***Updated: March 19, 2025***

**5. Plan for Instruction in the Responsible Conduct of Research and Scientific Rigor and Reproducibility**

The Office of Biomedical Postdoctoral Programs (BPP) at the University of Pennsylvania (Penn) requires all postdoctoral scholars within the Perelman School of Medicine, School of Veterinary Medicine, School of Nursing, and School of Dental medicine participate in Responsible Conduct of Research (RCR) and Scientific Rigor and Reproducibility (SRR) trainings. These trainings are provided by BPP in conjuncture with the postdoctoral scholar’s home-lab on an annual basis.

The BPP RCR-SRR Program for postdoctoral scholars is comprised of three major components: 1) online asynchronous RCR-SRR training modules; 2) synchronous roundtable discussion sessions lead by faculty mentors; and 3) access to additional program literature for further guidance. The online training modules are provided through the Collaborative Institutional Training Initiative (CITI Program) and are assigned through Penn’s online learning platform (Workday Learning) when a postdoctoral scholar begins their first appointment at the university. These courses cover critical content on RCR and SRR and work to build a framework for future discussion sessions. Postdocs are then welcome to join faculty-led discussions sessions held throughout the year. BPP hosts a minimum of twelve 60-minute sessions, typically in person, each focusing on one of the required topic areas as stated by the NIH. Below are recent RCR sessions organized by BPP:

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| Date | Leader/ Co-Leaders | Topic |
| 04/01/2024 | Andrew Paskevich | Research misconduct |
| 05/17/2024 | Sandhitsu Das, Ph.D. & Melike Lakadamyali, Ph.D. | Data management |
| 06/03/2024 | James C. Gee, Ph.D. & Andrew Maidment, Ph.D. FAAPM FSBI | Conflict of interest in research |
| 07/16/2024 | Christopher Hunter, B.Sc, Ph.D. & Nancy Speck, Ph.D. | Collaborative research |
| 08/29/2024 | Waged Jafer, Ph.D. | Safe research environments |
| 11/19/2024 | Crystal Conn, Ph.D. & Andrew Modzelewski, Ph.D. | Peer Review |
| 12/10/2024 | Sean Hennessy, PharmD, PhD | Using AI in Research and Ethical Conduct of Clinical Trials |
| 12/16/2024 | Michael Harhay, PhD, MPH | Authorship, Collaborations, and Mentoring |
| 03/11/2025 | Joshua Gold, Ph.D. & Michael Nusbaum, Ph.D. | Authorship & Publication Ethics |
| 04/08/2025 | Ronen Marmorstein, Ph.D. | Collaboration & Team Science |

Finally, RCR-SRR related literature is made available through the BPP website and during the discussion sessions for scholars to take back to their labs for further discussion and consideration. The most important document is *Responsible Conduct of Biomedical Research: A Handbook for Biomedical Graduate Studies Students* (Biomedical Graduate Studies Program, University of Pennsylvania). This is the primary resource for the case study portion of the training program. It was originally written as a companion to *On Being a Scientist: A Guide to Responsible Conduct in Research* (National Academies Press, Washington, D.C). While the BGS Handbook includes several topics that are not included in *On Being a Scientist*, together, these documents provide a case-study approach to inform, stimulate discussion among and thereby educate program participants.

(*It is important to add here something more specific to the RCR training in your laboratory or on your T32 program*)

Outside of BPP led RCR-SRR training, all postdocs participate in required annual RCR-dedicated lab meetings starting their first year. The lab PI is asked to select one or two RCR topics and lead a discussion among lab members, like the faculty-led BPP sessions. These meetings, however, allow for small group discussion and discussion of research and concerns unique to the lab itself. Lab PIs report their RCR-dedicated lab meetings to BPP via IDP, including topics covered, materials used, and trainees participating.

**Responsible Conduct of Research Annual Symposium**

BPP hosts a Responsible Conduct of Research Training Symposium each year, typically in April. The symposium is required for first year postdoctoral scholars but is open to all postdocs to attend. The symposium serves as an introduction to all RCR subject topics, including Scientific Rigor and Reproducibility, adopted by the recent National Institution of Health (NIH) recommendations (FY 2022 Updated Guidance: Requirement for Instructions in the Responsible Conduct of Research NOT-OD-22-055).

*The next Responsible Conduct of Research (RCR) Symposium is scheduled for Wednesday, April 30, 2025, from 10am-1pm.*