Responsible Conduct of Research, Scholarship and Creativity (RCR) Plan, 2013-14

MSU RCR Policy

RCR training is required for anyone who contributes in a sustained role in research in faculty laboratories, including post-doctoral researchers, graduate students, technicians, and undergraduate students, even if not supported on grants. Individuals conducting routine maintenance such as washing glassware are not included. Faculty members are responsible for ensuring that training specified by the policy is completed by each person covered. Graduate students or postdocs who come to MSU with "RCR certification" from another institution must provide a copy of the certificate and the curriculum/syllabus. Individuals can be hired on projects before training is completed, but the faculty member must ensure that training is completed promptly each year. A person will not be reappointed to a project if RCR training has not been completed.

Required RCR training consists of initial training (minimum of eight hours) and annual refreshers (minimum of four hours). On-line and face-to-face training is required. Training of undergraduates can be limited by the type of work they conduct; e.g., if authorship is not warranted, then they would not be required to be trained in RCR.

1. INITIAL TRAINING (MINIMUM OF 8 HOURS), CONSISTING OF THREE SEGMENTS

1A RCR Orientation. All individuals requiring RCR training will be provided an institutional overview of RCR. This will normally take place at the summer orientation for new graduate students. The overview will draw from the topics below (from the federal Office of Research Integrity: http://ori.dhhs.gov/education/), depending on the focus of the research. PowerPoint presentations from the MSU Graduate School (http://grad.msu.edu/researchintegrity/resources) will be among the materials used.

Typical topics to be presented during the orientation:

- Introduction to RCR - The Continuum from Research Integrity to Research Misconduct
- Data Acquisition, Management, Sharing and Ownership
- Conflict-of-Interest and Conflict of-Commitment
- Protection of Human Subjects
- Use of Animals in Research
- Research Misconduct
- Authorship and Publication
- Mentor-Trainee Relationships
- Peer Review
- Collaborative Research
- Protection of Intellectual Property
- Scientists as Responsible Members of Society - Environmental and Societal Impacts of Scientific Research

Note: RCR Orientation is offered by the Entomological Society of America at their annual meetings, and soon at some of the Branch meetings. Completion of the RCR Orientation at ESA fulfills the 1A requirement.

Total for Segment 1A: Minimum of 2 hours

1B Face-to-Face Discussion. A designated faculty member (usually the P.I. of the project on which the student or post-doc is working) will be assigned to each individual. The faculty member will assign readings as appropriate to the research, provide each person with a copy of the NSF Conflict of Interest form, and initiate a discussion of the specific circumstances related to the funded project.

Total for Segment 1B: Minimum of 2 hours

1C Workshops and Courses. This requirement can be met in one of two ways:

a. Complete ENT 812 (Nature and Practice of Science). This is an intense, highly interactive course that focuses on many RCR issues, such as review of recommended scientific best practices; principles and practices of research integrity and professionalism; foundations of scientific inquiry; and evaluation of scientific quality and productivity.

OR
b. Complete the Graduate School’s RCR Seminar Series (http://grad.msu.edu/rcr/). This may include assigned readings from the MSU Research & Scholarly Integrity Website (http://grad.msu.edu/researchintegrity/resources), and discussions with a designated faculty member on the material covered.

**Total for Segment 1C: Minimum of 4 hours (15 contact hours if the ENT 812 option is taken)**

2. **ANNUAL REFRESHER TRAINING (MINIMUM OF 4 HOURS), CONSISTING OF TWO SEGMENTS**

2A. Participate in a formal, department-wide discussion of RCR issues each Fall. This includes a review of basic topics in 1A, plus readings, videos, Q&A and other materials as appropriate.

**Total for Segment 2A: 2 hours**

2B. Participate in project-wide group discussions led by the project P.I. Complete assigned readings as assigned from the MSU Research & Scholarly Integrity Website (http://grad.msu.edu/researchintegrity/resources), and participate in discussions with a designated faculty member on the material covered. Review new areas of federal research compliance, if necessary.

**Total for Segment 2B: 2 hours**

3. **MONITORING AND DOCUMENTATION (SEE HEATHER LENARTSON-KLUGE FOR GUIDANCE)**

It is the responsibility of each member of the research staff to report completed training through the Research Training Tracking System (RTTS; https://www.egr.msu.edu/secureresearchcourses/). The department will ask faculty members to certify annually the accuracy and completeness of the training reported by each member of their laboratory. Each person should complete the Departmental RCR Completion Form (below).

4. **RCR RESOURCES**

*Federal and MSU Policies:*

- Federal Office of Research Integrity (http://ori.dhhs.gov/education/),
- NIH RCR Policy: NIH_RCR_Update_11-24-09.pdf
- Memo from Provost Wilcox and Vice President Gray: http://grad.msu.edu/ric/docs/WilcoxMemo.pdf
- MSU Policy Statement on NSF RCR requirements
- MSU Research Integrity Office: http://www.rio.msu.edu/

*MSU Graduate School:*

- RCR Seminar series -- http://grad.msu.edu/rcr/
- MSU Authorship Guidelines – http://rio.msu.edu/authorshipguidelines.htm
- Collaborative Institutional Training Initiative (CITI) Training courses -- (http://www.citiprogram.org)
- Research Data: Management, Control, Access -- http://rio.msu.edu/research_data.htm
- Research Integrity Newsletter -- http://grad.msu.edu/researchintegrity/newsletters.aspx
- Research Integrity Council -- http://grad.msu.edu/ric/ This last page links to extensive set of references and resources that pertain to other elements of RCR training recommended by the ORI (see above).
- Other readings -- http://grad.msu.edu/researchintegrity/resources.
Responsible Conduct of Research, Scholarship and Creative Activities Completion Form

Name of Trainee: _______________________________ Last ___________________________ First ___________________________ MI ___________________________

Category: ☐ Undergraduate Student ☐ Graduate Student ☐ Post-doc ☐ Technician

Name of P.I.: _______________________________ Last ___________________________ First ___________________________ MI ___________________________

Funded by: _______________________________

IRB #: _______________________________

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<th>Topic</th>
<th>Date Completed</th>
<th>Initials PI</th>
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<tbody>
<tr>
<td><strong>1. Initial Training</strong></td>
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<tr>
<td>1A RCR Orientation, at MSU or at ESA</td>
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<td>1B Face-to-face discussions, including project-specific readings and a COI discussion</td>
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<td>1C Workshops and Courses</td>
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<td>1Ca ENT 812 <em>(Nature and Practice of Science)</em></td>
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<td>1Cb Graduate School RCR Seminar Series</td>
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<td><strong>2. Annual Refresher Training</strong></td>
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<td>2A Departmental refresher review</td>
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<td>2B Project-specific refresher discussion with PI</td>
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Department of Entomology RCR Contacts and Responsibilities

<table>
<thead>
<tr>
<th>Person</th>
<th>Telephone</th>
<th>Email</th>
<th>Responsibility</th>
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<tbody>
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<td>Inquiries Representative</td>
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