How-to Guide for MSU RCR Series

1) Obtain your MSU e-mail (xxxxxx@msu.edu). This is the ONLY e-mail address to which The Graduate School will send messages regarding RCR announcements.

2) Know your departmental requirements for RCR Education. Seven (7) out of eight (8) sessions are required to earn The Graduate School Certificate in RCR. Your department may not require The Graduate School Certificate for you to fulfill departmental RCR requirements, but rather particular workshops within the series. Know this PRIOR to registering for the RCR Workshops. This way, you register for only those workshops you need.

3) Register for the RCR Workshops (described below) that fulfill your department requirements. http://grad.msu.edu/workshops/webreg.aspx

At registration, be ready to identify a Research Integrity Consultant (RIC) who will be your sounding board through the workshop series. Ask this individual before listing their name while registering, as the Graduate school WILL be contacting your RIC.

4) Read the Syllabus (following document) and make sure you know how to get to “On being a Scientist” online, and be registered in the D2L Epigeum Course for “Research and Scholarly Integrity” (more below).

5) Do the Pre-workshop readings and any assignments sent in the e-mail that announces the workshops normally one-week prior to the upcoming workshop. This will prepare you for pop-quizzes given during the workshops; you must achieve a 75% overall score (attendance+ Quiz) to receive credit to gain a certificate (7 sessions average).

6) Come to the Erickson Kiva prior to 6 pm (registration begins at 5:20 pm) on the night of the workshop so you have time to sign in; signing in is a REQUIREMENT for credit for the workshop. You will also pick up a folder with your name on it, and you will use this through the course of the workshop series. You will also pick up an iClicker for use during the workshop.

7) When the session is complete, sign out as asked by the instructors (each session may be different); signing out is a REQUIREMENT for credit for the workshop. Return your folder with all papers inside of your folder. Return the iClicker.

Thank you.

The Graduate School
Workshop Series Syllabus:

Responsible Conduct in Research and Scholarship


Registration 5:30 – 5:50 p.m.; Workshop Programs 6:00 – 7:30 p.m.
The Erickson Hall Kiva

Stephanie W. Watts
Series Coordinator/Faculty
Assistant Dean
Pharmacology & Toxicology
517-353-3724
wattss@msu.edu

Karen L. Klomparens
Dean & Associate Provost
The Graduate School
517-353-3220
kklompar@grd.msu.edu

“The scientific enterprise is built on a foundation of trust. Society trusts that scientific research results are an honest and accurate reflection of a researcher's work. Researchers equally trust that their colleagues have gathered data carefully, have used appropriate analytic and statistical techniques, have reported their results accurately, and have treated the work of other researchers with respect. When this trust is misplaced and the professional standards of science are violated, researchers are not just personally affronted – they feel that the base of their profession has been undermined. . .”


Graduate Education & Postdoctoral Training at Michigan State University

Our goal is to prepare researchers to become globally-engaged citizen-leaders. Central to achieving this goal is the ability to conduct quality research/scholarship. This serves as the foundation for strong professional reputations for individuals, their departments and graduate programs, and Michigan State University (MSU). For students and postdoctoral trainees, professional development occurs under the guidance and leadership of individual faculty through partnerships intended to be mutually beneficial. To be successful, these partnerships must be based on a shared commitment to responsible research/scholarly practices based on key principles of research integrity. This workshop series will highlight these key principles and repeatedly emphasize that research and scholarly integrity is a fundamental characteristic of quality research/scholarship in all disciplines.

Why is this Workshop Series Offered?

• This workshop series is intended to support the efforts of departments and graduate programs in fostering responsible research/scholarly practices. The expectation is that student/trainee research/scholarship will be of higher quality, and that students/trainees will be better able to avoid and respond to situations involving irresponsible research/scholarly practices and behaviors.

• Pursuing a graduate degree and undertaking a research training experience is intensely personal. However, it is critically important that early career scholars understand that their
Research/scholarly work impacts others and contributes to the research/scholarship of others in important ways that may not always be clear.

•Research and creative works are often supported by public funding or with funding from private sources. These funding sources and the public trust that new information generated through funding is accurate, true, and carefully considered. Inaccurate (flawed, incorrect) results can occur from mistakes or chance. In some instances, individual researchers violate the principles of research integrity by intentionally misrepresenting their findings (research misconduct).

Students and trainees are accountable for deviations from and violations of established policies and professional standards concerning research integrity. This is particularly important for students to understand, because the most serious violations can affect completion of individual courses and research programs. Findings of research misconduct in theses and dissertations after granting of a degree can even lead to revocation of the degree.

