercomputers or other HPC tools received nearly $430 million in grant awards in FY22.

Major Information Technology data resources

GUIDES

- **Tech Guides**
  - Faculty
  - Students
  - Staff
  - Collaborators
- ServiceNow Knowledge (formerly Knowledge Base)

CONSULTATION SERVICES

- Research Technologies

Services & Tools

- High-Performance Computing
- IUware (downloadable software)

Training & Events

- Quantum Computing (October 17)
- New Features in IU REDCap (October 23)
- Intro to Deep Learning (October 24)
- Data Management and Administration (November 6)
- Advanced Topics in Deep Learning (November 14)

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UITS Research Technologies

See [impact stories/use cases](#) to learn how UITS RT enables research and discovery at IU and beyond.

IU has substantial resources to help researcher, for example:

- Software for research
- Fast computers optimized for AI
- Fast storage
- Archival resources
- Visualization resources and workflows
- Cloud computer
- Expert humans

UITS Research Technologies

Resources

- **Compute Resources**
  - **Big Red 200**
  - **Quartz**
  - **Jetstream2**
  - **Research Desktop (RED)**
- **Storage Resources**
  - **Geode home directory**
  - **Geode-Project**
  - **Scholarly Data Archive**
  - **Slate**
  - **Slate-Project**
  - **Slate-Scratch**

- **Visualization**
  - **Advanced Visualization Lab**
  - **IU3D**
- **Expert Consulting**
- **IU REDCap**

Research Data Services

- GIS Data and GIS Software
- Restricted Access Data Remote Server (RADaRS)
- Research Database Complex (RDC)
- Scholarly Data Share (SDS)

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Pervasive Technology Institute

Accelerating innovation through advanced computing

Centers of PTI

- Center for Applied Cybersecurity Research
- Data to Insight Center (D2I)
- Cyberinfrastrucure Integration Research Center
- UITS Research Technologies
- HathiTrust Research Center
- Crisis Technologies Innovation Lab
- eLearning Research and Practice Lab

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IU Research

IU Research

[Supports research and creative activity throughout the university](#)

- Office for Research Administration
- Office for Research Compliance
- Office for Research Development
- Corporate & Foundation Relations
- Innovation & Commercialization
- National Security R&D Relations
- Centers, Institutes, & Museums

Major IU Research resources

GUIDES

- [Research compliance and policies](#)
- [Quick Guides](#)

CONSULTATION SERVICES

- [Proposal Development Services](#)

TRAINING & EVENTS

- Grantwriting workshops; see [events calendar](#)
- [Event recording archive](#)

SERVICES & TOOLS

- [Internal seed funding programs](#)
- [Pivot (external funding database)](#)

Policies and rules

Research Data is "Institutional Data" at IU, and this has consequences for you!

In general, research data is considered institutional data when IU has legal and/or ethical obligations with regards to the associated award, project, or the data itself.

If external (public domain, open, or licensed) data are reused in the conduct of research at IU, the external data must be handled according to the same guidance used for institutional data to ensure the integrity of the data and research, but IU does not assert ownership.

Policies & Procedures

"*Why Can't I Sign That?*" Submitting Contracts & Agreements to ORA

If you are utilizing data in an official capacity as a faculty member or graduate student at IU, and using IU resources, facilities, and/or equipment, then IU has a stake in those terms.

It is best for the Office for Research Administration to review all agreements (even ones related to publicly accessible data) to ensure the correct person signs it.

To submit an agreement to be reviewed by ORA, fill out the ORA Contract Request Form.

Policies & Procedures

Key policies and procedures for research data

Where to find information regarding research data policies:

- [The Rules & Policies of Data Management](#) (University Data Management Council)
- [IU RDC FAQ Policies & Procedures](#)
- [University Information Policy Office & University Information Security Office](#)
- [Data Policy Groups](#)
- [University Wide IT Policies](#)

Policies & Procedures

Planning research

Planning Research

Finding resources for planning research:

- [IU RDC FAQs: Planning Research](#)
- Search for resources in the [Resource Catalog](#), e.g. search "consult" to see groups that provide consultations.
- Look at the [Data Catalog](#) (still in development) and [look through repositories](#) to find datasets already available to you through IU.

