

RESEARCH DATA MANAGEMENT: ARCHIVING, OWNERSHIP, RETENTION, SECURITY, STORAGE, AND TRANSFER

POLICY NUMBER: HYB-RESDATAMGMT

POLICY TYPE: HYBRID

RESPONSIBLE OFFICIAL TITLE: VICE PROVOST FOR GRADUATE EDUCATION, RESEARCH, & OUTREACH (GERO)

RESPONSIBLE OFFICE: OFFICE OF THE VICE PROVOST FOR GRADUATE EDUCATION, RESEARCH, & OUTREACH (GERO)

EFFECTIVE DATE: UPON BOARD OF REGENTS APPROVAL – 9/12/2018

NEXT REVIEW DATE: BOARD OF REGENTS APPROVAL PLUS FOUR YEARS – 9/12/2022

SUPERSEDES POLICY DATED: N/A

BOARD OF REGENTS REPORTING (CHECK ONE):

PRESIDENTIAL RECOMMENDATION (CONSENT AGENDA/VOTING ITEM):

PRESIDENTIAL REPORT (INFORMATION ONLY)

I. POLICY STATEMENT

Collection and generation of research data are integral aspects of research activity at Northern Kentucky University (NKU), whether the data are primary in nature or compiled, assembled, or otherwise derived. Data are defined as “units of information observed, collected, or created during the course of research” (Erway, 2013). These data have several purposes: to serve as a record of the investigation, to form the basis on which conclusions are made, and to enable the reconstruction of procedures and protocols. In keeping with its commitment to promote integrity in the scholarly process, NKU's research data management practices should ensure open and timely secured access to and secured sharing of research data. Access, secured sharing, and retention are especially vital with respect to questions about compliance with legal or regulatory requirements governing the conduct of research, accuracy or authenticity of data, primacy of findings, and reproducibility of results.

Management of research data is a shared responsibility among the Office of the Vice Provost for Graduate Education, Research and Outreach; the Office of the Chief Information Officer; the University Library; the colleges; and the Principal Investigator (PI).

NKU has developed this policy to protect NKU investigators and the integrity of research data generated under the auspices of NKU. Investigators have the right to choose the nature and the direction of their investigations, to use research data generated to pursue future research, to publish their results, and to share their findings within academic communities. The exercise of these rights, however, is subject to compliance with laws and regulations, as well as contractual obligations governing the conduct of research. In conducting research as part of the NKU community, investigators are obligated to assist NKU in fulfilling its responsibilities of complying with applicable federal, state, and local laws, and sponsor requirements governing the conduct of research, including the management and sharing of research data.

NKU's responsibility for stewardship of research data, including access to data, derives from [Uniform Guidance, Section 200.333](#). While this regulatory authority applies specifically to federally funded activities, the principle that it espouses informs good management practices with respect to all research activities undertaken

at NKU. Further, an increasing number of sponsors (e.g., National Science Foundation [NSF], National Institutes of Health [NIH]) have requirements for sharing research data and disseminating research results.

II. ENTITIES AFFECTED

Academic Affairs, including the Provost's Office, Graduate Education, Research, & Outreach (GERO), Research, Grants, & Contracts (RGC); Legal Affairs; NKU Library staff; Information Technology (IT); faculty; staff; and students

III. DEFINITIONS

Principal Investigator (PI)

The individual or individuals primarily responsible for and in charge of a research project.

Research Data

Recorded factual material commonly accepted in the scientific or scholarly community as necessary to validate research findings, excluding preliminary analyses, drafts of scholarly or scientific work, plans for future research, peer reviews, and communications with colleagues and physical objects (e.g., laboratory samples). Research data may be in hard-copy form (including research notes, laboratory notebooks, or photographs) or in electronic form, such as computer software, computer storage/backup, or digital images.

Research data are not limited to raw experimental results and instrument outputs; they encompass associated protocols, numbers, graphs, tables, and charts used to collect and reconstruct the data. Research data include numbers; field notes or observations; procedures for data analysis and/or reduction; data obtained from interviews, surveys, computer files and databases; research notebooks or laboratory journals; slides; audio/video recordings; and/or photographs.

Research materials are tangible physical objects from which data are obtained, such as environmental samples, biological specimens, cell lines, derived reagents, drilling core samples, or genetically-altered microorganisms. While these are not considered to be research data, they should be retained consistent with disciplinary standards.