•All interested individuals and parties who support, conduct, oversee, and use the results of research/scholarship share a common commitment for the importance of maintaining the integrity of research/scholarly enterprises. This includes a commitment that early-career scholars receive appropriate education and training in the responsible and ethical conduct of research. As part of this commitment, certain Federal agencies implemented requirements that students and post-doctoral trainees supported by Federal funds be educated and trained in the responsible and ethical conduct of research. MSU departments and graduate programs developed plans to provide this education and to assure compliance to these Federal agencies as the funder of university research/scholarship.

Expectations of Your Participation in this Series

1) Know your departmental requirements for RCR: As a student or postdoctoral trainee at MSU, it is your responsibility to do your own work to take full advantage of the opportunities presented to you. Departments, Schools and Interdisciplinary Programs are responsible for establishing requirements and developing plans for appropriate training and oversight in the ethical and responsible conduct of research. Many decided to require attendance at this workshop series as a key aspect of their educational strategies. It is your responsibility to check with your Department, School, or Program about what they have elected to require. As noted above, plans for Responsible Conduct of Research Education and Training are listed on the Graduate School's web site by College.

The Certificate of Attendance offered after completing all workshops in this series (with a choice of animal or human protection workshops). This Certificate of Attendance will only be issued by the Graduate School if you have attended all required workshops and completed all assigned activities satisfactorily (more below). If completion of the Workshops is required by your department, school, or program and you are not able to do so, please check with your advisor or graduate program coordinator. Your department is responsible for assuring that all degree requirements are completed satisfactorily as a prerequisite for graduation.

2) It is your responsibility and duty to read and understand MSU’s policies and procedures on academic and research integrity and misconduct. Misrepresenting your participation would be considered a violation and invalidate granting of a Certificate of Completion.

3) Workshops will begin promptly at 6 p.m. and end at 7:30 p.m. Please arrive early, sign the registration sign-in sheet, and pick up your materials by 5:50 p.m. so that everyone will be ready to begin the workshop at 6 p.m. Sign in is required, because certificates are provided for those who complete the full series as a requirement by many graduate programs.
4) **Preparation prior to each workshop is required** in order to make the best use of our 90 minutes together. Pre-workshop readings and specific tasks are listed under each workshop topic to facilitate learning and discussions. Key issues and examples will be emphasized as case studies during the workshops. **Every student is responsible for reading and considering Pre-Workshop Readings and completing Pre-Workshop Tasks that will be assigned for Workshops (in an e-mail, ~1 week prior, to your MSU account).**

5) **Short writing exercises/quizzes will be included** in each session to evaluate pre-workshop planning and understanding about key issues regarding the specific content of the session.

6) **Electronic devices (phones, tablets, computers) may not be used** during the workshops. These sessions are designed to promote discussions.

7) **You will have a named folder to hold your work; pick it up at every session when you sign in.** Each participant will be provided a folder by the Graduate School to use at each session as a name card. This folder will be returned with writing exercises for review after individual workshops.

**Selection of a Research Integrity Consultant**

Because departments and graduate programs have the primary responsibility for educating students and trainees about responsible research/scholarly practices, we require that you identify and ask an experienced researcher/scholar in your department or program to serve as your **Research Integrity Consultant** for each session in the workshop series. Our intent is for you to communicate regularly with someone in your discipline about the topics covered in the workshop series. This individual could be your rotation supervisor, chair or member of your dissertation committee, thesis advisor, graduate program director, or research supervisor.

**When you register:** You will be asked to include the name and email address of the individual that has agreed to serve as your Research Integrity Consultant as we plan to communicate with you both prior to individual workshops. You will be asked to share the outcomes of your discussions with your Research Integrity Consultant in the workshop either orally or in written assignment.

**Workshop Registration**

Registration by students and postdoctoral researchers themselves is required. **No individual will be permitted to attend any workshop if they have not previously registered as described here. No walk-ins will be accepted; space is limited.**

**Before you Register:** Find out from your Department, School, or Program which specific workshops are required OR whether you are required to attend the entire series. Your registration will not be completed and assured if you do not provide the name and email address of your Research Integrity Consultant.

Please go to [http://grad.msu.edu/rcrRegistration/](http://grad.msu.edu/rcrRegistration/) and follow the directions for registering through the Graduate School's on-line Registration System. If a workshop is not listed on the registration page, it is full and registration is closed. You will be asked to identify:

- Your Name, Department, & Email address;
- The Name and email address of the individual that has agreed to serve as your Research Integrity Consultant; and
• The Names and Dates of the Workshop Sessions that you wish to attend.

For students or postdocs funded by the National Science Foundation (NSF), please also include the following additional information in the note field:

• The project/award Title;
• Name of the faculty Principal Investigator; and
• MSU Contract & Grant administration (CGA) Account or Award Number.

