

LMC 3318: Biomedicine and Culture

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COURSE DESCRIPTION: This course discusses the history of medicine and medical technologies; literary and popular representations of health, disease, and the medical establishment; ethical issues related to medicine and public health; and cultural conditions affecting the development of medicine and medical technologies. Subjects include interpersonal conflicts between doctors and patients, the Tuskegee syphilis study and the establishment of bioethics, the race among researchers to discover the HIV virus causing AIDS, sustainability and public health, patients' rights, and genetic technology.

Attributes: Humanities, Ethics

LEARNING OUTCOMES:

- To increase awareness of the cultural factors affecting the development of biomedical knowledge and practice
- To increase awareness of and think critically about the role of biomedicine, including its technological means, in culture
- To explore nuance and ambiguity in ethical debates about research and practice in biomedicine
- To communicate in sophisticated ways about these issues of broad concern, orally and in writing

BOOKS THAT COULD BE PURCHASED; also available as pdf documents in class Canvas site:

William Carlos Williams, *The Doctor Stories* New Directions, 1984. (\$11)—[selected stories/poems in pdf]

Margaret Edson, *W;t* [or *Wit*]. Faber and Faber, 1993, 1999. (\$10) [also in pdf]

David Feldshuh, *Miss Evers' Boys*. Dramatists Play Service, 1989, 1995. (\$7.50) [also in pdf]

RESERVE READINGS also available as pdf documents in class Canvas site:

Stanley Joel Reiser, "Examination of the patient in the seventeenth and eighteenth centuries" and "The stethoscope and the detection of pathology by sound," chapters 1 and 2 of *Medicine and the Reign of Technology* Cambridge University Press, 1978: 1-44.

Stanley Joel Reiser, "Governing the Empire of Machines," *Technological Medicine: The Changing World of Doctors and Patients* Cambridge University Press, 2009: 186-203.

Bettyann Holtzmann Kevles, "Looking through Women: The Development of Ultrasound and Mammography." Chapter 10 of *Naked to the Bone: Medical Imaging in the Twentieth Century*. Addison-Wesley, 1997: 228-260.

Susan Gubar, *Memoir of a Debulked Woman: Enduring Ovarian Cancer*, 2012. Selections.

James Jones, "A Moral Astigmatism" & "A Notoriously Bad Blood," Ch. 1 and 2 of *Bad Blood*, Free Press, 1993: 1-29.

Susan Reverby, "Bioethics, History, and the Study as Gospel" and "The Court of Imagination," chapters 10 and 11 of *Examining Tuskegee: The Infamous Syphilis Study and Its Legacy*. The University of North Carolina Press, 2009: 187-215.

Rebecca Skloot, *The Immortal Life of Henrietta Lacks*. Broadway, 2010, 2011. (\$8.24) [excerpts]

Randy Shilts, *And the Band Played On*. 1987. pp. 11-33, 80-92, 234-242, 263-277, 450-456, 486-503

A Timeline of HIV/AIDS <https://www.aids.gov/hiv-aids-basics/hiv-aids-101/aids-timeline/>

AIDS Retrospective Slideshow: A Pictorial Timeline of the HIV/AIDS Pandemic

<http://www.webmd.com/hiv-aids/ss/slideshow-aids-retrospective>

Luc Montagnier, *Virus: The Co-Discoverer of HIV Tracks Its Rampage and Charts the Future*, 1999 [Chapter 2]

Christopher Dyea and Shambhu Acharya, "How can the sustainable development goals improve global health?"

Call for papers." *Bulletin of the World Health Organization*. October 2017: 666-667.

Assignment 4 articles, which are available in pdf on Canvas, are noted on the last page of the syllabus.

TIPS: Print the syllabus and download pdf files of course texts before leaving the US. We will reference texts during class discussions, so having access to print or electronic versions (on laptop, tablet, or phone) during class is helpful. Purchasing plays by Edson and Feldshuh and bringing these to GTL is recommended.

