RESPONSIBLE CONDUCT OF RESEARCH (RCR)

Department of Statistics and Probability September 25 and 26, 2014



Example 1: Facebook

Facebook fiasco: was Cornell's study of 'emotional contagion' an ethics breach? A covert experiment to influence the emotions of more than 600,000 people. A major scientific journal behaving like a rabbit in the headlights. A university in a PR tailspin

From The Guardian, July 1, 2014



Email #1: Dear Professor Gelman,

I am writing you because I am a prospective doctoral student with considerable interest in your research. My name is Xian Zhao, but you can call me by my English name Alex, a student from China. My plan is to apply to doctoral programs this coming fall, and I am eager to learn as much as I can about research opportunities in the meantime.

I will be on campus next Monday, September 15th, and although I know it is short notice, I was wondering if you might have 10 minutes when you would be willing to meet with me to briefly talk about your work and any possible opportunities for me to get involved in your research. Any time that would be convenient for you would be fine with me, as meeting with you is my first priority during this campus visit.

Thanks you in advance for your consideration.

Sincerely

Alex

Email #2:

Dear Professor Gelman,

Thanks for your reply. I really appreciate your arranging to meet with me, but because of a family emergency I have to reschedule my visit. I apologize for any inconvenience this has caused you.

Alex



Email #3: Dear Professor Gelman,

A few weeks ago, you received an email from a Chinese student with the title "Prospective doctoral student on campus next Monday," in which a meeting with you was requested. That email was part of our field experiment about how people react to Chinese students who present themselves by using either a Chinese name or an Anglicized name. This experiment was thoroughly reviewed and approved by the IRB (Institutional Review Board) of Kansas University. The IRB determined that a waiver of informed consent for this experiment was appropriate.

Etc.



This example is taken from

http://andrewgelman.com/2014/09/22/willspam-six-gun-fountain-pen/



What is Research?

Examples of creative scholarly activities include:

- Research projects
- Writing a manuscript, research report, dissertation, grant, computer program
- Preparing a presentation
- Working on and writing up a class project.
- Etc.



MSU Intellectual Integrity Policies

- August 5, 1994: Interim University Document on Intellectual Integrity approved by the MSU President of Michigan State University
- June 29, 1995: document was revised
- University Intellectual Integrity Office <u>http://www.rio.msu.edu/</u>
- 2009-2010: two new initiatives
 - Research Integrity Council formed: <u>http://grad.msu.edu/ric/</u>
 - <u>New training guidelines for the responsible conduct</u> of research were introduced



STT RCR Training

- Initial training 8 hours for 3 components
- Refresher training 5 hours annually
- Additional training for those supported by NIH-funded grants: Health Information Portability and Accountability Act (HIPAA, 2 hours)
- At all institutions RCR training is required for staff on federally supported (NSF, NIH) grants
- At MSU all students who will be performing research must receive RCR training. (This includes ALL doctoral students.)



STT RCR Training – Component 1

- Completion of at least 2 workshops offered by the Graduate School on Responsible Conduct of Research.
- The schedule and description of workshops is available at http://grad.msu.edu/rcr/ and is given on the next two slides.
- For individuals involved in human subjects research, • one of the workshops may be replaced by the MSU tutorial for Human Research Protection Program (HRPP) available at

http://www.humanresearch.msu.edu/

- Total time: 4 hours during academic year.
- **Documentation:** list of workshop participants from the Graduate School, HRPP certificate



RCR workshops

All offered from 6-7:30pm

 Scientific communications, rights to data, and authorship (Oct. 15)
 Crediting the works of others and avoiding plagiarism (Nov. 5)
 Record keeping, data management, and sharing information (Nov. 19)



RCR workshops (ctd)

- 4. Misconduct in research and creative activities (Jan. 14)
- 5. Protecting human research participants (Jan. 27)
- 6. The care and use of animals in research (Jan. 29)
- 7. Conflict of interest, peer review, and collaboration/teamwork (Feb. 11)



STT RCR Training – Component 2

Completion of a 2-hour face to face training with a designated faculty member. (Today's and Friday's sessions.) The following issues will be addressed:

- Authorship guidelines •
- Plagiarism •
- **Conflict of interest** •
- **Research Misconduct**
- **Questionable Research Practices**
- Students keep a summary RCR document outlining • these issues.
- Total time: 2 hours •
- Documentation: signed Form I after completion of this • portion of training MICHIGAN STATE ancing Kno V

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STT RCR Training – Component 3

Completion of assigned reading from the list below. This list will be updated annually.