Registration preference will be given to graduate students and postdocs from departments who regularly attend the RCR series in the past ten years (list of departments). Additionally, preference will also be given to students and post-docs funded by NSF grants.

You may register for the entire series (recommended) or for an individual session. The deadline for registering for a session is one week before the session. You will receive an email reply confirming your workshop registration. It is recommended that you print and bring a copy of this confirmation with you to the workshop.

Registering with EPIGEUM in D2L

MSU has partnered with other Michigan and International Universities to support the development of five on-line courses through Epigeum addressing Research Integrity from the perspective of individuals in Natural & Physical Sciences, Biomedical Sciences, Social & Behavioral Sciences, Arts & Humanities, and Engineering & Technology. Topics covered include a general introduction to research integrity, data management, assignment of authorship, the mentor-mentee relationship, conflicts of interest, the publication process, and issues relating to human subjects, peer review, publication, and responsibilities to society. You will use some of these lessons as pre-workshop tasks, and we will work on some lessons together.

Please register for access to these courses through your D2L account. Go to “Self Registration” in the upper right menu, next to help. Click, and then choose to be enrolled in the Course Offering Named “Research and Scholarly Integrity (Epigeum). Embedded within these lessons are MSU Context boxes such that you will learn both general and MSU-specific RCR information.

Accommodations

Persons with disabilities or special needs should contact the Graduate School at 517-353-3063 or gradwrsp@msu.edu to request arrangements no later than one week prior to the session date. Requests received after this date will be met when possible.

Issuance of a Certificate of Attendance from The Graduate School

All individuals who desire to receive a Certificate of Attendance will be expected to participate and engage in all seven workshops as described in this syllabus. Everyone is welcome to attend both the workshop on “Protecting Human Research Participants” and “The Care and Use of
Animals in Research”, but attending only one of the two is required in order to receive a Certificate of Attendance. The other six are required.

Responses provided through the short writing exercises/quizzes will be read and assessed as to whether or not they are responsive to the question asked. Attendance at all workshops (signing in, signing out) as well as “suitable responses” to the writing exercises will be required as the basis for issuance of a Certificate of Attendance. A minimum score of 75%, averaged from scores for all required 7 sessions, is necessary for The Graduate School to issue you a Certificate of Attendance.

Use of RTTS System to track YOUR RCR Education

The Engineering College has created an online system that can be used by students so that the student themselves can track the different types of RCR activities in which they have participated. The Graduate School does NOT enter in your attendance at the RCR sessions to the RTTS system; you are responsible for this.

The intent of the Research Training Tracking System (RTTS) is to enable those needing non-credit training to record classes and other training events in electronic form which can be accessed by administrators for tracking and reporting purposes. Access is controlled by MSUNetID and password.

• Only students need to create accounts and no one else can create an account for a student. The Research Training Tracking System records classes for the academic year, thus from August 16 to the next August 15th. You will need to create a new account each year.

• When you first login, you are asked to select your Primary college and department. You are also asked to enter the MSUNetID of your adviser. BE SURE THIS IS A FACULTY MEMBER, not a graduate student supervisor. This can be changed to the NetId of a Principal Investigator if you are working on a specific grant or project (e.g. NSF grant, NIH Training grant).

• The web site for the RTTS is:

https://www.egr.msu.edu/secureresearchcourses/

Login with your MSUNetID and password.

• Start with the Create/Edit Trainee Account. Select Create/Edit Trainee Account tab on menu bar, follow the directions on the page. Please read them all, they explain different situations for new and returning students. Now select Type, Department and Adviser MSUNetID and Save the account. The Adviser MSUNetID should be your faculty adviser. You will be transferred to the Add/Edit Training Courses page.

• On the Add/Edit Training Courses page, you have the ability to select from your Primary department list of courses or from other college/department lists. The default is to select from the Primary. You should notice that some courses are fixed topics while others, such as PI meeting or Other, have a field where topic can be added. You should put in the number of hours and the date the training was taken. You must Save the record.

• The Run Training Courses Report generates a PDF of the training courses recorded for you. This can be printed off and signed by you and your adviser.
• The Research Training Tracking System records classes for the academic year, from August 16 to the next August 15th. You cannot change the records for last year so as the end of year approaches, remember to get your records updated.