Research data do not include unreported preliminary analyses of data, drafts of scientific papers, future research plans, peer reviews, or communications with colleagues; trade secrets, commercial information, materials necessary to be held confidential by a researcher until they are published, or similar information protected under law; and personnel, medical, and similar information, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy. (See [Uniform Guidance, Section 200.315.](#))

IV. RESPONSIBILITIES

Vice Provost for Graduate Education, Research & Outreach (VP-GERO), Chief Information Officer (CIO), and the Dean of the Library

Jointly responsible for ensuring that research data management needs and regulatory obligations, including preservation and long-term accessibility, are met for critical, high-value research data, and operational considerations with respect to the various types of research data are captured.

- Evaluate existing research data management solutions across the University.
- Determine future research data management requirements.

Colleges, Schools

Work with VP-GERO and CIO to identify and track their research data management needs, including future capacity needs, and inform the VP-GERO and Provost about those needs.

Office of the Chief Information Officer (CIO)

Responsible for the information technology strategy for the University, which includes a strategy for research data storage, archiving, and information security and addresses the information technology needs of the University, including the needs of research data storage.

Office of the Vice Provost for Graduate Education, Research and Outreach (GERO)

The VP GERO is responsible for ensuring that

- research data management practices meet state and federal regulations, sponsor requirements, and University policies; and
- research data management practices do not conflict with other University policies or interests, such as the protection of research subjects, national security interests, intellectual property, or technology transfer.

Principal Investigator (PI)

- Determines what needs to be retained in sufficient detail and for an adequate period of time.
- Manages access to research data.
- Selects the vehicle for publication or presentation of the data.
- Shares research data, including placing research data in public repositories, unless specific terms of sponsorship or other agreements supersede these rights.
- Is responsible for ensuring that critical, high-value research data under their stewardship are preserved.
- Educates all participants in the research project about their obligations regarding research data.
- Alerts Office of Research, Grants & Contracts (RGC) if a grant or contract may require management of research data that goes beyond standard requirements.

Office of Research, Grants and Contracts (RGC)

- Identifies and tracks sponsor requirements for research data management, including security and retention needs that go beyond standard requirements.
- Communicates exceptional sponsor requirements for research data management to the PI and administering unit of the grant or contract, and if needed, to other units, such as the Libraries.
- Trains and supports researchers in the creation and implementation of data management plans.

Dean of the Library

- Ensures accessibility and preservation of research data through curation, metadata, repositories, and other access and retrieval mechanisms to meet federal, state, sponsor, and University requirements.
- Trains and supports researchers in the creation and implementation of data management plans.
- Assists campus library directors if their assigned responsibilities exceed campus capacity.
- Works with campus library directors to develop research data management solutions system-wide, where appropriate.

V. PROCEDURES

Recording Research Data

Investigators shall record research data consistent with the standard practices of their discipline. In the absence of such standards, NKU's minimum standard is that research records are written/recorded, dated, and identified by the project title and name(s) of the individual(s) conducting the activity, experiment(s), or other investigation(s). Whatever the organizational system used, the Investigator should ensure that all personnel involved with the research project/activity, including any key administrative personnel, understand and adhere to the system.

Maintaining/Retaining Research Data

Research data and associated materials/correspondence must be retained in sufficient detail and duration to allow appropriate response to questions about research accuracy, authenticity, primacy, and compliance with laws and regulations governing the conduct of research.

The recordkeeping systems/practices used by Investigators should allow unmediated access by NKU over their entire retention period when necessary to comply with laws and regulations.

Investigators are responsible for the physical storage and security of research data during collection and retention periods, consistent with the standard practices of their discipline and/or the terms of a sponsored agreement. Of particular importance are issues involving confidentiality and general management of data obtained from human subjects, security of research data against theft or loss, and maintenance of backup or archival copies of research data that may be needed in the event of a disaster, as well as any software. Adherence to the University's [Information Security](#) policy and all other state requirements concerning data security are required.

The PI is the steward of the research data that are under his or her control. PIs are responsible for managing access to research data under their stewardship. PIs will select the vehicle(s) for publication or presentation of the data. PIs decide whether or not to share research data, including placing research data in public repositories, unless specific terms of sponsorship or other agreements supersede this right.

The PI is responsible for determining what needs to be retained in sufficient detail to enable appropriate responses to questions about accuracy, authenticity, primacy, and compliance with laws and regulations governing the conduct of research.

The University has the option to take custody of primary research data to ensure appropriate access in case of an allegation of research misconduct.