- MSU Authorships Guidelines available at http://rio.msu.edu/authorshipguidelines.htm
- Research Data: Management, Control, Access available at http://rio.msu.edu/research_data.htm
- Parker RA, Berman NG. Criteria for authorship for statisticians in medical papers. Statistics in Medicine 1998, 17:2289-2299.
- **Teaching Responsible Conduct of Research. Lancet** 2009 Nov 7;374(9701):1568.
- Hegyvary ST. What every author should know about redundant and duplicate publication. Journal of Nursing Scholarship, 2005, 37(4): 295-297. Advancing Knon in a

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STT RCR Training – Component 3 (Continued)

Suggested reading (continued):

- DeAngelis CD. Duplicate publication, multiple problems. JAMA, 2004, 292:1745-1746.
- Froman RD. The importance of peer review.
 Research in Nursing and Health, 2006, 29:253-255.
- Total time: 2 hours during Fall/Spring semester for student's first year at MSU
- Documentation: signed Form II given below after completion of this portion of training



STT RCR Refresher Training

- Review of the summary RCR document, conflict of interest and authorship issues and discussion with a designated faculty member. Total time: 1 hour
- Completion of assigned reading from the updated list of resources. Total time: 2 hours
- Completion of HRPP refresher training as required (every 2 years, total time: 4 hours) or completion of a workshop offered by the Graduate School on Responsible Conduct of Research.



Checking training

- All PhD students and all master's and undergraduate students who will participate in research must have RCR training
- RCR training is checked when a student is considered as a participant in a federally-funded research project.
- RCR training is checked when a student forms a guidance committee.



Resources and examples from statistics and mathematics

- (ASA guidelines) http://www.amstat.org/about/ethicalguideli nes.cfm
- (SIAM) <u>http://ima.umn.edu/~arnold/siam-</u> columns/integrity-under-attack.pdf
- <u>(AMS)</u>

http://www.ams.org/notices/200206/comm entary.pdf



MSU Office of Intellectual Integrity

 Resources available on-line at <u>http://grad.msu.edu/researchintegrity/resources/intellectu</u> <u>alproperty.aspx</u> with a permission to use:

> The Graduate School Michigan State University © 2010

Permission is granted to use or modify this presentation to support education about the responsible conduct of research, scholarship, and creative activities. Users are expected to cite this source.



Intellectual Property

- http://www.technologies.msu.edu/ip-primer.html has the following definition of intellectual property:
- Intellectual property (IP) is a term that encompasses all forms of creativity that are protected either under statutes or by common law
- It includes inventions, discoveries, know-how, show-how, processes, unique materials, copyrightable works, original data, and other creative or artistic works
- IP also includes the physical embodiment of intellectual effort (e.g., models, machines, devices, apparatus, instrumentation, circuits, computer programs and visualizations, biological materials, chemicals, other compositions of matter, plans, and records of research) 10 Wedge

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Protecting Intellectual Property

- Means of protecting intellectual property at the University: copyright and patents
- Definition of copyright from Ensuring the Integrity, Accessibility, and Stewardship of Research Data in the Digital Age (p. 74), National Academies Press, Washington DC, 2009, http://www.nap.edu/catalog.php?record_id=12615#description

"In the United States, copyright protection is extended to 'original works of authorship fixed in any tangible medium of expression ...' Copyright holders enjoy the exclusive right to disseminate their creations and to earn a profit by selling or licensing them."



Copyright examples

- Papers submitted by students in a university course
 - "Term papers and other comparable projects are the property of students who prepare them." MSU Code of Teaching Responsibility
- Dissertations and theses students own the copyright, which may be transferred to a journal later if dissertation is published
- Published journal articles
- Books



Copyright

- You're using Smith's "Statistics for Fun and Profit" in teaching a summer STT 200 course.
- The book comes with solutions for all exercises
- You post these on the STT class pages web site for your students' benefit. Is this OK?
- You post these on Angel or Desire 2 Learn. Is this OK?
- You make these available on reserve in the library. Is this OK?
- Copyright is a complex subject. See for example
 <u>http://library.uoregon.edu/reserves/copyrightfaq.html</u>



Research Misconduct

- Fabrication (making up data or results)
- Falsification (changing data or results)
- Plagiarism (using someone else's work or ideas without giving proper credit)
- Does not include honest error, differences in interpretation or judgment of data or results



