# Responsible Conduct of Research (RCR) Training Plan Template for Grants

## Instructions

The Responsible Conduct of Research (RCR) Training Plan Template provides a description of CHOP's formal RCR Training Program and suggestions for describing informal RCR instruction. It can be adapted for use in the following: Institutional Training Grants (e.g., T15, T32, D43, T90/R90, TL1), Institutional Career Development grants (e.g., K12, K30), Individual Fellowship (e.g., F32, F33), Individual Career Development Award (e.g., K01, K02, K05, K07, K08, K22, K23, K24) applications and other grants (e.g., NSF, USDA-NIFA) that require an RCR program description.

All NIH RCR training plans must include the following five instructional components: format, subject matter, faculty participation, duration of instruction, and frequency of instruction. The plan must discuss both formal and informal RCR instruction. These components are described in *the FY 2022 Updated Guidance: Requirement for Instruction in RCR (NOT-OD-22-055)* and the *NIH Update on the Requirement for Instruction in the Responsible Conduct of Research* (*NOT-OD-10-019*). Monitoring and tracking must also be addressed and are included in the template language.

This template language is not meant to replace individually tailored RCR education plans. **Use the items listed below to tailor the template language for your career stage, application type, and/or specific funding opportunity announcement.**

- Include both formal and informal RCR training that you have completed.
- Indicate your plans for completing formal RCR courses and informal RCR instruction within your clinical/laboratory research team (e.g., lab meetings, one-on-one meetings) and/or by attending other research-ethics related education events.
- Senior fellows and career award recipients (e.g., F33, K02, K05, and K24) may fulfil their RCR requirement by participating as RCR course instructors or discussion leaders. For more information contact the Office of Research Compliance at researchtraining@chop.edu.
- CHOP Research Institute faculty are strongly encouraged to participate as instructors, presenters, and discussion leaders in both formal and informal RCR programs. Informal RCR education may occur as part of regular meetings of the research group. List Faculty who serve as instructors in your RCR Training Plan description. Faculty participation in CHOP RCR programs is available from the Office of Research Compliance at researchtraining@chop.edu.
- Additional background information is contained within the CHOP RCR Training Policy and Plan.

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## RCR Template Language

1. **Training Format**

### A. Formal RCR Course Descriptions and Institutional Commitment

The Children's Hospital of Philadelphia (CHOP) Research Institute requires ongoing formal and informal training in Responsible Conduct of Research (RCR) for all research trainees and career development awardees. Faculty investigators participate in RCR programs as presenters, discussion leaders, panelists and subject matter experts. CHOP's formal RCR program includes online training through the Collaborative Institutional Training Initiative (CITI) RCR program; and two, 4-hour, in-person RCR workshop sessions for a total of 8 contact hours. The institution also sponsors discussion sessions and video conferencing seminars, generally led by CHOP faculty and outside speakers, on topics related to RCR.

### CITI RCR

The online CITI RCR training offers discipline-specific (biomedical, social and behavioral) modules and introduces the topics covered in the NIH NOT-OD-10-019 and updated NIH NOT-OD-22-055. A minimum score of 80% is required to pass each module quiz. An optional CITI RCR Refresher course is also available.

### RCR 1 and RCR 2

The RCR 1 and RCR 2 in-person workshops combine didactic and small group discussions facilitated by research faculty and administrators. In-person workshops (RCR 1 and RCR 2) are offered several times each fiscal year. Senior fellows and trainees are encouraged to build upon their research ethics experience by participating as discussion leaders or panelists in the RCR workshop sessions. Interactive learning experiences include case studies, panel presentations, and roundtable exercises.

CHOP's commitment to RCR training extends beyond formal training to include an RCR Training Policy and Plan designed to convey and clarify role specific RCR training requirements and RCR resources available to the entire research community. These resources facilitate access to RCR educational materials, increase understanding of RCR-related federal regulations and CHOP policies, and introduce institutional experts to answer questions and offer guidance.

### B. Informal RCR Instruction

*[The NIH NOT-OD-10-019 describes Informal RCR Instruction as continuous learning that occurs in daily laboratory interactions and in other scholarly activities throughout the research training experience. Informal RCR Instruction is expected to be completed in addition to the formal CHOP RCR training courses (i.e., CITI RCR, RCR 1, RCR 2)].*

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*[Describe your Informal RCR activities in this section. Some examples may include participating in research ethics-focused mentor and peer discussions, team meetings, self-study, or seminars. Be sure to include who provided the training (i.e., mentor, peers, collaborators, CHOP faculty, Scientists), frequency (weekly, bi-weekly, monthly, annual conference) and topics covered].*

### Research Integrity in Practice

Research Integrity in Practice is a discussion-based video conferencing series that features CHOP faculty, institutional authorities, and external experts. The seminars promote ongoing conversations about ethics and best practices in research and include a variety of traditional topics from NIH NOT-OD-10-019 and new topics from NIH NOT-OD-22-055. Seminars are one-hour in length and are offered several times each year. Recent topics covered include:

