UNIV 1200/HMAN 1200
Making Choices:
Ethics at the Frontier of Global Science

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Office Hours: Tuesdays 9:30-11:00
Seminar meets every Thursday from 4-6:20 pm in Pembroke Hall 202, (172 Meeting Street). Teleconferences will meet in a location to be announced.

Aims of the seminar:
This seminar considers the ethical tradition in the sciences, and the varied ways in which ethical issues are engaged in scientific fields. Readings and case study examples are drawn from a range of fields, including engineering, chemistry, physics, astronomy, psychology and the biological sciences. Training in ethics or RCR (Responsible Conduct of Research) is often proscriptive and universalizing, listing practices to avoid rather than recommending attitudes to adopt. Students in the sciences are not always encouraged to reflect upon the ways in which science intersects with larger societal questions. This seminar is not a training course, but a forum for exploring the ways in which we make ethical decisions in a global world. The seminar has been designed with NSF funding, and is being co-taught at Brown University, Zhejiang University in China and the Indian Institute of Technology in Mumbai, India. The three sections of this seminar will meet together to share international perspectives several times during the semester. It is open to undergraduates and graduate students from all fields, and is also open to medical students and students in public health.
Requirements:
- active class discussion and participation…………………………………..20%
- weekly position papers (1-2 pages)………………………………………..20%
- 15 minute presentation in the end-of-the-year student conference………..20%
- research term paper (15-20 pages)…………………………………………40%

Reading Assignments:
Students are expected to have read all material listed for the week’s assignment by class time. Readings are available on the University mycourses website.

SCHEDULE OF SEMINAR MEETINGS AND READING ASSIGNMENTS
(Please come to class prepared to discuss and critique the readings in detail.)

Week 1: Introduction: Thinking Ethically and Globally


Case Study: The BP Spill

Week 2: Global Science and its Obligations: Cosmopolitanism and Narrative Imagination


Week 3: First Videoconference: Comparing global science, priorities and cosmopolitanism in India, China and the US.

Week 4: Is an International Code of Ethics Possible? Is it Desirable?


**Case Study 1: Engineering Ethics Codes**

**Case Study 2: Stem Cell Research**

**Week 5: Cultural Competence, Cultural Humility and Participatory Research**


**Case Study: Participatory Rural Appraisal in a Maori Tribal Context**

**Week 6: Who Owns Ideas? Intellectual Property, Publishing and Credit**


**Case Study: IP in the US, India and China**
Intellectual Property statements from IIT, Zhejiang and Brown
Week 7: Second Videoconference: Comparing intellectual property and scientific publishing in India, China and the US.

Week 8: Who Owns the Past? Who Owns the Future? The Ethics of Heritage and Planning


**Case Study: Planning and Water Resources in India**


Week 9: Who Owns Data? Open Access, Creative Commons and the Ethics of Uncertainty
Kate Worlock, “The Pros and Cons of Open Access,” *Nature* [http://www.nature.com/nature/focus/accessdebate/34.html](http://www.nature.com/nature/focus/accessdebate/34.html)

Public Library of Science: Open Access ([http://www.plos.org/oa/index.html](http://www.plos.org/oa/index.html))


BioMed Central, “Creative Commons,” [http://www.biomedcentral.com](http://www.biomedcentral.com)

**Case Study 1: Hubble and Kepler Telescopes and Access to Astronomical Data**

**Case Study 2: Representing Uncertainty**

**Week 10: Third Videoconference: Open Access and Data**

**Week 11: Where are the Human Subjects in Engineering and the Physical Sciences?**


**Case Study: Human Impact of Engineering Design**

**Week 12: The Ethics of Language: Translation and Communication in International Discourse**


**Week 13: Final Videoconference: Translation and Cross-Cultural Communication**

**Week 14: Conclusions**