



## **Responsible Conduct of Research and Scholarly Activity**

As a land-grant institution, the University of New Hampshire (UNH) is accountable to New Hampshire residents and to the university community to ensure the ethical and safe conduct of research and scholarly activity. As an institution of higher education that prides itself on extensive research endeavors and the involvement of undergraduates and graduate students in research projects, UNH has an obligation to teach and actively promote integrity in research and scholarship.

To fulfill its obligations, UNH has embarked on an initiative to:

- Raise the consciousness of faculty, staff, and students regarding the ethical and responsible conduct of research and scholarly activity,
- Establish a knowledge base that defines normative and/or professional behavior to assist faculty, staff, and students in making ethical and responsible decisions in the conduct of research and scholarly activity, and
- Foster an institutional culture of integrity in research and scholarly activity.

Information is available at <http://unh.edu/research/responsible-conduct-research-scholarly-activity>

### **Educational Offerings**

#### **GRAD 930: Ethics in Research and Scholarship**

UNH offers this variable credit graduate course in responsible conduct of research and scholarship most semesters (refer to the semester time and room schedule for course details). This course examines questions and issues related to the conduct of research and scholarship. Participants gain knowledge of professional and ethical standards of behavior in research and scholarship as well as pertinent regulations, policies, and guidelines. Through case study analysis and discussion participants will learn to identify and to analyze ethical issues that may arise in their professional careers in order to develop reasoned and justifiable plans of action. The course stresses both principles and application. Visit <http://unh.edu/research/rcr-instruction-unh#Graduate> for more information, or contact [julie.simpson@unh.edu](mailto:julie.simpson@unh.edu).

#### **Web-Based Instruction**

UNH has interactive, self-contained Web-based training modules on topic areas related to the responsible conduct of research and scholarly activity available at <https://rit.sr.unh.edu/training/rcr.shtml>

Modules include:

- |                                    |                                  |
|------------------------------------|----------------------------------|
| Animal Subjects                    | Human Subjects                   |
| Authorship & Publication           | Intellectual Property            |
| Collaborative Research             | Mentoring                        |
| Conflicts of Interest & Commitment | Misconduct in Scholarly Activity |
| Data Management                    | Peer Review                      |
| Hazardous Materials                |                                  |

Modules may be completed according to the individual's own timeframe. Allow approximately 30 minutes for each module.



**RCR Training** ~ <http://unh.edu/research/rcr-training-unh>

Three times a year (January/February, May, and September/October), the UNH Responsible Conduct of Research and Scholarly Activity (RCR) Committee offers training in the ethical and responsible conduct of research.

This training opportunity involves two components:

- Completion of UNH's Web-based program of RCR instruction (available at <https://rit.sr.unh.edu/training/rcr.shtml>), followed by
- Participation in a half-day seminar (see <http://unh.edu/research/rcr-training-unh> for next seminar date)

Modules must have been completed prior to participation in the seminar. Successful completion of the training requires completion of both components. This training is open to any member of the UNH community. While it is primarily directed at postdoctoral researchers, graduate students, and undergraduate students, faculty and staff are invited to participate.

The training will fulfill:

1. The National Science Foundation (NSF) mandate that all postdoctoral researchers, and undergraduate and graduate students supported by NSF to conduct research on proposals submitted on or after January 4, 2010 receive appropriate training in the ethical and responsible conduct of research (see <http://www.unh.edu/research/nsf-rcr-training-requirement>).
2. The United States Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA) RCR requirement (see <http://www.unh.edu/research/usda-nifa-rcr-training-requirement>). The training will fulfill the new National Science Foundation (NSF) mandate that all postdoctoral researchers, and undergraduate and graduate students supported by NSF to conduct research on proposals submitted on or after January 4, 2010 receive appropriate training in the ethical and responsible conduct of research. (This training may be completed up to six months prior to employment on an eligible NSF grant.)

Visit <http://unh.edu/research/rcr-training-unh> for more information, or contact [julie.simpson@unh.edu](mailto:julie.simpson@unh.edu).

**UNH RCR Library Guide** ~ <http://libraryguides.unh.edu/RCR/intro>

The RCR Library Guide provides access to a host of resources on responsible conduct of research and scholarly activity (RCR) topics.

**UNH RCR Case Study Series** ~ <https://www.unh.edu/research/rcr-resources>

A series of real cases involving misconduct created for instructional use.