Planning Research

"I want to plan a research project...Who at IU can help me plan this research?" (FAQs)

Planning Research

Sample resources for **compliance**:

- [Research Guidelines and Procedures](#) (IU Research)

Sample resources for **grant proposals**:

- General support: [Proposal Development Services](#) (for faculty) & [GradGrants Center](#) (for graduate students)
- More specific support via several service centers and research cores, e.g. power analyses and evaluation plans (listed in FAQs, or search the resource catalog)

Planning Research

Planning Research

Sample resources for **data management**:

- [Research data management guidance](#)
- [DMPTool](#) (via IU Libraries)
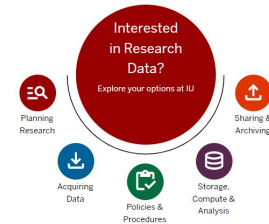
Acquiring Data

Acquiring or Purchasing Data

- [How do I get data?](#) (FAQ)
- [Data catalog](#): Finding data already available to you for reuse (in development)
- Internal funding through the [IU Research Equipment Fund](#) (to support purchase of shared data resources)

Acquiring Data

Storage & Compute

Storage, Compute, & Analysis

Finding resources for storage, compute, & analysis

- IU RDC FAQs: Storage, Compute, & Analysis
- Search for resources in the Resource Catalog, e.g. search "storage" for different options and sources of guidance
- Look at our events calendar for upcoming trainings related to high-performance computing and data analysis techniques.

Storage,
Compute &
Analysis

Storage, Compute, & Analysis

"What options for data storage are available to IU researchers?" (FAQ)

Storage, Compute, & Analysis

Data storage options at IU

- [Data Sharing and Handling Tool](#) (guidance on where to store different types of data based on their domain and sensitivity classification)
- [Data Storage Finder](#) (tool to filter and compare different storage options)
- [SecureMyResearch](#) (resources and consultations to help you store and protect your data)

Storage,
Compute &
Analysis

SecureMyResearch

Grants, Contract, DUAs

- Interpret cybersecurity terms & conditions into your specific research context
- Work with ORA to negotiate reasonable terms
- Identify IU solutions that meet terms and conditions
- Provide security boilerplates to include in proposals

SecureMyResearch provides you with consulting and resources to help you protect research data and comply with cybersecurity requirements in grants, contracts, and data use agreements.

securemyresearch@iu.edu

Regulatory Compliance

- Help make sense of complex regulations
- Recommend complaint solutions
- Build complaint workflows

Research Projects

- Recommend/build secure/compliant solutions
- Design secure workflows
- Help with compliance/security documentation
- Security Review

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SecureMyResearch Cookbook

SecureMyResearch Cookbook

Enter keywords related to what you want to do or learn, then **wait a second** for a drop-down with matches.

> 🔍 Search for a recipe

Welcome! The SecureMyResearch Cookbook offers information and recipes (step-by-step directions) to help you get your work done while ensuring that your research is trustworthy. The recipes do this by leveraging ingredients that have security already baked in by IU technology and cybersecurity/compliance experts. Many of the recipes are also pre-approved for certain types of critical data, for instance HIPAA protected health information (PHI). Simply follow the recipes, and you will find security and compliance seamlessly woven into your research workflows.

- **Search for a recipe or information:** Enter keywords in the search bar above titled "Search for a recipe" about what you want to do, for example, "share". Wait a second for a drop-down showing matches which you can click on.
- **Seek consulting:** If the cookbook doesn't provide what you are looking for, please email securemyresearch@iu.edu for help. We will take it from there.

Recipes by research area:

- Applied sciences

Recipes by topic:

- Data storage

Recipes by regulation:

- HIPAA

https://uisapp2.iu.edu/confluence-prd/x/LARTHw

Training opportunities

Training Opportunities

Upcoming Events:

- October 18th: (IU) Unlocking Grant Success: Insights from Grant Winners - Focus on NSF Grant Applications
- October 18th: Workshop in Methods | Transcribing Qualitative Data: Considerations and Options at IU
- October 24th: Preparing to Share Research Data
- October 25th: (IUI) IU Research Onboarding & Orientation
- November 8th: (IUB) IU Research Onboarding & Orientation
- November 8th: Workshop in Methods | Introduction to R
- November 11th: Federal Grants for Centers Information Session

Ongoing Training Opportunities & Where to Find Them:

- IU RDC Events page
- UITS IT Training (UITS)
- Search "Training" in the Resource Catalog
- Accelerator Crash Courses (CEW&T)
- Research Workflow Canvas Course
- Scholars Commons Programming (IUB Libraries)
- Workshop in Methods (Social Science Research Commons)

Questions?

Thank you for coming! Slides will be emailed shortly after we end.