- 04/22/2021 - Negotiating Authorship - An Open Discussion: Sogol Mostoufi-Moab, MD, MSCE and Joseph P. Zackular, PhD
- 06/15/2021 - Double Trouble - Inappropriate Image Duplications in Biomedical Research Publications: Elisabeth Bik, PhD
- 01/13/2022 - Demystifying Intellectual Property: Zev Sunleaf
- 03/30/2022 - Understanding and Reducing Gender Bias in STEM: Corinne Moss - Racusin, PhD
- 05/19/2022 - Data Privacy and Confidentiality - Dianna Reuter, JD, CIPP/US and Nicole Feldman, MSIS
- 06/02/2022 - Data Management and Sharing: Ene Belleh, MLIS, MBA; Nicole Feldman, MSIS; and Julianna Pakstis, MS
- 10/25/2022 - Navigating the Conflict of Interest Process: Patrick Egan, JD; Van Mahlab, JD
- 11/08/2022 - Improving Data Management with LabArchives: Hannah Clark; Michael Gerrity
- 12/08/2022 - Crisis and Reformation in the Biomedical Sciences: Arturo Casadevall, MD, PhD

2. **Subject Matter:** The formal online CITI RCR, in-person RCR 1 (4 hours), RCR 2 (4 hours) and informal Research Integrity in Practice video conferencing series cover a combination of the following topics listed in NIH NOT-OD-10-019 and NIH NOT-OD-22-055:

    - conflict of interest - personal, professional, and financial - and conflict of commitment, in allocating time, effort, or other research resources
    - policies regarding human subjects, live vertebrate animal subjects in research, and safe laboratory practices
    - mentor/mentee responsibilities and relationships

- safe research environments (e.g., those that promote inclusion and are free of sexual, racial, ethnic, disability and other forms of discriminatory harassment)
- collaborative research, including collaborations with industry and investigators and institutions in other countries
- peer review, including the responsibility for maintaining confidentiality and security in peer review
- data acquisition and analysis; laboratory tools (e.g., tools for analyzing data and creating or working with digital images); recordkeeping practices, including methods such as electronic laboratory notebooks
- secure and ethical data use; data confidentiality, management, sharing, and ownership
- research misconduct and policies for handling misconduct
- responsible authorship and publication
- the scientist as a responsible member of society, contemporary ethical issues in biomedical research, and the environmental and societal impacts of scientific research

3. **Faculty Participation:** CHOP Research Institute leaders and faculty contribute to both formal and informal RCR training. Faculty participate in the formal in-person RCR workshop sessions as presenters, discussion leaders, panel members, and/or content reviewers. Faculty members facilitate informal RCR instruction via one-on-one mentoring, small group discussions within their labs/research teams and through seminar presentations.

   *[Faculty participation data in formal CHOP RCR sessions is from the Office of Research Compliance (ORC) at: researchtraining@chop.edu. The role of the mentor(s)/PI/faculty member must be described in this section.]*

4. **Duration of Instruction:** The online training through the Collaborative Institutional Training Initiative (CITI) RCR program takes approximately 5 hours to complete and the optional CITI RCR Refresher takes approximately 3 hours. The in-person RCR 1 workshop is 4 hours and the in-person RCR 2 workshop is 4 hours. Each Research Integrity in Practice session is one hour. Research faculty provide ongoing mentorship and instruction in responsible research practices.

5. **Frequency of Instruction:** The in-person RCR 1 and RCR 2 training sessions are completed at least once during each career stage and at a frequency of no less than once every four years. The online CITI RCR training program is completed once and an optional CITI RCR Refresher is available. Informal RCR instruction is discipline specific and completed via ongoing educational seminars, lab meetings, and mentored discussions.

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6. **Monitoring and Tracking:** Participation in formal CHOP RCR programs is documented via sign-in sheets for in-person sessions (RCR 1 and RCR 2) and direct tracking for the online CITI RCR programs. The Office of Research Compliance communicates the requirement, monitors participation and tracks completion of the formal RCR training components. Principal Investigators assure that trainees and career development awardees complete the formal RCR training requirement and participate in ongoing informal RCR education. Faculty mentors monitor, track and report informal RCR instruction as required. Research trainees and career development awardees also maintain individual records that document completion of both formal and informal RCR education.

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The following sections provide background on CHOP RCR Training During COVID-19, and links to federal and institutional RCR Training Policies.

## CHOP RCR Training During COVID-19

- From April 2020 through June 2023, CHOP implemented a relaxed In-Person RCR Training Requirement due to the COVID public health emergency and in alignment with NIH NOT-OD-21-152 - *NIH Extension of COVID Flexibilities for Instruction in the Responsible Conduct of Research*.
- The online CITI RCR and Refresher RCR Courses were used to meet the in-person federal RCR Training requirements during the COVID public health emergency.
- Research Integrity in Practice video conferencing seminars are supplemental and offered throughout the year.
- CHOP is resuming in-person RCR programs as described in the *Format: Formal RCR Course Descriptions and Institutional Commitment* section beginning in November 2023.

## Federal RCR Training Requirements

- CHIPS and Science Act of 2022 – National Science Foundation (NSF)
- NIH NOT-OD-22-055 - *FY 2022 Updated Guidance: Requirement for Instruction in RCR*
- USDA NIFA RCR Requirement (2013)
- NIH NOT-OD-10-019 - *Update on the Requirement for Instruction in RCR (2009)*
- NSF RCR Requirement (2009)

## CHOP RCR Training Requirements

- RCR Training Policy and RCR Training Plan

*2023-07-25*