ADAPTS: The Atlanta Office of Disability Services assists students self-identifying as having a disability to obtain reasonable accommodations. Documentation of disability is required to determine appropriate accommodations or modifications that may be helpful on campus. See <http://www.adapts.gatech.edu/>

INCLUSIVE EXCELLENCE: The Ivan Allen College of Liberal Arts supports the Georgia Institute of Technology's commitment to creating a campus free of discrimination on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status. We further affirm the importance of cultivating an intellectual climate that allows us to better understand the similarities and differences of those who constitute the Georgia Tech community, as well as the necessity of working against inequalities that may also manifest here as they do in the broader society.

ACADEMIC HONESTY: If you quote, paraphrase, or summarize information that you originally obtained from a written (print or Internet) or a verbal source in your written assignment, this source reference should be cited in your text. You should use MLA style in your papers for this course: references should be parenthetically made within your essay, and references to texts not on the course reading list should be linked to a works cited section. Questions about appropriate forms of citation can be asked of the course instructor or the reference staff at the library. You should become familiar with the provisions of the Georgia Tech academic honor code and the policies governing violations of the honor code, both published in the Georgia Tech course catalog. For more information, see www.honor.gatech.edu

WRITTEN ASSIGNMENTS AND PARTICIPATION [More information is available on the assignment handout]: Due dates for the writing assignments are listed in the syllabus. Your writing assignments will provide opportunities to extend classroom discussions and to meditate more thoughtfully on course topics. Class discussions depend on your analyses of the readings and your contributions to the conversations. Your essays should build on your reading and the class discussions. Please come to each class prepared to participate in discussions after having read and thought about the text/s assigned for that day, bringing your ideas and questions to introduce into the discussion.

REPORTS: During each class a student will lead us through and share a short (5-8 minute) analysis of the text and topic, summarizing the reading's focus, evaluating its meaning and construction, and providing a question or two for class discussion. In preparing your presentation, consider what you learned from the reading, how it can apply to other readings, and which stylistic features of the text and aspects of its argument deserve consideration. You should consult the instructor if you have questions about your presentation. Remember that your contribution as a presenter should facilitate class conversations as you formulate appropriate questions that fit the course topics, provide a thoughtful way of approaching textual issues, and report on information gleaned from reading primary and critical material. Sign up for reports as soon as possible; "R:" indicates a report topic.

GRADING: All written assignments should be posted to the Dropbox section of the class tsquare site. Any postings should be in the body of the message (not sent as attachments). Late assignments will not be accepted unless you arrange with the instructor in advance of the due date.

Final grades will be calculated according to the following proportion and graded by the instructor named here:

- Assignment 1 (short essay on relationship of doctor/nurse and patient): 15% of final grade [*Senf*]
- Assignment 2 (short essay on ethics, culture, medical technology) 15% of final grade [*Senf*]
- Assignment 3 (short essay on public health, ethics) 15% of final grade [*Colatrella*]
- Assignment 4 (team presentations on medical ethics article): 20% of final grade [*Colatrella*]
- In-class oral report/leadership of one class discussion: 10% of final grade [*Both*]
- General class participation/weeks 1-3: 5% of final grade [*Senf*]
- General class participation/weeks 4-11: 10% of final grade [*Colatrella*]
- In-class writings: 10% of final grade [*Colatrella*]

GRADING SCALE: 90-100=A, 80-89=B, 70-79=C, 60-69=D, less than 60=F

ATTENDANCE IS REQUIRED IN THIS COURSE: Because class discussion and in-class assignments make up a significant percentage of the final grade, excessive absences (more than 2) could result in an unsatisfactory mark. Submit the appropriate documents to the instructor for medical, athletic, or other justified absences. Extended absences away from campus for family, medical, or legal reasons should be reported to Dr. Paul Voss at Georgia Tech Lorraine. The Georgia Tech Office of Student Life in Atlanta also has information: <https://studentlife.gatech.edu/content/class-attendance>

SCHEDULE:

Carol Senf

Week 1 *Relationship of doctor and patient, diagnosis, therapy, ethics of research*

Th 5/16 Introduction to course; choose oral report topics (R:) for weeks 1-3

Discuss poems by W. C. Williams: "Médecin malgré lui," "The Poor," "To Close" (pp.129,132)

