The George Washington University
Responsible Conduct of Research Training Plan

INTRODUCTION
In pursuit of its research mission, The George Washington University (GW) is dedicated to upholding and promoting the highest standards of ethical research and scholarly conduct. This Responsible Conduct of Research (RCR) training plan is designed to engage the GW community in cultivating a research environment that aligns with GW's Code of Ethical Conduct and institutional policies while adhering to sponsor requirements and applicable regulations. Centrally managed by the Office of Research Integrity and Compliance (ORIC), this plan seeks to build upon the foundations of research excellence that form an integral part of GW's tradition.

SCOPE
This plan addresses training in the responsible and ethical conduct of research mandated and encouraged by research sponsors such as the National Science Foundation (NSF), the National Institutes of Health (NIH), the United States Department of Agriculture's National Institute of Food and Agriculture (USDA NIFA), and others. Each researcher must identify and comply with the distinct elements of RCR training required by the relevant sponsor(s) for specific grants and research projects and may seek guidance from the ORIC as to applicable requirements. GW encourages all members of its research community to acquire knowledge in RCR that exceeds sponsor requirements. Although general RCR training can be complementary, requisite training in human participant research, animal research, biosafety, radiation safety and laser safety research are not addressed in this plan. Please refer to the GW Office of Human Research and/or the Office of Research Safety for specific training related to these areas.

RCR CORE CONTENT
Education in the responsible and ethical conduct of research covers a range of topics. Such education should ideally begin at the start of one's research career and be reinforced through responsible training, supervision, and mentoring. The following list of topics, while not exhaustive, denotes core content for gaining a general understanding of what it means to conduct ethical, responsible research. These and other topics may also be tailored to the specific discipline and career stage:

● Research Ethics
● Research Misconduct and other Breaches of Integrity
● Conflicts of Interest and Conflict of Commitment
● Data Management (e.g., secure and ethical data use and sharing, acquisition, analysis, ownership, and recordkeeping practices)
● Protection of Human Subjects in Research
● Protection of Animals in Research
● Safe Laboratory Practices and Safe Research Environments
● Responsible Authorship and Publication Practices
● Peer Review (e.g., confidentiality and security)
● Collaborative Research and Equitable Partnerships
● Mentor/Trainee Responsibilities, Mentoring Training and Mentorship
● Social Responsibility and Researchers as Members of Society (e.g., exploring ethical issues, societal and environmental impact of research)

RCR TRAINING
The ORIC works with research leaders across campus to ensure the availability of RCR training and coordinate various offerings to help GW researchers meet their RCR training requirements. These include an RCR seminar series that features in-person and on-line sessions involving interactive discussion on the RCR topics listed above. Current RCR events are listed on the ORIC RCR webpage and individual school and department webpages as well as on the GW University Calendar. The ORIC also contributes to discipline-specific training and offers support for development of individual project RCR plans.

All GW faculty, staff, and students involved in research, regardless of funding source, are encouraged to complete the online RCR Basic Course offered by GW via the Collaborative Institutional Training Initiative (CITI) Program. Other courses offered by GW via the CITI program include tailored courses related to biomedical, social/behavioral, physical sciences, humanities and engineering disciplines, including courses in data management and mentoring.

Different funders have specific requirements for training in the ethical and responsible conduct of research, including the NSF, NIH, and USDA NIFA, for which RCR training requirements vary and are set forth below. Other research sponsors, including federal, state and local funders as well as private sponsors, may also require RCR training.

Consistent with existing policy and guidance, GW encourages RCR training to be undertaken at least once during each career stage and at least every four years. Personnel who have met RCR training requirements at another institution may submit their documentation to the ORIC. Documentation of CITI training or equivalent on-line or in-person instruction will be considered on a case-by-case basis as to whether GW policy and applicable sponsor requirements are met.

National Science Foundation
GW requires those involved in research sponsored by NSF to complete Responsible and Ethical Conduct of Research training. All faculty and senior personnel, graduate students, postdoctoral fellows, undergraduate students and staff researchers involved in NSF projects must complete the CITI RCR Basic Course, which includes modules on data management and mentoring and healthy research environments in accordance with new NSF requirements. The training should be completed within 90 days of becoming involved in an NSF project and should be undertaken at least every four years. Those involved in NSF sponsored research are also encouraged to participate in courses offered by their schools and departments and attend training opportunities available on campus, either through the ORIC or other GW affiliates. If a researcher has completed the CITI RCR Basic Course (or equivalent as determined by the ORIC) within the last four years but has not had a course in data management and/or a course in mentoring, then they must complete both courses to comply with new NSF training requirements.

