

**Bioethics and Social Responsibility Symbiosis University,
Pune, India**

**Course Directors, Dr. John D. Loike, Columbia University and Dr. Ruth Fischbach, Center for Bioethics, Columbia University, and Eduard Mandel, Knowledge Exchange Institute,
Summer 2012**

Classroom hours for each course including lectures, debates, and student presentations- 40 hours Off-site visits for each course (five visits)- 15 hours

SYNOPSIS:

In this seminar-style course, students will examine a variety of topics related to bioethics, medical ethics and social responsibility. In the area of bioethics the course will focus on how emerging biotechnologies (such as human cloning, transgenic technologies, new reproductive technologies, genomics, and proteomics) intersect with bioethical principles and practices. In the area of medical ethics, the course will focus on the cross-cultural aspects of health care and the ethics of disaster medicine. The third area will focus on how culture, religion, and social responsibility impact the practice of bioethics, medical ethics and science. In this course, students will engage in discussions, debates, and role playing activities to enabling them to better analyze and resolve bioethical and medical ethical dilemmas. About 30% of the time, students will attend off-site visits to various institutions to see first-hand how culture and religion influence bioethical issues. Two courses will be offered. The first is called Medical Diplomacy and Anthropology. The second is called Frontiers in Crosscultural Bioethics

REQUIREMENTS:

Students should have at least one year of college level biology. All students will be expected to attend class regularly and to keep up with assigned reading. Students will be graded based on: a student presentations, a final paper that the student writes based on the presentation and the comments emerging from his or her presentation, and student participation in the class. The paper will be due by October 1, 2012. Selected papers will be considered for publication in the Columbia University Journal of Bioethics.

Topics: All the topics will be multi-dimensional coving the medical, scientific, legal, ethical, and cultural aspects of a subject.

Frontiers in Cross-cultural Bioethics

Credits: 3

1. Introduction to Cross-cultural Bioethics
Topics include: An introduction to Buddhism, Cultural History of India
Faculty-
2. Science, religion and medical ethics: Topics will include:
Buddhist and Hindi perspectives on bioethical issues such as the beginning of life, end of life, and reproductive medicine
Bioethics in India
Culture and education in India
Western approaches to bioethical decision-making
Faculty: Faculty from Symbiosis University
Dr. John D. Loike, Center for Bioethics, Columbia University
Dr. Jennifer E. Miller, Bioethics International
3. Stem Cell Research: Topics will include:
Progress in Stem cell technology
Future clinical applications of stem cell technology
When does human life begin
How is human life defined
Legal and Social ramifications of stem cell technology

Faculty: Faculty from Symbiosis University
Dr. John D. Loike, Center for Bioethics, Columbia University
4. Biomedical Research, Oncology & Ethics: Topics will include:
Ethics of clinical testing
Patient rights and confidentiality
Faculty: Faculty from Symbiosis University
Dr. Jennifer E. Miller, Bioethics International
5. Human cloning and human-animal chimeras: Topics will include:
Human reproductive cloning
Cloning the Neanderthal woman
Reconstituting human brains or a human uterus in animals
Faculty: Dr. John D. Loike, Center for Bioethics, Columbia University
6. Reproductive Biology: Topics will include:
IVF, Abortion, and PGD
Faculty: Faculty from Symbiosis University
Off-site visit- Molecular Laboratory and IVF Clinic,

7. Genetic Screening:

Topics will include: Genetic Screening from embryo to birth, Genetic Counseling
Sex selection, Surrogate motherhood

Faculty: Faculty from Symbiosis University

8. Sexually Transmitted Diseases, AIDS, and Birth Control:

Faculty: Faculty from Symbiosis University

9. Neuroethics

Faculty- Faculty from Symbiosis University

Medical Diplomacy and Anthropology

Credits: 3

1. Buddhism and role of Physician; Medical Decision-making in India
Topics include a comparison of the practice of medicine and health from a Buddhist or Hindu perspective as compared to Western perspectives.
Faculty- Faculty from Symbiosis University
Dr. John D. Loike, Columbia University
2. Alternative Medicine: Topics will include:
Health Care system in India
Integrating Western and Eastern therapies
Educating of the medically uninformed about Western medicine
Faculty: Faculty from Symbiosis University
Off-site visit to the Alternative Medicine Clinic
3. Medical Tourism: Topics will include:
Medical tourism- an emerging area of medicine
Impact of medical tourism on insurance and medical training
Future directions for medical tourism
Faculty: Faculty from Symbiosis University
Dr. John D. Loike, Center for Bioethics, Columbia University
4. Overview Medical Anthropology.
Topics include: Introduction to medical anthropology, applying medical anthropology to current issues in medical ethics

Faculty- Faculty from Symbiosis University
Dr. John D. Loike, Columbia University
5. Disaster, non-disaster relief/Global Healthcare Inequalities- The Japan Earthquake and Tsunami will be the focus
Pediatric emergency mass critical care: Triage and allocation of scarce resources for children and families
Faculty – Jennifer E. Miller, Bioethics International
6. Trafficking of Human Organs, Human Beings/Sex Workers
Topics include: illegal trafficking, origins of trafficking, future directions to control trafficking.
Faculty- Faculty from Symbiosis University
7. Conflicts Between Health Care policies and Religion

Topics will include: sensitivity to cultural and religious differences in managing health care options, how to address conflicts between religious or cultural practices in science and medicine

Faculty- Dr. John D. Loike, Columbia University

8. Medical Sustainability/Genetics of species/Identification of homo sapiens
Topics include: examining the ethics of humanizing animals, creating human animal chimeras, behavioral enhancement of animals, animal welfare and ethics
Faculty- Dr. John D. Loike, Columbia University

9. Social Responsibility in Biomedicine

Corporate Social Responsibility: Corruption; ethical considerations in the marketing of medicines and interactions between bio-pharmaceutical companies and doctors; ethical reporting and communication of clinical trial results including ghostwriting; and access to medicines.