F 5/17 Williams, *The Doctor Stories*, pp. 56-60 & pp. 92-98; Reiser, "Examination of the patient," *Medicine and the Reign of Technology*, pp. 1-22 (pdf)

R: Williams, "The Use of Force," *The Doctor Stories*, pp. 56-60

R: Williams, "The Paid Nurse," pp. 92-98

R: Reiser on cultural and technical issues related to examining the patient and diagnosing illness

M 5/20 Williams, *The Doctor Stories*, pp. 42-55 & 131-132; Reiser, "The stethoscope and the detection of pathology by sound," *Medicine and the Reign of Technology*, pp. 23-44 (pdf)

R: Williams, "The Girl with a Pimple Face," pp. 42-55

R: Williams, "The Dead Baby" and "A Cold Front," pp. 131-132

R: Reiser on development of stethoscope: technical and cultural factors

Week 2 *Development of evidence-based medicine, biomedical technologies*

T 5/21 Discussion of texts read to date and papers. **Assignment 1 due:** two-page (250-300-word) essay on doctor/nurse-patient relationship as represented in readings by Williams and Reiser.

W 5/22 Stanley Joel Reiser, "Governing the Empire of Machines," *Technological Medicine*, 186-203 (pdf)

R: Ethical use of technologies in medicine

R: The example of ultrasound

Th 5/23 Bettyann Kevles, "Ultrasound and Mammography," *Naked to the Bone*, Chapter 10: pp. 228-260 (pdf)

R: Development of ultrasound: technical factors

R: Development of ultrasound: cultural factors

F 5/24 Kevles, "Ultrasound and Mammography," *Naked to the Bone*, Chapter 10 228-260 (pdf)

R: Development of mammography: technical factors

R: Development of mammography: cultural factors

Discussion comparing representations of culture and medical technologies in Bernard, Reiser, Kevles

Week 3 *Conflicts between medical therapy and research*

M 5/27 Susan Gubar, *Memoir of a Debulked Woman: Enduring Ovarian Cancer*. Selections in pdf.

R: Gubar's personal tone

R: Gubar's incorporation of technical information

R: Gubar's literary references

Week 3 Conflicts between medical therapy and research (continued)

T 5/28 Edson, *Wit* (play)

R: Vivian Bearing's character

R: Doctors in the play

R: Nurse in the play

W 5/29 Margaret Edson's *Wit* (Dir. Mike Nichols) Screen film

Assignment 2 due: two-page (250-300-word) essay on tensions/ethical conflicts related to use of technologies in medical practice in two of these course texts: Reiser, Kevles, Edson, Gubar.

CS & CC: M 6/3 *Wit* (Dir. Mike Nichols) Finish screening and discuss film

Choose report topics for weeks 4-11

Carol Colatrella

Weeks 4 & 5 Tuskegee syphilis study, the development of bioethics, media representations of Tuskegee study

T 6/4 James Jones, *Bad Blood*, chapter 1: pp. 1-15 (pdf).

R: *Bad Blood*, chapter 1: Public Health Service "experiment" on syphilis

R: *Bad Blood*, chapter 1: Nazi experiments and the Tuskegee syphilis study

W 6/5 James Jones, *Bad Blood*, chapter 2: pp.16-29 (pdf)

R: *Bad Blood*, chapter 2: cultural perceptions of race and sexuality and diagnosis of syphilis

R: *Bad Blood*, chapter 2: cultural perceptions of race and sexuality and treatment of syphilis

Th 6/6 David Feldshuh, *Miss Evers' Boys*

R: Patients in the play: their concerns

R: Doctors in the play: professional ethics in developing "study"

R: Nurse in the play: professional ethics in implementing "study"

F 6/7 David Feldshuh, *Miss Evers' Boys*

R: Patients in the play: their concerns after "treatment"

R: Doctors in the play: professional ethics, considered in retrospect

R: Nurse in the play: professional ethics, considered in retrospect

T 6/11 & W 6/12 *Miss Evers' Boys* (Dir. Joseph Sargent). Screen film

Th 6/13 Susan Reverby, "Bioethics, History, and the Study as Gospel," ch. 10 of *Examining Tuskegee*, 187-203