National Institutes of Health
The NIH requires RCR training for those applying for any NIH research training grants, individual fellowship awards, career development awards (institutional and individual), research education grants, dissertation research grants, or other grant programs with an RCR instruction requirement as noted in the funding opportunity announcement. This requirement also applies to all faculty, including new faculty, mid-career faculty and senior faculty, and professional and scientific employees receiving funding from these sources. The principal investigator must describe plans to meet the RCR training requirements in the application.

Principal investigators submitting NIH grants that require instruction in the responsible conduct of research are responsible for developing a plan in keeping with the specific requirements for

the grant application and [NIH guidelines](#). This includes those applying for NIH training grants and career development awards, including all trainees, fellows, participants, and scholars receiving support from programs such as the following: 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, and U2R and any other NIH-funded programs that support research training, career development, or research education and that require instruction in the responsible conduct of research as described in funding opportunity announcements.

Principal investigators may consult the ORIC for guidance in developing RCR plans in accordance with RCR training requirements described in the relevant funding opportunity announcement. NIH policy and guidance encourages completion of RCR training at least once during each career stage, and at least once every four years.

Regardless of career stage and discipline, all GW faculty, staff, and students involved in NIH-funded research should complete the online RCR Basic Course offered by GW via the [Collaborative Institutional Training Initiative (CITI) Program](#), and may also attend courses offered by their schools and departments and attend training opportunities available on campus, either through the ORIC or other GW affiliates.

National Institute of Food and Agriculture
GW requires that all individuals involved in USDA NIFA projects complete the CITI RCR Basic Course. The training should be completed within 90 days of becoming involved in a USDA NIFA project and should be undertaken at least once every four years. Researchers funded by USDA NIFA may also attend courses offered by their schools and departments and attend training opportunities available on campus, either through the ORIC or other GW affiliates.

SHARED RESPONSIBILITY
The responsibility for adhering to sponsor requirements for RCR training and building a culture of ethical and responsible research is shared among those involved in the GW research endeavor. This includes the principal investigators, schools and departments, and the Office of the Vice Provost for Research (Office of Research Integrity and Compliance and Office of Sponsored Projects). While some responsibilities may overlap, primary obligations of these distinct groups and individuals can generally be described as follows:

Principal Investigators
Principal investigators have primary individual responsibility for the conduct and administration of a research grant or contract and must ensure compliance with applicable laws and regulations and institutional policy governing sponsored research. Accordingly, principal investigators must ensure that those supported on their awards complete RCR training per sponsor requirements. Specifically, principal investigators must:

● identify and communicate with research team members who must receive RCR training;
● determine the most appropriate training format in line with sponsor requirements;
● ensure each research team member completes their training and maintain an up-to-date record of completion for the entire team.

Schools and Departments
In partnership with the ORIC, schools and departments at GW should provide support and advice to researchers to foster a community of research excellence as follows:

- integrate research ethics and integrity discussions in regular meetings of the school or department as a means of raising awareness and fostering a culture of integrity at the highest administrative level across the school or department and within the individual research teams;
- help educate principal investigators as to their mentoring and support role for RCR training;
- provide support for face-to-face RCR training relevant to the trainee's specific discipline and career stage;
- share RCR information and resources across GW to assist trainees in adhering to training guidelines;
- help verify completion of RCR training as needed.

Office of Research Integrity and Compliance
The Office of Research Integrity and Compliance in the Office of the Vice Provost for Research assumes responsibility for the following as part of its function to support the ethical and responsible conduct of research activities at GW:

- maintain and update the GW RCR plan and related webpages;
- offer educational sessions, including an RCR seminar series;
- provide information to sponsors regarding compliance on request;
- allocate resources for oversight, including monitoring of completion of training, and coordination of RCR training opportunities in concert with GW schools and departments;
- review and approve previously completed RCR training and proposals for new RCR training content on a case-by-case basis;
- verify compliance with RCR requirements, including via random quarterly audits of select funded awards;
- partner with departments and schools to promote faculty engagement in building a culture of ethical and responsible research.

Office of Sponsored Projects
The Office of Sponsored Projects Authorized Organizational Representative is responsible for providing institutional assurance of compliance to applicable funding agencies. This includes:

- at the time of an NSF proposal submission, certify that the institution has a plan to provide appropriate training and oversight in the responsible and ethical conduct of research;
- at the time a notice of award is processed, provide a reminder to the principal investigators and pod administrator that the award is subject to RCR training requirements;
- at time of subaward, communicate applicable RCR requirements to subawardee(s) and the principal investigators.