Examples of Research Misconduct

- Intentional misrepresentation of data that can lead to serious errors in practice or other applications
- Intentional destruction or alteration of data
- Intentional prevention of access to data by other qualified members of research team (NIH grants have policies on data sharing outside of research team)
- Intentional abuse of confidentiality: unauthorized dissemination of ideas or data gained from access to privileged information (peer or grant review)
- Retaliation against a person who reported or provided information about suspected or alleged misconduct and who acted in good faith (MSU College of Nursing PhD Student Handbook)



Examples of Questionable Research Practices or Behaviors

- Failing to keep adequate research records of the design, implementation, and results of a research project
- Failing to give peers (not members of research team) reasonable access to research materials or data that support published papers



Two recent examples

- Ed Wegman is a well-known statistician at George Mason University
- He (and co-authors) prepared a report for the US Congress on climate change in 2006
- He (and co-authors) also published a peerreviewed paper (in the journal Computational Statistics and Data Analysis) on the same topic.



Two recent examples (ctd)

- In both, there was much plagiarized material.
- Wegman blamed some of this on a graduate assistant.
- The CSDA paper was retracted by the journal.
- George Mason University is investigating the allegations.



Two recent examples (ctd)

- Potti et. al. published an influential paper in *Nature Genetics* related to determining whether a tumor will respond to chemotherapy.
- Re-analysis by two statisticians (Baggerly and Coombes) from MD Anderson found numerous errors, poor documentation, etc.
- Later it was found that Potti misrepresented his credentials (e.g. claimed a Rhodes Scholarship)
- Issues include sharing data, "reproducible research," etc.



References for two examples

- "Climate study gets pulled after charges of plagiarism" by Dan Vergaro, USA Today, May, 2011.
- "Copy and Paste," Nature editorial, 26 May, 2011.
- Deriving chemosensitivity from cell lines: Forensic bioinformatics and reproducible research in highthroughput biology" by Baggerly and Coombes, Annals of Applied Statistics, 2009.
- "Duke Scientist Suspended Over Rhodes Scholar Claims" By Natasha Singer, New York Times, July, 2010.



"Self-plagiarism"

- You prove a theorem in a paper, published in 2012.
- You use this theorem crucially in another paper, published in 2013, so you repeat the statement of the theorem in the new paper.
- Do you cite the 2012 paper?



"Self-plagiarism"

- You develop a new method for analyzing data from clinical trials, that you publish in the Annals of Applied Statistics in 2013.
- To reach an audience of practitioners, you write a paper about this method and submit it to *Statistics in Medicine*.
- How much overlap is OK?
- The introductions in the two papers are rather similar. How similar is OK? Do you cite verbal material from the earlier paper?



"Self-plagiarism"

- Based on a manuscript you've just had published, you present a talk at a conference.
- The conference organizers like your talk, and ask you to contribute a paper to a conference proceedings based on your talk.
- Should you say "yes?"
- How much overlap is OK?



Citation and Self-Citation

- You've submitted a paper, and the referee's reports come back with a "revise and resubmit" recommendation. In particular, one referee asks you to add several references that you feel are only marginally relevant.
- What should you do?



Citation and Self-Citation

- You know that your university weighs the number of citations heavily in tenure and promotion decisions.
- You can increase the number of citations of your work by adding citations to marginally relevant papers that you've written, and by suggesting that authors cite your work when you prepare (anonymous) referee reports.
- Is this ethical?



Authorship – MSU Guidelines

MSU Guidelines on Authorship:

http://uiio.msu.edu/authorshipguidelines.htm require:

- Substantial participation in conception and design of the study, or in analysis and interpretation of data
- Substantial participation in the drafting of the manuscript or in the substantive editing of the manuscript
- Final approval of the version of the manuscript by all authors
- Ability to explain and defend the study in public or scholarly settings
- Note: these criteria follow closely those recommended by several professional associations
- See the International Committee of Medical Journal Editors, Annals of Internal Medicine 1988; 108: 258-65

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Authorship

- Key: distinguishing substantial contributions from minor support or contributions
- Examples of minor support: technical support, data collection, data entry, financial assistance, typing, proofreading
- Those who provide minor support may be acknowledged in the manuscript (check journal policies)
- It is helpful to decide early who will be credited as authors, and who will be acknowledged
- "As a minimum, authors should take responsibility for a particular section of the study." (Brand R. A. Thoughts on authorship. Editorial, Clinical Orthopeadics and Related Research, 2008, 466: 1002-1005.)