R: Public imaginary of race and Tuskegee syphilis study

R: Tuskegee study and bioethics

F 6/14 Reverby, "The Court of Imagination," ch. 11 of *Examining Tuskegee*, 204-215

R: Representing an historical case in popular film

R: Ethical concerns in film, according to Reverby

Weeks 6-8 Medical research studies and patients' rights; journalistic ethics; public health

M 6/17 Rebecca Skloot, *Immortal Life of Henrietta Lacks*, pp. 13-17, 62-66, 105-109, 127-143

R: Diagnosis of Henrietta Lacks

R: Treatment of Henrietta Lacks

T 6/18 Skloot, *Immortal Life of Henrietta Lacks*, pp. 152-169, 180-187, 315-328

R: Skloot's interest in history of HeLa and Henrietta Lacks

R: Journalistic ethics and Skloot's example

Weeks 6-8 Medical research studies and patients' rights; journalistic ethics; public health (continued)

W 6/19 **Assignment 3 due:** two-page (250-300-word) essay on ethical conflicts in medical practice and research (syphilis, cancer), referencing representations in two of these course texts: Jones, Feldshuh, Reverby, Skloot. Discussion of essay. [Trailer for HBO *Immortal Life of Henrietta Lacks* & Hopkins Lacks websites]

Th 6/20, M 6/24, T 6/25 Screen *And the Band Played On* (Dir. R.Spottiswoode; online at HBO Go, Amazon)

W 6/26 For class, review these websites:*A Timeline of HIV/AIDS* <https://www.aids.gov/hiv-aids-basics/hiv-aids-101/aids-timeline/> and *AIDS Retrospective Slideshow: A Pictorial Timeline of the HIV/AIDS Pandemic* <http://www.webmd.com/hiv-aids/ss/slideshow-aids-retrospective>

Class discussion: why is it important to know the history of HIV/AIDS as a disease? why is it important to consider politics and policy related to AIDS/HIV research and therapies?

Th 6/27 Randy Shilts, *And the Band Played On*, pp. 11-33, 80-92, 234-242, 263-277

R: Raising public awareness of infection

R: Alerting government officials to the AIDS health crisis

M 7/1 Shilts, *And the Band Played On*, pp. 450-456, 486-503

R: Collective action by patients and caregivers

R: Professional ethics in public health

T 7/2 Luc Montagnier, chapter 2: "The Red Notebook," *Virus* (autobiography of HIV researcher), pp. 42-82

R: Montagnier's discovery of HIV and the conflict with Gallo

R: AIDS epidemic: understanding origins and reducing infections

Weeks 8-11 Ethics, Sustainability, and Public Health

W 7/3 Review United Nations Sustainable Development Goals (SDG)

<http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

Read Christopher Dyea and Shambhu Acharya, "How can the sustainable development goals improve global health? Call for Papers" (2017)

due 7/3: On your own or with a partner, construct a list of SDG related to ethics and public health

Choose article for Assignment 4 from t-square; look in Resources in "medical ethics articles" folder.

F 7/5 United Nations Sustainable Development Goals, Ethics, and Public Health

In-class discussion considering SDG call for papers. Based on students' lists, we will construct a class list of SDG issues related to ethics, sustainability, and public health.

T 7/9, W 7/10, Th 7/11 In-class team meetings preparing group presentations (read and discuss article for Assignment 4)

F 7/12 No class: meet with group to prepare presentations

M 7/15: In-class team meetings preparing and practicing group presentations (Assignment 4)

T 7/16, W 7/17, Th 7/18, M 7/22, T 7/23, W 7/24: Group presentations (Assignment 4) reflecting on ethical dilemmas in medical research and practice, referencing medical ethics articles on reserve and on Canvas

Th 7/25 General discussion about course readings, discussions, and assignments

F 7/27 READING DAY

Week 12: FINAL EXAMS/READING PERIOD

Short Essay 1 (*due T 5/21*): Write a 250-300-word essay considering the representation of the doctor/nurse-patient relationship or the physician's treatment of a patient in readings by Williams and Reiser. Pick one text by one of these authors and discuss the characteristics that are associated in the text with the caregiver's treatment of the patient and the patient's (or the patient's family's) perceptions of the doctor. What can the text teach us about the ideals and the realities of medical practice and/or research?