Workshop Series Outcomes

Attendees are expected to commit to thinking about and discussing their understanding of responsible research practices both at workshops and with their student/trainee/faculty colleagues/Research Integrity Consultant in their Departments, Schools and Interdisciplinary Programs. All attendees will be expected to participate actively by reading assigned materials in advance, contributing to group discussions, reflecting on and their understanding of professional principles and standards; and sharing views about responsible and ethical conduct of research/scholarship in their academic field of study. At the end of the workshop series, attendees will be expected to understand and be able to explain:

- MSU’s rules concerning academic integrity, including possible disciplinary actions regarding allegations of academic or research misconduct;
- MSU’s requirements for training and oversight in the responsible and ethical conduct of research;
- Where to find their department’s or program’s plan for training and oversight in the responsible and ethical conduct of research;
- The Key Principles of Research Integrity and core values of responsible and ethical conduct of research/scholarly practices;
- How to properly credit other’s works in order to avoid accusations of plagiarism;
- How to reason logically and critically evaluate ethical dilemmas and professional situations to guide responsible and ethical actions in the conduct of research/scholarship;
- How their research/scholarship affects others, both professionally and personally; and
- How to responsibly collaborate with others in research/scholarly teams.

Workshop Series Topics & Scheduled Dates

Fall Semester 2014

Workshop 1: Being an Early Career Scholar
(Wednesday, September 17, 2014)

Pre-Workshop Readings

  Introduction to the Responsible Conduct of Research
  Advising and Mentoring (page 4)
  Mistakes and Negligence (page 12)
  Laboratory Safety in Research (page 28)
- Academic Programs (a listing of academic programs, policies and related information)
  (for Graduate Students only)
  Appropriate information regarding academic advising and research for your graduate program (Masters or Doctoral)
- Graduate Student Rights and Responsibilities (for Graduate Students only)
  Article 2: Academic Rights and Responsibilities for Graduate Students
- Guidelines for Graduate Student Advising and Mentoring Relationships (for Graduate Students only)
- Making the Right Moves: A Practical Guide to Scientific Management for Postdocs and New Faculty: Second edition (for Post-Doctoral Trainees only)
  Chapter 5: Mentoring and Being Mentored
- MSU Research & Scholarly Integrity Resources
  Mentor/Trainee Relationships
- Your Graduate Handbook (request a copy if it is not online; for Graduate Students only)
  Section on Integrity & Safety in Research & Creative Activities (bring a copy)
- Guidelines for Integrity in Research and Creative Activities

Pre-Workshop Tasks (Graduate Program Advisors will be invited to attend this workshop)
- Will be assigned by email prior to the Workshop
**Workshop 2: Scientific Communications, Rights to Data, and Authorship**  
(Wednesday, October 15, 2014)

Pre-Workshop Readings

  - Authorship and the Allocation of Credit (page 35)
  - Sharing of Research Results (page 29)
  - Intellectual Property (page 39)
- MSU Research & Scholarly Integrity Resources
  - Authorship and Publication
  - Collaborative Research
  - Protection of Intellectual Property

Pre-Workshop Tasks

- Will be assigned by email prior to the Workshop

**Workshop 3: Crediting the Works of Others and Avoiding Plagiarism**  
(Wednesday, November 5, 2014)

Pre-Workshop Readings

  - Authorship and the Allocation of Credit (page 35)
- MSU Research & Scholarly Integrity Resources
  - Plagiarism
  - Avoiding Unintentional Plagiarism

Pre-Workshop Tasks

- Will be assigned by email prior to the Workshop

**Workshop 4: Record Keeping, Data Management, and Sharing of Information**  
(Wednesday, November 19, 2014)

Pre-Workshop Readings

  - The Treatment of Data (page 8)
- MSU Research & Scholarly Integrity Resources
  - Management of Research Data

Pre-Workshop Tasks

- Will be assigned by email prior to the Workshop
Spring Semester 2015

Workshop 5: Misconduct in Research & Creative Activities
(Wednesday, January 14, 2015)

Pre-Workshop Readings

  Research Misconduct (page 15)
  Responding to Suspected Violations of Professional Standards (page 19)
- MSU Research & Scholarly Integrity Resources
  The Continuum from Research Integrity to Research Misconduct

Pre-Workshop Tasks

- Will be assigned by email prior to the Workshop

Workshop 6A Protecting Human Research Participants
(Tuesday, January 27, 2015)

Pre-Workshop Readings

  Human Participants and Animal Subjects in Research (page 24)
- MSU Research & Scholarly Integrity Resources
  Protection of Human Subjects

Pre-Workshop Tasks

- Will be assigned by email prior to the Workshop

Workshop 6B The Care and Use of Animals in Research
(Thursday, January 29, 2015)

Pre-Workshop Readings

  Human Participants and Animal Subjects in Research (page 24)
- MSU Research & Scholarly Integrity Resources
  Use of Animals at Michigan State University

Pre-Workshop Tasks

- Will be assigned by email prior to the Workshop
Pre-Workshop Readings

- MSU Research & Scholarly Integrity Resources Collaborative Research Conflict of Interest Peer Review

Pre-Workshop Tasks

- Will be assigned by email prior to the Workshop