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Authorship responsibility (example) Example from *Clinical Orthopaedics and Related Research* copyright transfer agreement:

I, the undersigned Author, certify that I and all other coauthors are properly identified and have participated sufficiently in the intellectual content and reporting to take public responsibility for it. Each author has materially contributed to at least three of the following five elements of the study: designing the study, collecting the data, analyzing and interpreting the data, writing the initial draft, and ensuring the accuracy of the data.



Authorship example continued

The following authors have:

- (1) designed the study (note only initials):
- (2) gathered the data (note only initials):
- (3) analyzed the data (note only initials):
- (4) written the initial draft (note only initials):
- (5) ensured the accuracy of the data and analysis (note only initials):_____



Authorship responsibility

I certify that this article

- has not been submitted or accepted for publication elsewhere (in whole or in part, including patients, data, results, without acknowledgment),
- nor have I assigned any right or interest in the manuscript to any third party.
- Moreover, should the Editor-in-Chief of Clinical Orthopaedics and Related Research request the data upon which the manuscript is based, I shall produce it.



Authorship responsibility cont.

I certify my institution (or all institutions if a multiinstitutional study) has approved any investigation involving humans or animals or human or animal material or data, and that the investigation was conducted in accordance with humane and ethical research principles.



Scenarios for Duplicate Publications

- A new graduate publishing papers from dissertation.
 Need to cite other manuscripts from the same study (dissertation).
- Reports of a longitudinal study. Each article must contain new information.
- An author writing in different languages. Appropriate if article in other language is cited, and permission from the publisher of he original article is obtained.
- An author writing for different audiences. Example: a study used innovative methods; publications submitted to Statistics in Medicine and to a clinical journal (e.g. Cancer).

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Penalties for Duplicate Publication

- If redundancy is recognized before publication, manuscript is rejected
- Published articles are retracted even after publication
- Notice of duplicate publication appears in both journals
- Penalties apply to all authors (including students)



Some Good Authorship Practices

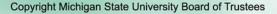
- Cite all related papers including those submitted but not yet accepted.
- Be clear what new information manuscript contains (avoid self-plagiarism).
- Include problem statement and purpose statement in the introduction.
- Circulate the manuscript among all co-authors.

For more information, see Hegyvary T. What every author should know about redundant or duplicate publication.

Order of Authorship

- Contributions from multiple authors may be equal or unequal
- Different practices in different disciplines
- Alphabetical listing of authors when contributions are equal (STT)
- In some disciplines, first author has primary responsibility for the content of manuscript
- In some disciplines, first author makes the largest contribution into the research project and manuscript preparation
- In some disciplines, last author is the senior author author

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Order of Authorship Cont.

Example: After submission of this signed agreement, changes of authorship or in the order of the authors listed will not be accepted by *Clinical Orthopaedics and Related Research* unless scientifically justified and unless approved by the Editor-in-Chief. Any changes in authorship must be accompanied by a Change of Authorship Form signed by all original authors.



Order of Authorship Example (JAMA)

Effect of Increasing Doses of Saw Palmetto Extract on Lower Urinary **Tract Symptoms** A Randomized Trial

Michael J. Barry, MD Sreelatha Meleth, PhD Jeannette Y. Lee, PhD Karl J. Kreder, MD, MBA Andrew L. Avins, MD, MPH J. Curtis Nickel, MD Claus G. Roehrborn, MD E. David Crawford, MD Harris E. Foster Jr, MD Steven A. Kaplan, MD Andrew McCullough, MD Gerald L. Andriole, MD Michael J. Naslund, MD O. Dale Williams, PhD John W. Kusek, PhD Catherine M. Meyers, MD Kevin T. McVary, MD for the Complementary and Alternative Medicine for Urological Symptoms (CAMUS) Study Int Michigan State University Board of Trustees

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Example: Why so many authors?

Design, Setting, and Participants. A double-blind, multicenter, placebo controlled randomized trial at 11 North American clinical sites conducted between June 5, 2008, and October 10, 2010, of 369 men aged 45 years or older,

with a peak urinary flow rate of at least 4 mL/s, an American Urological Association Symptom Index (AUASI) score of between 8 and 24 at 2 screening visits,

and no exclusions.



Author contributions (JAMA example)

Drs Lee and Cantor had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.

Study concept and design: Barry, Lee, Avins, Nickel, Roehrborn, Crawford, Foster, Kaplan, Andriole, Naslund, Williams, Kusek, Betz, McVary.