## Human Subjects in Research

The UNH Institutional Review Board (IRB) for the Protection of Human Subjects in Research is a standing faculty committee responsible for protecting the rights and welfare of people who are the subjects of UNH research activities. UNH's policy regarding the use of human subjects in research states: **At UNH, all research activities proposing to involve human subjects must be reviewed and receive written, unconditional approval from the IRB before commencing.** This policy applies to ALL research conducted under the auspices, or by an agent, of UNH, including research in the humanities, and behavioral and social sciences, regardless of whether the research is funded or not.

The IRB:

- Reviews all research protocols involving human subjects
- Reviews and addresses concerns involving the use of human subjects in research
- Advises faculty, staff and students on the ethical conduct of research involving people
- Conducts appropriate reviews of the University's program for the use of human subjects in research to ensure compliance with federal and state regulations, and University policy
- Serves in an advisory capacity to the Senior Vice Provost for Research

The Research Integrity Services (RIS) office:

- Provides administrative support to the IRB
- Assists investigators with IRB application forms and developing research protocols for IRB review
- Conducts outreach and education programs to the University community on human subjects protections

Investigators should submit applications and protocols for IRB review to RIS. Protocols that meet federally-determined standards for Exempt or Expedited review are considered on a rolling basis; all other protocols undergo Full Board review at a convened meeting of the IRB. The full IRB meets every other week during the academic year, and once each month during the summer to review protocols. It is best to allow a minimum of two weeks for review of protocols qualifying for Exempt or Expedited review, and one month for protocols requiring Full Board review.

The *Human Subjects* webpage, <http://unh.edu/research/human-subjects>, contains IRB application forms, meeting schedule, training requirements, guidelines, human subjects protections regulatory and background information, and links to related websites.

### Contacts:

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|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For IRB forms, application information, meeting schedules, protocol submission deadlines, administrative concerns, and general inquiries: | Research Integrity Services, Service Building<br>Julie Simpson, 603/862-2003<br><a href="mailto:julie.simpson@unh.edu">julie.simpson@unh.edu</a><br>Theresa Cherouvis, 603/862-3536<br><a href="mailto:theresa.cherouvis@unh.edu">theresa.cherouvis@unh.edu</a> |
| For Exempt level protocol review in the departments of Psychology and Sociology:                                                          | Contact the appropriate department chair                                                                                                                                                                                                                        |



## Vertebrate Animals in Research, Testing, and Instruction

The UNH Institutional Animal Care and Use Committee (IACUC) is a standing committee of faculty and staff, and community members not affiliated with UNH. The IACUC is responsible for ensuring the proper care and use, and humane treatment, of vertebrate animals used in research, testing, and instruction at UNH. UNH's policy regarding the use of vertebrate animals in research, testing, and instruction states: **At UNH, all activities proposing to involve the care and use of live vertebrate animals must be reviewed and receive written, unconditional approval from the IACUC before commencing.** This policy applies to ALL research, testing, and instruction conducted under the auspices, or by an agent, of UNH, regardless of whether the activity is funded or not.

The IACUC:

- Reviews all research, testing, and instructional protocols involving vertebrate animals
- Conducts semiannual reviews of the university's animal care and use program, and facilities
- Reviews and addresses concerns involving animals in research, testing, and instruction
- Serves in an advisory capacity to the Senior Vice Provost for Research

The Animal Resources Office (ARO) provides assistance in every phase of animal activity, and promotes a cooperative and open relationship among researchers, administration, and regulatory bodies. The ARO:

- Provides technical support, consultation, and training to UNH faculty, staff and students using or caring for animals
- Provides veterinary services for animals used or cared for by UNH faculty, staff, and students
- Assists UNH investigators in the development of protocols for animal use
- Oversees UNH animal facilities to ensure compliance with federal, state, and University standards

The Research Integrity Services office (RIS):

- Provides administrative support to the IACUC
- Assists investigators with IACUC application forms

Investigators should submit protocols for IACUC review to RIS. At UNH, all animal use protocols undergo review by the full IACUC at a convened meeting. The IACUC meets once a month throughout the year. It is best to allow a minimum of one month for review of protocols by the IACUC. The *Animal Care and Use* webpage, <http://unh.edu/research/animal-care-use>, contains IACUC application forms, meeting schedule, and other related information.

