

## **Responsible Conduct of Research Policy**

The University of Houston is committed to supporting responsible and ethical conduct of research and scholarship among its faculty, staff, and students. Responsible conduct of research should foster a climate of intellectual honesty and a commitment to ethical responsibilities by academia. All members of the University community share responsibility for developing and maintaining standards to assure ethical conduct of research and detection of abuse of these standards. (See <u>Responding to Allegations of Research Misconduct</u>) for the University's policy on handling misconduct in research and scholarship.)

The University of Houston continually strives to maintain a research environment that promotes attention to the highest ethical standards for all sponsored and non-sponsored research. It is expected, therefore, that all researchers participate in ongoing education in all core areas that comprise a comprehensive responsible conduct of research curriculum. These core areas include:

- Scientist as a responsible member of society
- Conflict of Interest (personal, professional, and financial), including Conflict of Commitment
- Human subjects, animal, and safe laboratory practices
- Mentor/mentee responsibilities and relationships
- Safe research environments
- Collaborative research
- Peer review
- Data acquisition and analysis
- Secure and ethical data use
- Data confidentiality, management, sharing, and ownership
- Research misconduct
- Responsible authorship and publication
- Export controls (includes disclosure and reporting requirements)
- Research security risks

Recipients of awards from the National Science Foundation (NSF), the USDA National Institute of Food and Agriculture (NIFA), and the National Institutes of Health (NIH) are required to comply with specific requirements to ensure appropriate training in the responsible conduct of research. Researchers applying for, and receiving, support from NSF, NIFA, and the NIH will need to be familiar with these respective regulations, as well as provide documentation of appropriate training as required under the terms of the award. Regardless of funding, however, these core ethical values are expected to be upheld in all research conducted at the University. Research team education in all applicable areas is highly encouraged.

## National Science Foundation (NSF) Requirements for Responsible Conduct of Research (RCR)

The National Science Foundation (NSF) has established a training requirement in the Responsible Conduct of Research (RCR) for all undergraduates, graduate students, postdoctoral fellows (postdocs), faculty, and other senior personnel supported by NSF projects. The new regulations implement



provisions of the America COMPETES Act and the CHIPS and Science Act of 2022 which requires grantees to provide training and oversight in the responsible and ethical conduct of research. The scope of the training has been expanded to include training in the area of research security risks as well as federal export control, and disclosure and reporting requirements.

At the time an NSF proposal is submitted, the Grants and Contracts office must certify that the University of Houston has a plan to provide appropriate training and oversight for students (undergraduate and graduate), postdoctoral fellows, faculty and senior personnel who will be supported by NSF, to conduct research. Plans are not to be submitted with proposals but are subject to review upon request by NSF.

NSF has specified some of the content but not the mode of delivery of the training in the responsible conduct of research. Nonetheless, the agency has suggested that seminars, web-based programs, workshops and mentoring are some of the acceptable methods of delivery. The University of Houston participates in the Collaborative Institutional Training Initiative (CITI), a subscription service providing online research ethics training to members of the research community. Therefore, all students, postdocs, faculty and other senior personnel supported by an NSF project are required to complete, at a minimum, CITI training in the Responsible Conduct for Research at <a href="https://www.citiprogram.org/">https://www.citiprogram.org/</a>.

NSF expects the RCR training to be delivered during the first year of an award; however, we highly recommend it be taken within 180 days of an individual starting work on the project to ensure integrity is maintained throughout.

Principal Investigators are responsible for ensuring completion of the RCR education requirements by all undergraduates, graduate students, postdocs, faculty, and senior personnel who are supported by NSF projects, including subawards, submitted and subsequently awarded. The Division of Research Office of Research Integrity and Oversight will, on a periodic basis, monitor completion of CITI training. The PI will be notified of any individuals who have not satisfied this training requirement.

<u>Noncompliance</u>: Failure to comply with this policy within specified time frames shall constitute grounds for disciplinary action. Disciplinary action is based upon a reasonable investigation of the noncompliance and is consistent with the severity of the violation. A range of examples includes, but is not limited to, additional training/monitoring for minor violations up to limits being placed on the use of NSF-awarded funds for the project supporting research team members who are not in compliance, and/or loss of privilege to apply for new grant funding until the required training has been brought into compliance.

## U.S. Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA) Requirements for Responsible Conduct of Research (RCR)

USDA NIFA considers education in RCR critical for excellence, as well as public trust, in science and engineering. The agency requires that program directors, faculty, undergraduate students, postdoctoral researchers, and any staff participating in the awarded research project receive appropriate training and oversight in the responsible and ethical conduct of research; documentation of such training must be maintained and provided to NIFA upon request.