Acquisition of data: Meleth, Kreder, Avins, Nickel, Roehrborn, Crawford, Foster, Kaplan, McCullough, Andriole, Naslund, Williams.

Analysis and interpretation of data: Barry, Meleth, Lee, Avins, Nickel, Crawford, Foster, Kaplan, Andriole, Williams, Kuse Meyers, Cantor, McVary. Transforming

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JAMA example continued

Drafting of the manuscript: Barry, Meleth, Lee, Nickel, Roehrborn, Crawford, Foster, Kaplan, McVary.

Critical revision of the manuscript for important intellectual content: Barry, Lee, Kreder, Avins, Nickel, Roehrborn, Crawford, Foster, Kaplan, McCullough, Andriole, Naslund, Williams, Kusek, Meyers, Betz, Cantor, McVary.

Statistical analysis: Meleth, Lee, Williams, Cantor, McVary.

Obtained funding: Lee, Avins, Nickel, Roehrborn, Crawford, Foster, McCullough, Andriole.

Administrative, technical, or material support: Avins, Roehrborn, Crawford, Kaplan, Naslund, Kusek, Meyers, Betz, McVary.

Study supervision: Barry, Meleth, Avins, Nickel, Andriole, Williams, Kusek Meyers. Incing Know Si

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Examples of Statistician's Participation

- Substantive input into study design and protocol
- Writing sections of grants
- Regular participation in study meetings
- Advising other investigators on specific issues
- Planning and directing the analyses
- Preparing written material summarizing the results of the analyses
- For more information, see Parker RA, Berman NG
 Criteria for authorship for statisticians in medical papers



Examples of Non-Substantial Statistician's Participation

- Overall review of protocol, running the analyses planned by other investigators and statisticians
- Responding to specific issues when asked by other investigators
- Preparation of the data management plan
- Supervision of the data management
- Advising other investigators on specific issues



Scoring System from Parker et al.

- Level 1 activities (3 points each):
- Substantive input into overall design
- Regular participation in study meetings
- Planning and directing the analyses
- Level 2 activities (2 points each)
- Writing one or more sections of the grant or protocol
- Implementation of data collection and data management
- Preparation of written analysis reports



Scoring System from Parker et al.

- Level 3 activities (1 point each):
- Overall review to sharpen the proposal without major changes
- Advising only on specific issues when asked
- Doing the analysis
- Substantial contribution to warrant authorship: 6-8 points



An Example for Discussion

E-mail:

Dear Alla,

One of our consultants would like to share your workshop materials from a few years back with one of his clients to help them on their project.

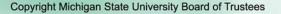
If this is okay, please let me know.



Copyright ©, *continued* (from Graduate School web site)

- Protects authors of "original works of authorship" including literary, dramatic, musical, artistic and certain other intellectual works that are fixed in a tangible form of expression
- Copyright gives the owner the right to: (a) reproduce the work; (b) prepare derivative works; (c) distribute copies; and (d) perform and display the work publicly
- Copyright does not protect ideas, concepts, systems, or methods of doing something

Quoted and/or paraphrased from: http://www.technologies.msu.edu/ip-primer.html



Responsible Conduct of Research, Scholarship, and Creative Activities Michigan State University Graduate School, 2010 http://grad.msu.edu/

Copyright ©, continued from Graduate School web site)

- Copyright protection exists from the time the work is created in fixed form (U.S. Copyright Office, <u>http://www.copyright.gov/circs/circ01.pdf</u>)
- No action is required to establish a copyright, although authors may indicate copyright with "©, year of first publication, author"

© 2008 John Doe

 Copyrights may be registered with the U.S. Copyright Office, but registration is not a condition of copyright protection

Responsible Conduct of Research, Scholarship, and Creative Activities mino Michigan State University Graduate School, 2010 http://grad.msU.edu/

Copyright continued from Graduate School web site

- Copyright
 - "Copyright infringement is using someone else's work without getting that person's permission"
 - "A fair use exemption allows you to legally copy small amounts of someone else's work" if you give proper credit to the author
 - Copyrights are protected by law

Quotes from http://www.plagiarismchecker.com/handouts/pl copyright.pdf

opulation of these Responsible Conduct of Research, Scholarship, and Creative Activities Michigan State University Graduate School, 2010 http://grad.msU.edu/

Examples for Discussion

- Making copies of a published paper and circulating it among students in your class
- Making copies of a draft manuscript that a colleague has shared with you, and circulating it among students in your class



Findings from this study will be available to other researchers under the following conditions: 1) appropriate human subjects protection is in place; 2 Findings from this study will be available to other researchers under the following conditions: 1) appropriate human subjects protection is in place

Using data

- Publicly available data sets. Examples: National Health Interview Survey (NHIS) <u>www.cdc.gov/nchs/nhis.htm</u>, National Health and Nutrition Examination Survey (NHANES) www.cdc.gov/nchs/nhanes.htm
- Data collected by other investigators: data sharing policy and data use agreements
- Sample data sharing policy:

Findings from this study will be available to other researchers under the following conditions: 1) appropriate human subjects protection is in place; 2) data have been de-identified; and 3) study investigators have publicly presented and published Incing Kno iv key findings.

