RCR training **exceeds NIH recommendations**, with **>20 hours of face-to-face training** **with faculty** in a discussion format over five years, and an additional 3 hours of online instruction. Participation of both trainees and faculty is recorded by the program. Students are exposed to **all eleven topics** recommended by NIH, including *Inclusivity, Diversity & Equity*; *Research Misconduct*; *Data Acquisition, Management & Confidentiality (electronic records);* *Conflict of Interest*; *Responsible Authorship & Peer review*; *Mentor/mentee Responsibilities*; *Collaborative science*, *Use of Animals or Humans in research*; *Scientist as a Responsible Member of Society*. Training **meets the NIH instructional plan** for Format, Subject Matter, Faculty Participation, Duration and Frequency. To ensure that the topics in **NOT-OD-22-055** are considered in sufficient depth and to consolidate learning within a “broad conceptual framework”, RCR training is spread over five years using the **stage-appropriate model** outlined below. Note specifically that over their last four years in the program this schedule provides **10.5 hours** of **face-to-face RCR training.**  Thus, students on an NRSA exceed the NIH mandated minimum (8 hours per four years).

**Year one** (**10.5 hours**): Students attend a lecture (**0.5 hr**) on RCR that touches on the issues above, including Research Misconduct. This is followed by sessions on Data acquisition and management, focusing on best practices for traditional and electronic notebooks (**2 hr**), and on Professionalism, including Mentor/mentee responsibilities (**2 h**). Trainees participate in several workshops including **three** on **Menotorship**, **Wellness**, and **Inclusive Culture** (**2hrs each**). Students access RCR-related materials developed by BGS, including policies, guidelines, and case-studies, which in 2021 were **updated** to be inclusive and culturally sensitive. This site provides students access to electronic versions of *Scientific Integrity* (Macrina, ASM Press) and *Responsible Conduct of Research* (Shamoo and Resnik, Oxford University Press).

**Year two** (**3 hrs**): Each student must participate in **small group (10-12) discussions**, led by two research training faculty (**1.5 hr; Please insert date of your training, and list faculty present; example: “5/15/2018; PIs DiNardo & Gold”**). Topics are Research misconduct (including plagiarism), Data management, and Inclusivity, Diversity & Equity in Science. Students review case studies, and are provided ‘What’s in a Picture? The temptation of image manipulation’ (*J. Cell. Biol.* 166: 11–15, 2004). In workshops, students and faculty engage in analysis, review facts, and discuss ethical principles. The participation of active investigators lends real-world credibility to case studies. In addition to this, each student participates in an **RCR-dedicated lab meeting** (**1.5 hr; Please insert date of lab RCR training**), led by their principal investigator who selects the topic and facilitates a discussion among lab members. This design satisfies the small-group benefits of discussion, and explicitly treats RCR issues that grow out of the laboratory’s research area. These **RCR-dedicated lab meetings are reported to BGS** by the PI each year, and document the topics covered, materials used, and the trainees participating. In addition to the 3 hrs of faculty contact RCR, core principles are re-enforced by mandating students to complete an online module in the Collaborative Institutional Training Initiative (CITI) RCR Program.

**Year three** (**3 hrs**): Each student is mandated to participate in small group discussions as in year two, led by our faculty (**1.5 hr**; **Please insert date of your training, and faculty present**). Topics for the third year are Collaborative science, Mentorship, and on Animals and Humans in research. Trainees additionally participate in an **RCR-dedicated lab meeting** as in year 2 **(1.5 hr; Please insert date of lab RCR training)**. RCR topics are re-enforced by a supplemental online CITI module (1 hr).

**Year four** (**3 hrs**): The mandated, year four small group discussion revolves around the stage-appropriate topics of Conflicts of interest and Time, Authorship/publication practices, Peer review, and Scientist as responsible member of society (**1.5 hr; Please insert date of your training, and faculty present**). As in previous years, students participate in an **RCR-dedicated lab meeting (1.5 hr; Please insert date of lab RCR training)**. RCR topics are re-enforced by an online CITI module (1 hr).

**Year five** (**1.5 hr;** same in year six, if necessary): Students participate in an **RCR-dedicated lab meeting** as in previous years **(1.5 hr; Please insert date of lab RCR training, or “ToBeArranged”)**.