

**Time:** Wed 3:00-4:20 PM**Place:** 303 Gerlinger**Professor:** Holly Arrow, 421 Straub, 346-1996, harrow@uoregon.edu**Office hours:** Mon 2-3 & Wed 4:30-5:30**(6 February 2015 Updated)**

COURSE OBJECTIVES: This seminar fulfills a requirement for ethics training for all graduate students who are funded by or attached to labs funded by NIH and NSF. More broadly, it is an opportunity to reflect on and discuss together values, responsibility, ethics, right action, and compliance related to scientific research, teaching, scholarship, and mentoring.

COURSE REQUIREMENTS:

Attendance: Required. If you need to miss class, let me know in advance. If you need to miss more than one class, you can make up missed classes by meeting with me to discuss the material you didn't have a chance to discuss in class. Students who wrote reflection papers (see below) for the week you missed will be invited to make these available as additional background reading.

Discussion Questions and Reflection Papers:

You will sign up for "special assignment" for two of the nine weekly topics.

- (1) By Wed 9 AM, send out two discussion questions based on the readings to the rest of the class (I'll also share these with the guest presenter for the week). Use the Blackboard "Email all users" function
- (2) Write a brief (300 words MAX) reflection paper discussing your thoughts and insights on both the assigned readings and on class presentation and discussion. Submit under Assignments on Blackboard by Friday 1 PM. These should be "reflection" papers (your thoughts, reactions, insights), not summaries. With your permission, I will share reflection papers for the week with any students who were absent, to provide additional background for their "make-up" discussion meeting with me.

SCHEDULE OF TOPICS AND ASSIGNED READINGS**WEEK 1, Jan. 7: Introduction/Organizational meeting**

Values, Responsibility, Ethics, Compliance

WEEK 2, Jan. 14: Research Fraud

On duty: Brett & Ashleigh

ASSIGNED READINGS/AUDIO CLIP (continued next page):

Gross, C. (2012, Jan. 9-16). Disgrace: On Marc Hauser. *The Nation*. Around 15 pages.

<http://www.thenation.com/article/165313/disgrace-marc-hauser?page=0,1>

Listen to NPR “All Things Considered” story about a discredited and highly influential study by Andrew Wakefield (1998) claiming a link between autism and vaccinations. 3.5 min clip.

<http://www.npr.org/player/v2/mediaPlayer.html?action=1&t=1&islist=false&id=132703314&m=132714490>

Yong, E., Ledford, H., & Van Noorden, R. (2013, Nov 28). Research ethics: 3 ways to blow the whistle. *Nature News*, 503:454-457.

http://www.nature.com/polopoly_fs/1.14226!/menu/main/topColumns/topLeftColumn/pdf/503454a.pdf

WEEK 3, Jan 21: Gray Area Practices On duty: Cory, Melissa, Brett

Guest: **Sanjay Srivastava, Psychology social/personality faculty member**

ASSIGNED READINGS:

Simmons, J. P., Nelson, L. D., & Simonsohn, U. (2011). False-positive psychology: Undisclosed flexibility in data collection and analysis allows presenting anything as significant. *Psychological Science*, 22, 1359-1366.

<http://pss.sagepub.com/content/early/2011/10/17/0956797611417632.full.pdf+html>

Gelman, A., & Loken, E. (2013). The garden of forking paths: Why multiple comparisons can be a problem, even when there is no "fishing expedition" or "p-hacking" and the research hypothesis was posited ahead of time. Unpublished manuscript. 17 pages.

http://www.stat.columbia.edu/~gelman/research/unpublished/p_hacking.pdf

Read abstract and look at Table 1 in:

John, L.K, Loewenstein, G., & Prelec, D. (2012). Measuring the prevalence of questionable research practices with incentives for truth telling, *Psychological Science*, 23 (5), 524-532.