Short Essay 2 (*due M 6/3*): Write a 250-300-word essay analyzing how cultural values, perceptions, attitudes and the development and/or use of medical technologies influence each other. Your essay should reference one or two texts by Reiser, Kevles, Edson, or Gubar. What does the text argue regarding how technology supports and/or hinders the quality of medical practice? What ethical concerns does the text raise about the development or the use of technologies in medical practice?

Short Essay 3 (*due W 6/19*): Write a 250-300-word essay outlining the ethical conflict/s troubling medical practice or medical research as these are explained or suggested in two of the texts by Jones, Feldshuh, Reverby, Skloot. What do these representations argue or suggest should be the responsibilities and ethical practices of medical caregivers (doctors, nurses) and researchers? What responsibilities might the patient/s have?

Keep in mind:

Your thesis statement and argument should respond to the question/s noted or develop your own focused question/s related to the readings. Consult the thesis statement handout posted in Resources on the class Canvas site.

Each 2-page essay should be written along the lines of a standard 5-paragraph essay with a short introduction, including a thesis statement presenting your argument in a sentence or two. In the following paragraphs, provide evidence supporting your argument followed by a short conclusion.

It's ok to have fewer or more paragraphs, but your essay should make an argumentative claim that you support with examples from the text/s you are writing about. Resist the temptation to summarize the text or to quote extensively (more than a phrase or two) from it.

Use 11- or 12-point font and double-space the essay, which should be about 500-words. Please submit the essay to the class Canvas site by the date indicated.

Ask questions during class about assignments 1 and 2 of Dr. Senf (carol.senf@lmc.gatech.edu) and about assignments 3 and 4 (team oral presentation) of Dr. Colatrella (carol.colatrella@lmc.gatech.edu). Or let us know via email if you have any questions or concerns.

LMC 3318, Assignment 4:

The group presentation should define the ethical concerns, dilemmas, conflicts, or problems in medicine or public health noted in the article. Often thinking about the interests of different individuals or groups can help define an ethical conflict or a possible conflict. If relevant, you can link issues to other course readings. Consider what could be and should be done to solve the problem or eliminate the conflict. What social/cultural or technical innovations could be developed and applied to this problem? Describe possible resistance to the solution or technology. What initiatives could overcome resistance?

Team oral presentation (20 minutes) on medical ethics with each presentation referencing one of these articles (all are on Canvas and on library reserve) and with all team members participating:

Rachel Aviv, "What Does It Mean to Die," *The New Yorker*, February 5, 2018: 24 pages.
When Jahi McMath was declared brain-dead by the hospital, her family disagreed. Her case challenges the very nature of existence.

<https://www.newyorker.com/magazine/2018/02/05/what-does-it-mean-to-die>

David C. Bellinger "Lead Contamination in Flint — An Abject Failure to Protect Public Health," *The New England Journal of Medicine*, 2016. <http://www.nejm.org/doi/full/10.1056/NEJMp1601013>

Atul Gawande, "Overkill" *The New Yorker*. May 11, 2015

An avalanche of unnecessary medical care is harming patients physically and financially. What can we do about it? <http://www.newyorker.com/magazine/2015/05/11/overkill-atul-gawande>

Atul Gawande, "The Heroism of Incremental Care (Tell Me Where It Hurts)," *The New Yorker* January 23, 2017. *Our medical system rewards heroic intervention. When will we grasp the power of incremental care?* <http://www.newyorker.com/magazine/2017/01/23/the-heroism-of-incremental-care>

Patrick Keefe, "The Family That Built an Empire of Pain," *The New Yorker*, October 30, 2017: 34-49.
The Sackler family's ruthless promotion of opioids generated billions of dollars—and millions of addicts.

<https://www.newyorker.com/magazine/2017/10/30/the-family-that-built-an-empire-of-pain>

Carolyn Korman, "Through the Looking Glass," *The New Yorker*. December 21 & 28, 2015.