Data Retention Period. NKU complies with the State University Model Records Retention Schedule, which can be found at http://kdla.ky.gov/records/recretentionschedules/Documents/State_Records_Schedules/KYUniversityModel.PDF as required by state law and NKU policy for all research data.

PIs may choose to retain the data beyond the minimum period, up to any deadline specified by laws, regulations, or other agreements.

Accessing Research Data

Reasonable access to research data should normally be available to any member of the research group in which the data were collected, when such access is not limited otherwise by written agreement, policy, or regulation. Prior to the initiation of a research project/activity, the PI should come to a written understanding with each Student Investigator and/or member of the research group, specifying who has access to what research data and when. If there is any possibility that a copyright or patent application might emerge from a group project or other collaborative effort, the PI should promptly contact the NKU Office of GERO for guidance.

There may be instances in which it is necessary for NKU to access research data in situations including, but not limited to, sponsor requests, patent disputes, allegations of data misuse, subpoena, or Freedom of Information Act/Right to Know Law requests. To facilitate necessary, timely, and appropriate access to research data, NKU reserves the right to take physical possession of such data. This responsibility lies with the VP-GERO.

Where there exists a legitimate official need to take physical possession of research data in situations not covered by existing NKU policies such as those on Intellectual Property, Responsible Conduct of Research, and Financial Conflict of Interest in Research, the VP-GERO will notify the PI, the department chair, and the dean in writing of such need. The VP-GERO's request will describe the data sought and set forth the legitimate official need(s) sufficient to justify the request. The PI may appeal the request to the NKU Provost. Any such appeal must be in writing and submitted to the Provost within 5 days of the VP-GERO's request. The Provost shall review the appeal, make any further inquiry deemed appropriate, determine whether there is sufficient legitimate official need, and inform the PI of the decision in writing within 5 working days of receipt of the appeal. The Provost's decision shall be final.

Without Prior Notification. If the VP-GERO determines it would be impractical (e.g., deceased Investigator) or would be contrary to NKU's interests (e.g., Investigator has violated an NKU contractual obligation) to notify the PI that the VPGERO intends to take physical possession of the research data, the VPGERO will present the written request and justification to the NKU Provost. The Provost will determine whether to grant the request, and her/his decision shall be final. If the request is granted, the NKU President will communicate this decision to the PI, the department chair, and the dean after the research data have been secured by the VP-GERO.

Sharing Research Data

Certain external sponsors (e.g., the National Science Foundation and the U.S. Public Health Service) require that data gathered in the course of research supported with their funds be shared broadly in a timely manner after the associated research results have been published or provided to the sponsor. When data sharing is not governed otherwise by another written agreement or an applicable policy or regulation, research data created by Investigators may be shared in a manner consistent with standard practices of their discipline. Tangible research materials (e.g., cell lines, technical data, manufactures of matter, or any unique material) shall be shared only by specific agreement with persons or entities outside NKU (or vice-versa). Such specific agreements may include but are not limited to Material Transfer Agreements, License Agreements, Grants, and Contracts.

Archiving Research Data

Some funding agencies have begun to require that the data they fund be deposited in a public archive. Researchers should plan for eventual archiving and dissemination of project data before the data even come into existence. Organization of the research documents and data, file naming conventions, file format selection, the creation and preservation of accurate metadata, to name a few, ensure the usability of the research data and support the long term preservation of research records.

The PI needs to create a data management plan to identify the following items: project personnel and their responsibilities for data management; the types of data to be generated by the research project; data formats and contextual details (metadata) necessary to make the data meaningful to the project team and others; the level of access to/sharing of data including privacy or restrictions; data storage tasks and preservation needs; and potential costs for data management. Data management plans must adhere to NKU's [Information Security](#) policy and all other state requirements concerning data security.

Records selected to document a research project or for preservation should be originals for all analog formats. Records should be selected based on their information content, not their format. Records are likely to fall into one of three general categories: short term records that will be destroyed at the end of their retention period, records for which public access is needed, and records to be preserved for long term use. The PI is responsible for maintaining short term records until the end of their retention period and filing a Records Destruction Certificate to obtain approval for their authorized destruction. If the PI leaves NKU prior to destruction of the records, the responsibility falls to the respective department chair. Stealy Library is able to provide public access to digital research records and datasets via the Digital Repository it manages for the university. Digital files identified for public access should not contain private, confidential, or restricted information; however, pre-publication articles can be embargoed. Contact the University Archives for specifics about supported file formats, file transfer methods, and other details that are part of developing a data management plan. The University Archives also manages the long term preservation of permanent university records whether analog or digital. Digital files requiring long term preservation are likely to overlap those requiring public access but not fully. Actively curating digital data for long term preservation is not inexpensive. Not everything generated should be preserved. Preservation and access copies are managed in two separate systems.