<http://pss.sagepub.com/content/23/5/524.short>

WEEK 4: Jan. 28: Ethics and Logistics of Research with Human Subjects On duty: Kyle, Arthur

Guest: **Mary Hanabury from the UO Research Compliance Services (RCR)**

All studies using human subjects need to be approved by the UO Committee for the Protection of Human Subjects (CPHS) (which serves as the UO Institutional Review Board, or IRB) before data can be collected. Our visitor will discuss how ethical issues regarding research on human subjects are conceptualized and handled by the IRB approval process, which includes (1) preparing and submitting a protocol (2) review by the university CPHS/IRB and (3) revision if needed prior to approval and permission to start data collection.

ASSIGNED READINGS (cont. next page):

Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1979). *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research*. 20 pages in original format; about 5 in web format.

<http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html>

Miller, R. B. (2003). How the Belmont Report Fails, *Essays in Philosophy* 4 (2). 16 pages.
<http://commons.pacificu.edu/cgi/viewcontent.cgi?article=1089&context=eip>

Kane, D. (2014, Jan 16). UNC board suspends whistle-blower's research on literacy level of athletes.
&NewsObserver.com. 2 pages
<http://www.newsobserver.com/2014/01/16/3538799/uncs-folt-questions-literacy-findings.html>

Beard, A. (2014, Jan 19). University of North Carolina: Athlete Literacy Research Findings Flawed,
Diverse Issues in Higher Education. 2 pages. <http://diverseeducation.com/article/60247/>

WEEK 5, Feb. 4: Ethics of peer review **On duty: Jeff, Ashleigh, Grace**

Guest: **Marjorie Taylor, Psychology developmental faculty member**

ASSIGNED READINGS:

Curran-Everett, D. (1999, Sept 10 & 24). The Thrill of the Paper, The Agony of the Review: Part One /
Part Two. *Science Careers*. 5 pages.
http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/1999_09_10/nodoi.1645765895198606153
http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/1999_09_24/nodoi.12698624408178385243

Rockwell, S. (No date.) Ethics of Peer Review: A Guide for Manuscript Reviewers. Peer Review
Resources from Yale University, retrieved from ORI website on 21 Jan 2014. 19 pages.
<http://ori.hhs.gov/sites/default/files/prethics.pdf>

And for a little comic relief (also raises some good issues!!):
[Name Removed for Blind Review]. No date. Cover Letter with Manuscript Revision. 2 pages.
http://www.devpsy.org/humor/manuscript_cover_letter.html

WEEK 6, Feb. 11: Acquisition, management, sharing and ownership of data

On duty: Jeff, Marcus, Cory

Guest: **Brian Westra**, the Lorry I. Lokey Science Data Services Librarian

Brian will discuss the new NSF requirement for a data management plan, and we'll discuss (among other things) the tensions between IRB directives to make data inaccessible and scientific directives (from NSF, for example) to make data more accessible.

HWK: Find out the data and lab notebook policies for your research lab, and bring a copy to class.

ASSIGNED READINGS (cont. next page):

Doorn, P., Dillo, I., van Horik, R. (2013). Lies, Damned Lies and Research Data: Can Data Sharing
Prevent Data Fraud? *International Journal of Digital Curation*, 8 (1), 229-243.
<http://www.ijdc.net/index.php/ijdc/article/download/8.1.229/308>

Clinical Tools, Inc. [Course Authors M.B. Coulehan & J.F. Wells] (2006). Guidelines for Responsible Data Management in Scientific Research. **Read pp 1-21 only.**
<http://ori.hhs.gov/education/products/clinicaltools/data.pdf>

Eich, E. (2014). Business not as usual, *Psychological Science*, 25 (1), 3-6. DOI:
0.1177/0956797613512465 <http://pss.sagepub.com/content/25/1/3.full.pdf+html>

Goodman, A., et al. (2014). Ten Simple Rules for the Care and Feeding of Scientific Data. *PLOS Computational Biology*. DOI: 10.1371/journal.pcbi.1003542
<http://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1003542>

WEEK 7, Feb. 18: Publication practices, responsible authorship, collaborative science