Faculty- Dr. Jennifer Miller, Bioethics International and Global Healthcare Innovation Management Center (GHIM), Fordham University

Dr. John D. Loike, Columbia University

Selected Readings:

Selected readings from “Frontiers in Bioethics” by John D. Loike, Ph.D. and Ruth L. Fischbach, Ph.D.. This unpublished book has been used as the basic text for “Crossroads in Bioethics” course taught at Columbia College for the past six years.

Chapters in the course

1. . Traditional ethical approaches to bioethics
 - a. (Ethical theory; justice, non-malificence, beneficence, autonomy, deontology, utilitarianism)
2. Redefining research bioethics
 - a. (rationale, developing appropriate guidelines, regulation)
3. The Science of nuclear transfer technology
 - a. (early human embryology, nuclear transfer)
4. The bioethics of reproductive cloning: Patenting a Designer Human Being.
 - a. (individuality, fetal rights, is reproduction a parental right or privilege?)
5. Human stem cells: the alchemists dream
 - a. (definition, functions, sources, potential medical applications, potential medical risks)
6. Bioethics of stem cell research: The web of life’s beginnings

- a. (When does human life begin, Religious theories, Classical ethical theories, Public views)
- 7. Human-animal chimeras and synthetic biology
 - a. (reconstituting human embryonic stem cells in mice, reconstituting human brain cells into mice and monkeys, creating artificial organisms)
- 8. Genetic Sovereignty of Human Disease
 - a. (origins of mutations, imprinting, genetic basis of diseases, dominant, recessive, genes that increase susceptibility, Genetic testing)
- 9. Neurotechnology and Neuroethics
 - a. (brain imaging and its impact on behavior science)
- 10. Women's Reproductive Technology
 - a. (oocyte freezing, egg freezing, egg donation, IVF, regulation of menses)
- 11. Women's Reproductive Technology: Ethical Standpoints
- 12. Ethical Considerations Emerging From Future Biotechnologies

Additional readings

1. Antommaria, A., Powell, T., Miller, J., and Christian, M., Ethical Issues in Pediatric Emergency Mass Critical Care, *Journal of Pediatric Critical Care Medicine*, accepted July 2011, publication scheduled November 2011
2. Bosek MS. Respecting a patient's religious values: what does this require? *JONAS Healthc Law Ethics Regul.* 2008 Oct-Dec;10(4):100-5. Review.
3. Chattopadhyay S., Religion, spirituality, health and medicine: why should Indian physicians care? *J Postgrad Med.* 2007 Oct-Dec;53(4):262-6. Review.
4. Epstein M., Sociological and ethical issues in transplant commercialism. *Curr Opin Organ Transplant.* 2009 Apr;14(2):134-9. Review.
5. Gupta V, Khadgawat R, Sachdeva MP. Significance of genome-wide association studies in molecular anthropology. *Genet Test Mol Biomarkers.* 2009 Dec;13(6):711-5. Review.

6. Gerber A, Hentzelt F, Lauterbach KW., Can evidence-based medicine implicitly rely on current concepts of disease or does it have to develop its own definition? *J Med Ethics*. 2007 Jul;33(7):394-9. Review
7. Hales S, Zimmermann C, Rodin G.,The quality of dying and death.,*Arch Intern Med*. 2008 May 12;168(9):912-8. Review.
8. Kim SH, Ye YM, Palikhe NS, Kim JE, Park HS.,Genetic and ethnic risk factors associated with drug hypersensitivity. *Curr Opin Allergy Clin Immunol*. 2010 Aug;10(4):280-90. Review
9. Kurian AW., BRCA1 and BRCA2 mutations across race and ethnicity: distribution and clinical implications. *Curr Opin Obstet Gynecol*. 2010 Feb;22(1):72-8. Review.
10. Loike, J.D., Fischbach, R.L., Women's Reproductive Technology: Ethical Standpoints
11. Loike, J. D. and M.D. Tandler. Homo Sapiens: Reformulating the Definition Of Species. *Kennedy Institute of Ethics Journal*, 12: 343-350, 2002.
12. Santoro G, Wood MD, Merlo L, Anastasi GP, Tomasello F, Germanò A., The anatomic location of the soul from the heart, through the brain, to the whole body, and beyond: a journey through Western history, science, and philosophy. *Neurosurgery*. 2009 Oct;65(4):633-43; discussion 643. Review.
13. Whyte SR., Health identities and subjectivities: the ethnographic challenge. *Med Anthropol Q*. 2009 Mar;23(1):6-15. Review
14. Zwart H.,Genomics and identity: the bioinformatisation of human life. *Med Health Care Philos*. 2009 Jun;12(2):125-36. Epub 2009 Feb 26. Review.