### Contacts:

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|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For IACUC forms, application information, protocol submission deadlines, administrative concerns and general inquiries: | Research Integrity Services, Service Building<br>Julie Simpson, 603/862-2003<br><a href="mailto:julie.simpson@unh.edu">julie.simpson@unh.edu</a><br>Theresa Cherouvis, 603/862-3536<br><a href="mailto:theresa.cherouvis@unh.edu">theresa.cherouvis@unh.edu</a> |
| For information on the ARO and its services, and for questions on veterinary care aspects of research protocols:        | Dean Elder, D.V.M., Director<br>Animal Resources Office, Rudman Hall<br>603/862-4629, <a href="mailto:dean.elder@unh.edu">dean.elder@unh.edu</a>                                                                                                                |

### **Use of Hazardous Materials**

Due to the diversity of activities at UNH and the need to ensure safety in a variety of areas, UNH has specialized faculty safety committees to oversee the use of radioactive materials, biological materials, and chemical materials at the institution. The Institutional Biosafety, Chemical Safety, Radiation Safety, and Occupational Safety committees meet quarterly to ensure the safe acquisition, use, and disposal of hazardous materials. The Office of Environmental Health and Safety (OEHS) implements the policies, procedures, and programs addressing these substances. The OEHS web address is <http://unh.edu/research/environmental-health-and-safety>

**Contacts:**

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|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Radioactive materials and lasers | Michele Arista, Radiation Safety Officer<br>Perpetuity Hall<br>603/862-3607, <a href="mailto:michele.arista@unh.edu">michele.arista@unh.edu</a>                                                                                                                                      |
| Biological materials             | Dana Buckley, Biological Safety & Security Officer<br>Perpetuity Hall<br>603/862-0197, <a href="mailto:dana.buckley@unh.edu">dana.buckley@unh.edu</a>                                                                                                                                |
| Chemical materials               | Andy Glode, Laboratory Safety Officer<br>Perpetuity Hall<br>603/862-5038, <a href="mailto:andy.glode@unh.edu">andy.glode@unh.edu</a><br><br>Karrie Myer, Chemical Inventory Coordinator<br>Perpetuity Hall<br>862-1510, <a href="mailto:karrie.myer@unh.edu">karrie.myer@unh.edu</a> |
| Hazardous waste                  | Marty McCrone, Hazardous Waste Coordinator<br>Perpetuity Hall<br>603/862-3526, <a href="mailto:mmccrone@cisunix.unh.edu">mmccrone@cisunix.unh.edu</a>                                                                                                                                |
| Occupational safety              | Brian Cournoyer, Occupational Health & Safety<br>Coordinator<br>Perpetuity Hall<br>603/862-4761, <a href="mailto:brian.cournoyer@unh.edu">brian.cournoyer@unh.edu</a>                                                                                                                |



### **Controlled Substances**

UNH must comply with federal and state laws and regulations regarding the use, storage and disposal of controlled substances used for campus research, scholarly activity, and analytical purposes. These include relevant U.S. Drug Enforcement Administration (DEA) requirements and the New Hampshire Department of Health and Human Services (DHHS), Title XXX, Occupations and Professions, RSA 318-B, Controlled Drug Act.

UNH has developed a Controlled Substances Management Plan (<http://unh.edu/research/controlled-substances>). This plan outlines the requirements and responsibilities for the possession and use of controlled substances for authorized research and scholarly activity at UNH. Use of controlled substances at UNH in research and scholarly activity is restricted to authorized persons working under the direct supervision of the UNH DEA registrant, Dr. Dean Elder. Failure to comply with controlled substances procedures at UNH may be grounds for employee disciplinary action or research termination.

**Contact:**

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|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| For information on controlled substances: | Dean Elder, D.V.M., Director<br>Animal Resources Office, Rudman Hall<br>603/862-4629, <a href="mailto:dean.elder@unh.edu">dean.elder@unh.edu</a> |
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### **Export Controls and Embargoes**

UNH intends to comply fully and completely with all US export control laws and regulations, including those implemented by the U.S. Department of Commerce through its Export Administration Regulations and the U.S. Department of State through its International Traffic in Arms Regulations, as well as those embargo regulations imposed by the U.S. Treasury Department through its Office of Foreign Assets Control.

The UNH office of Contracts and Export Controls oversees export control compliance through implementation of the UNH Export Control and Embargoes Management System. This system is grounded upon awareness training for faculty, students, project directors, and staff using controlled technologies or involving travel and other activities with sanctioned countries and individuals.