NIFA specifies general requirements for RCR training and indicates that grantees consider CITI training specifically. Therefore, all required research personnel supported by NIFA are required to complete, at a minimum, the CITI online training in the Responsible Conduct for Research at <a href="https://www.citiprogram.org/">https://www.citiprogram.org/</a>.

It is the responsibility of the PI to ensure that appropriate training has been completed by all individuals associated with the funded work. The Division of Research Office of Research Integrity and Oversight will, on a periodic basis, monitor completion of CITI training. The PI will be notified of any individuals who have not satisfied this training requirement.

<u>Noncompliance</u>: Failure to comply with this policy within specified time frames shall constitute grounds for disciplinary action. Disciplinary action is based upon a reasonable investigation of the noncompliance and is consistent with the severity of the violation. A range of examples includes, but is not limited to, additional training/monitoring for minor violations up to limits being placed on the use of USDA/NIFA-awarded funds for the project supporting research team members who are not in compliance, and/or loss of privilege to apply for new grant funding until the required training has been brought into compliance

## National Institutes of Health (NIH) requirements for Responsible Conduct of Research (RCR)

NIH requires that all Institutional Research Training Grants, Individual Fellowship Awards, Career Development Awards (institutional and individual), Research Education Grants, Dissertation Research Grants or other grant programs with a training component include a plan for how the PI will carry out instruction in responsible conduct of research. Specifically, this applies to the following types of grants: D43, D71, F05, F30, F31, F32, F33, F34, F37, F38, K01, K02, K05, K07, K08, K12, K18, K22, K23, K24, K25, K26, K30, K99/R00, KL1, KL2, R25, R36, T15, T32, T34, T35, T36, T37, T90/R90, TL1, TU2, U2R. Although this plan does not affect overall impact scores, applications will be considered incomplete and will not be reviewed until an acceptable plan of instruction is submitted.

All trainees, fellows, participants, and scholars receiving support are required to complete RCR training. Instruction should include face-to-face discussions or video conferencing (online can be a component but is not sufficient on its own). Substantial face-to-face discussion or video conferencing<sup>1</sup>, a combination of didactic and small-group discussions (e.g. case studies), and participation of research training faculty members in instruction are highly encouraged. A minimum of 8 contact hours are considered to be substantive (a semester-long series of seminars/programs is ideal). Instruction must be undertaken at least once during each career stage (undergraduate, post-baccalaureate, predoctoral, postdoctoral, faculty), but no less than once every four years. Additionally, "a more tailored, discipline-specific approach may better fit the needs of advanced graduate students and those who have transitioned to postdoctoral status" per the updated NIH guidance (NOT-OD-22-055).

NIH has not mandated specific subject requirements, but most acceptable plans have included conflict of interest and conflict of commitment; human subjects, animal, and safe laboratory practices; safe research environments, mentor/mentee responsibilities and relationships; collaborate research; peer

<sup>&</sup>lt;sup>1</sup> Video conferencing should not be the only mode for RCR instruction.



review; data acquisition and analysis and lab tools, secure and ethical data use, data confidentiality and management, sharing and ownership; research misconduct; responsible authorship and publication; and scientist as a responsible member of society. (See NIH's Update on the Requirement for Instruction in the Responsible Conduct of Research to learn more about NIH's requirements and NOT-OD-22-055)

The Division of Research office has created a "Recommended Plan for Responsible Conduct of Research by Career Stage" matrix to assist researchers in satisfying these educational requirements (see <a href="RCR">RCR</a>
<a href="Resources">Resources</a>). Please note that the matrix categories are suggestions and are not meant to limit any trainee to only certain types of training.

It is the responsibility of the PI to ensure that appropriate training has been completed by all individuals associated with the funded work. The Division of Research Office of Research Integrity and Oversight will, on an annual basis, monitor compliance with the RCR plan outlined in the funded grant. In cases where UH is a subrecipient, general NIH RCR requirements must be met.

<u>Noncompliance</u>: Failure to comply with this policy within specified time frames shall constitute grounds for disciplinary action. Disciplinary action is based upon a reasonable investigation of the noncompliance and is consistent with the severity of the violation. A range of examples includes, but is not limited to, additional training/monitoring for minor violations up to limits being placed on the use of NIH-awarded funds for the project supporting research team members who are not in compliance, and/or loss of privilege to apply for new grant funding until the required training has been brought into compliance.