<http://www.newyorker.com/magazine/2015/12/21/through-the-looking-glass-annals-of-science-carolyn-korman>

[Producing a low cost microscope for use in non-industrial countries]

Suzanne Koven, "The Doctor's New Dilemma," *The New England Journal of Medicine*. 374, 7 (February 18, 2016) [Managing efficient, economic, and effective physician/patient visits]

<http://www.nejm.org/doi/full/10.1056/NEJMp1513708>

Sandra Soo-Jin Lee, "American DNA: The Politics of Potentiality in a Genomic Age," *Current Anthropology* 54,S7, *Potentiality and Humanness: Revisiting the Anthropological Object in Contemporary Biomedicine* (October 2013), pp. S77-S86

<https://www.journals.uchicago.edu/doi/full/10.1086/670970>

Larissa MacFarquhar, “The Comforting Fictions of Dementia Care.” *The New Yorker*. October 8, 2018. 30 pages. *Many facilities are using nostalgic environments as a means of soothing the misery, panic, and rage their residents experience.*

<https://www.newyorker.com/magazine/2018/10/08/the-comforting-fictions-of-dementia-care>

Emmanuel Kabengele Mpinga, Tshimungu Kandolo, Henk Verloo, Ngoyi K. Zacharie Bukonda, Ngianga-Bakwin Kandala and Philippe Chastonay, “Traditional/alternative medicines and the right to health: Key elements for a convention on global health.” *Health and Human Rights* 15, 1 (June 2013), pp. 44-57. <https://cdn2.sph.harvard.edu/wp-content/uploads/sites/13/2013/06/Mpinga-FINAL.pdf>

Siddhartha Mukherjee, “AI versus MD,” *The New Yorker*, April 3, 2017: 18 pages. *What happens when diagnosis is automated?*

<https://www.newyorker.com/magazine/2017/04/03/ai-versus-md>

Amanda Schaffer, “The Moral Dilemmas of Doctors During Disaster,” *The New Yorker*. September 12, 2013. <http://www.newyorker.com/tech/elements/the-moral-dilemmas-of-doctors-during-disaster>

Jerome Amir Singh, “How Bioethics is Complementing Human Rights in Realizing Health Access for Clinical Trial Participants: The Case of Formative PrEP Access in South Africa,” *Health and Human Rights* 17, 1 (June 2015), pp. 58-62. <http://www.hhrjournal.org/2015/06/how-bioethics-is-complementing-human-rights-in-realizing-health-access-for-clinical-trial-participants-the-case-of-formative-prep-access-in-south-africa/>

Rebecca Solnit, “Medical Mountaineers,” *The New Yorker*. December 21 & 28, 2015.

<http://www.newyorker.com/magazine/2015/12/21/medical-mountaineers>

[Providing medical care in remote places such as the Himalayas]

Michael Specter, “Rewriting the Code of Life.” *New Yorker* January 2, 2017. *Through DNA editing, researchers hope to alter the genetic destiny of species and eliminate diseases.*

<http://www.newyorker.com/magazine/2017/01/02/rewriting-the-code-of-life>

Darren B. Taichman and Christine Laine, “Reducing Firearm-Related Harms: Time for Us to Study and Speak Out,” *Annals of Internal Medicine* 2015, 62: 520-521.

<http://annals.org/aim/fullarticle/2173244/reducing-firearm-related-harms-time-us-study-speak-out>

Christine Van Dusen, “A Georgia sperm bank, a troubled donor, and the secretive business of baby-making,” *Atlanta Magazine*, March 2018: 18 pages.

<https://www.atlantamagazine.com/great-reads/georgia-sperm-bank-troubled-donor-secretive-business-babymaking/>

Linda Villarosa, “Why America’s Black Mothers and Babies Are in a Life or Death Crisis.” *The New York Times Magazine*, April 11, 2018: 26 pages. *The answer to the disparity in death rates has everything to do with the lived experience of being a black woman in America.*

<https://www.nytimes.com/2018/04/11/magazine/black-mothers-babies-death-maternal-mortality.html>