**Contacts:**

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For information and training on export controls and embargoes, including: Contract Review and Negotiation; Non-Disclosure Agreements for Research Projects; Technology/Regulation Reviews; Shipping of Controlled Technologies; and Export Licensing | Victor G. Sosa, Director<br>Contracts and Export Controls<br>Service Building<br>603/862-2001, <a href="mailto:victor.sosa@unh.edu">victor.sosa@unh.edu</a> |
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### **Intellectual Property**

UNHInnovation integrates institutional efforts for building research partnerships that result in commercialization and economic development. UNHInnovation:

- Determines the potential market for new intellectual property
- Promotes UNH intellectual property to outside interests
- Establishes collaborative relationships with industry
- Coordinates the flow of information required for patents, trademarks, copyrights and other forms of protection
- Ensures compliance with federal regulations

Information is available on-line at <http://unh.edu/research/support-units/research-partnerships-commercialization>

**Contact:**

|                                                    |                                                                                                                                                         |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| For information on UNHInnovation and its services: | Marc Sedam, Executive Director<br>UNHInnovation, 21 Madbury Road, Suite 101<br>603/862-4130, <a href="mailto:marc.sedam@unh.edu">marc.sedam@unh.edu</a> |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|

### **UNH Policy on Misconduct in Scholarly Activity**

The UNH Policy on Misconduct in Scholarly Activity is applicable to all members of the University community, regardless of funding source. Scholarly activities include: Lab and field research, educational innovation projects, theoretical investigations, observational studies, experimentation, research and scholarship in the humanities, and other forms of creative expression. Misconduct is defined as: Fabrication, falsification, or plagiarism in proposing, performing, or reviewing scholarly activities, or in reporting results from scholarly activities; and, retaliation against a person who has brought forth an allegation or provided information in its investigation. The UNH Policy on Misconduct in Scholarly Activity policy is administered by the Office of the Senior Vice Provost for Research, and is available on-line at <http://www.usnh.edu/olpm/UNH/II.Acad/C.htm>

### **UNH Policy on Ownership, Management, and Sharing of Research Data**

The UNH Policy on Ownership, Management, and Sharing of Research Data is applicable to all members of the University community, regardless of funding source. The policy articulates University community members' rights to and responsibilities for research data including ownership and custody, issues in recording, selecting, and reporting research data, and requirements for access to, and sharing, storage, and retention of, research data. The policy emphasizes the need for written agreements among research personnel delineating who has access to research data and when, and specifying disposition of data when study personnel cease involvement in the research activities. The UNH Policy on Ownership, Management, and Sharing of Research Data is administered by the Office of the Senior Vice Provost for Research, and is available on-line at <http://www.usnh.edu/olpm/UNH/VIII.Res/C.htm>



## **UNH Policies on Financial Conflict of Interest in Research**

Regulations (e.g., Public Health Service [PHS], National Science Foundation) exist governing financial conflicts of interest of researchers who apply for external funds to conduct research. UNH has two policies on financial conflict of interest in research to protect the integrity of externally-sponsored research and to comply with federal regulations. The purpose of these policies is to identify and eliminate or manage any possible threat to research objectivity at UNH and, where conflicts could affect the rights and welfare of human subjects in research, to identify and eliminate or manage the conflicts that could lead to the unethical treatment of research subjects.

The first UNH policy on financial conflict of interest in research applies to all research funded, or proposed for funding, by any external source except for the PHS and organizations that require compliance with the PHS financial conflict of interest in research regulations (see <http://www.unh.edu/research/conflicts-interest-commitment> for policies, forms, and instructions). Effective August 24, 2012, UNH has a second financial conflict of interest policy that applies specifically to research funded, or proposed for funding, by the PHS and other organizations that require compliance with the PHS financial conflict of interest in research regulations (see <http://unh.edu/research/financial-conflicts-interest-research-projects-funded-public-health-service-phs> for more information).

The UNH policies apply to individuals who are responsible for the design, conduct, or reporting of research activities (investigators) funded or proposed for funding by external sources. The UNH policies require that investigators disclose any significant financial interests prior to UNH submitting an application for external funds to support research. The UNH policies are administered by the Office of the Senior Vice Provost for Research.

For UNH policies on the following topics, visit the UNH Online Policy Manual at <http://www.usnh.edu/olpm/UNH/Default.html>:

- Openness, Access, and Participation in Research and Scholarly Activities
- Classified Work
- Misconduct in Scholarly Activity
- Ownership and Management of Research Data
- Intellectual Property
- Financial Conflict of Interest in Research
- Use of Human Subjects in Research
- Care and Use of Animals