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Sample Data Use Agreement

- The following guidelines will apply to all individuals who use any data from the Family Care Research Program Team (FCRP).
- The FCRP Data Use Request Form must be completed by each person requesting to use data.
- A <u>separate approval is required each time</u> data will be used.



Sample Data Use Agreement

- The Principal Investigators for the FCRP will assure that all scientists have an opportunity to participate in formulating plans for analysis and the writing of manuscripts.
- The Principal Investigators will review all proposed data use requests to assure prevention of duplication, overlap and conflict with purposes of grant goals.



Sample Data Use Agreement

- After reading the Data Use Guidelines, a data request form can be used to the FCRP Investigators to request approval for the use of FCRP data.
- Data will be provided for approved requests within 10-14 days following submission of 1) a thumb drive or CD-ROM, 2) evidence of IRB approval, and 3) a codebook for the variables desired.



- Recipient understands and agrees that s/he is bound to limit analyses to the original research plan as outlined in this request. Additionally, recipient agrees to the following guidelines:
- Evidence of IRB approval must be provided prior to release of FCRP data. IRB approval must be maintained as required by the institution's IRB for the duration of this agreement.



 In addition to providing data necessary for analysis, FCRP Investigators shall have the right to participate in development of the study protocol and in the analysis and publication of study results. In this process, the FCRP investigator and recipient shall reach mutually agreeable decisions regarding data to be analyzed, protocols to be followed, and participation in data analysis.



- FCRP Investigators will be given opportunity to review research findings resulting from this collaboration prior to data presentation or publication. This includes, but is not limited to, abstracts, presentations, manuscripts, and thesis/dissertation defenses.
- Any papers, reports, presentations, abstracts, thesis or dissertation work developed under this Agreement must be reviewed and approved by the FCRP investigators prior to being submitted for dissemination.



- Full acknowledgement of the grant title, grant number, funding agency, Principal Investigator, and the period of funding must be included on materials. If multiple datasets are used, all sources of research support must be cited.
- Once materials are submitted, a copy must be sent via email to the FCRP PI. Where and when the material was submitted must be included in the copy. Up-to-date progress including revisions, re-submissions and rejections needs to be provided in writing to the FCRP PI on a regular basis. The same process is to be followed for revised versions.

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• A final PDF of the final product must be provided.

- This agreement is for a specific purpose and for a specified period of time. Upon expiration of this agreement, all data must be returned to the FCRP investigator. No copy of the data should be retained.
- Each use of FCRP data requires signed approval and final approval rests with the PI for submission, resubmission or re-direction to another journal.
- The FCRP Investigator may terminate this agreement, for any reason, with 30 days written notice to the recipient.



Code of Professional Standards

- Graduate Student Rights and Responsibilities Articles (published by the Graduate School; available at <u>http://www.vps.msu.edu/SpLife/default.pdf</u>)
- University guidelines for ethical research (published by the University Committee on Research Involving Human Subjects [IRB]; available at <u>http://www.humanresearch.msu.edu/</u>
- The MSU Guidelines for Integrity in Research and Creative Activities http://grad.msu.edu/researchintegrity/docs/ris04.pdf
- Graduate Student Resource Guide (published by the Graduate School; available at <u>http://grad.msu.edu/conflict.htm</u>)



Some Graduate Student Rights and Responsibilities

- Mutual respect, understanding, and dedication to the education process (article 2.1.2 of GSRR)
- Maintenance of a collegial atmosphere (2.3.7)
- Mutual trust and civility (2.3.1.2)
- The graduate student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards (2.3.8)



Standards Central to the Department

- Integrity in interpersonal relations and communication with faculty, peers, research participants, and other personnel/staff who are interacted with during activities in the graduate student role
- Responsible fulfillment of all academic obligations, including ethical conduct in the research setting
- Honesty and integrity in all academic and professional conduct