Transfer of Research Data

If a PI leaves or joins the University or a project is moved to or from another institution, the PI may request that a copy of the research data be transferred. If/when the PI permanently leaves NKU, s/he may normally take original research data for which s/he is custodian. In doing so, s/he must notify her/his department chair and Dean/Director of the location of such data. However, original research data must remain at NKU when (a) the data have been used for a patent application filed or pending filing by NKU; (b) the research data are relevant to an ongoing inquiry/investigation under NKU's policy on Responsible Conduct of Research; (c) the funding sponsor of the project/activity specifically requires that NKU retain original data; or (d) NKU is otherwise required to maintain the original research data.

Student Investigators. Upon departure from NKU, a Student Investigator may take a copy of NKU-owned data related to her/his research project/activity (including thesis or dissertation). However, s/he must leave the original research data, including laboratory notebooks, with the Sponsoring PI.

Destroying Research Data

PIs must destroy research data when required by laws, regulations, or other agreements, on or before a specified deadline, and follow the applicable process for destroying research data.

VI. EXCEPTIONS

For Student Investigators, research data must be retained in an authorized manner until the pertinent controlling period (above) has elapsed, the student's degree is awarded, or the research project/activity is closed or completed, whichever is longer. In addition, if the student's department requires a longer retention period, the latter would prevail.

When existing research data are relevant to an allegation of misconduct in scholarly activity or of financial conflict of interest, records must be retained until seven (7) years after the end of the investigation before they can be destroyed; or to an open case of litigation, claim, or audit, maintain the records until all litigation, claims or audit findings involving the records have been resolved and final action taken, then destroy.

Data relevant to intellectual property interests must be retained for as long as may be necessary to protect those interests, at minimum for the (above) controlling period

Data subject to specific federal, state, or local regulation must be retained for the period indicated by the regulation, or the controlling period (above), whichever is longer.

When records are transferred to or maintained by the federal awarding agency, the retention requirement is not applicable to the award recipient.

VII. REFERENCES AND RELATED MATERIALS

REFERENCES & FORMS

Erway, Ricky. 2013. [Starting the Conversation: University-Wide Research Data Management Policy](#). Dublin, Ohio: OCLC Research.


UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS FOR FEDERAL AWARDS, Subpart D-Post-Federal Award Requirements, Record Retention and Access, Uniform Guidance, Section 200.333 – [Retention Requirements for Records - https://www.gpo.gov/fdsys/pkg/CFR-2014-title2-vol1/pdf/CFR-2014-title2-vol1-part200.pdf](https://www.gpo.gov/fdsys/pkg/CFR-2014-title2-vol1/pdf/CFR-2014-title2-vol1-part200.pdf)

REVISION HISTORY


REVISION TYPE	MONTH/YEAR APPROVED
New Policy	September 12, 2018

RESEARCH DATA MANAGEMENT: ARCHIVING, OWNERSHIP, RETENTION, SECURITY, STORAGE, AND TRANSFER

PRESIDENTIAL APPROVAL

PRESIDENT	
Signature 	Date 5/23/18
Gerard St. Amand	

BOARD OF REGENTS APPROVAL

BOARD OF REGENTS (IF FORWARDED BY PRESIDENT)	
<input type="checkbox"/> This policy was forwarded to the Board of Regents on the Presidential Report (information only) . Date of Board of Regents meeting at which this policy was reported: ____/____/____.	
<input checked="" type="checkbox"/> This policy was forwarded to the Board of Regents as a Presidential Recommendation (consent agenda/voting item) .	
<input checked="" type="checkbox"/> The Board of Regents approved this policy on <u>9</u> / <u>12</u> / <u>18</u> . (Attach a copy of Board of Regents meeting minutes showing approval of policy.)	
<input type="checkbox"/> The Board of Regents rejected this policy on ____/____/____. (Attach a copy of Board of Regents meeting minutes showing rejection of policy.)	
EXECUTIVE ASSISTANT TO THE PRESIDENT/SECRETARY TO THE BOARD OF REGENTS	
Signature 	Date 9.18.18
Benjamin Jager	