On duty: Grace, Ariel, Tasha

Guest: **Elliot Berkman, Psychology social/personality faculty member**

ASSIGNED READINGS:

Ferrucci, D. A. (2012, Jan 7). Building the Team That Built Watson. *New York Times*. On-line version.
http://www.nytimes.com/2012/01/08/jobs/building-the-watson-team-of-scientists.html?_r=1&nl=todaysheadlines&emc=tha26

Lin, T. (2012, Jan 16). Cracking Open the Scientific Process. *New York Times*. On-line version.
<http://www.nytimes.com/2012/01/17/science/open-science-challenges-journal-tradition-with-web-collaboration.html?src=recg>

Ludlow, P. (2013, Feb 25). Aaron Swartz was right. *The Chronicle Review*. 6 pages.
<http://chronicle.com/article/Aaron-Swartz-Was-Right/137425/>

Poldrack, R. A., & Poline, J.-B. (2015). The publication and reproducibility challenges of shared data. *Trends in Cognitive Sciences*, 19(2), 59–61. doi:10.1016/j.tics.2014.11.008 (On Blackboard)

WEEK 8, Feb. 25: Non-Human Animal Research

On duty: Rita, Arthur, Melissa

Guest: **Monte Matthews**, the Director of the UO [Office of Veterinary Services and Animal Care](#).

Monte will speak on issues related to the history and ethics of animal care and use, regulations/guidelines/policies governing the use of animals in research, and UO processes for working with animal subjects.

READINGS:(cont. next page):

NIH Office of Laboratory Animal Welfare (OLAW):
<http://grants.nih.gov/grants/olaw/olaw.htm>

From this page you can access the US Government Principles, the PHS Policy on Humane Care and Use of Laboratory Animals, The Guide for the Care and Use of Laboratory Animals and lots of guidance from OLAW (see next page):

<http://grants.nih.gov/grants/olaw/references/phspol.htm#USGovPrinciples>
<http://grants.nih.gov/grants/olaw/references/phspol.htm>
http://www.nap.edu/catalog.php?record_id=12910

The other federal agency involved is USDA. The Animal Welfare Act (AWA), the AWA regulations and their Policy manual:

http://www.aphis.usda.gov/animal_welfare/awa_info.shtml
http://www.aphis.usda.gov/animal_welfare/downloads/awa/awa.pdf
http://www.aphis.usda.gov/animal_welfare/downloads/Animal%20Care%20Blue%20Book%20-%202013%20-%20FINAL.pdf
http://www.aphis.usda.gov/animal_welfare/policy.php

WEEK 9, March 4: Conflict of interest and commitment

On duty: Ariel, Marcus, Kyle

Guest: **Don Tucker, Psychology clinical faculty member and founder, Electro Geodesics, Inc (EGI)**

ASSIGNED READING:

Cosgrove, L. & Sheldon Krimsky, S. (2012, March 13). A Comparison of DSM-IV and DSM-5 Panel Members' Financial Associations with Industry: A Pernicious Problem Persists. *PLOS Medicine*, 9 (3), 1-4. DOI: 10.1371/journal.pmed.1001190
<http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1001190>

Cosgrove, L., & Wheeler, E. E. (2013). Industry's colonization of psychiatry: Ethical and practical implications of financial conflicts of interest in the DSM-5. *Feminism & Psychology* 23 (1), 93-106. DOI: 10.1177/0959353512467972 <http://fap.sagepub.com/content/23/1/93.full.pdf+html>

WEEK 10, March 11 : Mentoring skills and commitments

On duty: Tasha, Rita

Guest: **Dare Baldwin, Psychology developmental faculty member**

ASSIGNED READING: *See Blackboard under Documents for this reading*

Thibodeau, R. (2009). Academic integrity in the mentoring relationship: A sampling of relevant issues. In T. Twomey, H. White, & K. Sagendorf (Eds.), *Pedagogy, not policing* (pp. 67-76). Syracuse, NY: The Graduate School Press of Syracuse University.