Curriculum Vitae <u>Ioanna Semendeferi</u> *August 2016*

Office Address

Associate Instructional and Research Professor Science Ethics & History of Science, Department of Physics, TIMES, 338 Health and Biomedical Sciences Center (HBSC), 4811 Calhoun Rd., University of Houston, Houston, TX 77204-6022

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URLs:

http://www.dearscientists.org

&

http://www.uh.edu/ethicsinscience

Google

http://scholar.google.com/citations?user=Hd0FkzYAAAAJ&hl=en&oi=ao

Education/Degrees

• University of Minnesota, Twin Cities, Minnesota, U.S.A.

Ph.D., Program in History of Science, Technology, and Medicine, 2003

Dissertation: Exploiting Uncertainty in Radiation Limits: Monticello Dissenters,

Health Physicists, and the Civilian Nuclear-Power Debate

Aristotle University of Thessaloniki, Thessaloniki, Greece
 B.S., Department of Physics, 1989

Areas of Specialization and Interest

- Ethics in Science, Technology, and Medicine
- Human and Social Dimensions of Science and Technology
- Science Policy, Public Policy, and Public Health
- History of Science 20th Century America
- History of Energy 20th Century America, Nuclear
- History of Technology 20th Century America
- Science of Science

Grants, Honors, and Fellowships

- Re-elected: Executive Board, National Institute for Engineering Ethics, July 2016-June 2019
- Elected: Steering Committee, Forum for the History of Science in America, History of Science Society, November 2013-November 2016
- Elected: Executive Board, National Institute for Engineering Ethics, July 2013-June 2016

- Academic/educational film "Dear Scientists" (released February 2014) writer, director, producer:
 - http://www.dearscientists.org/selections.php
 - http://www.dearscientists.org/reviews.php
 - http://www.dearscientists.org/libraries.php
 - http://www.dearscientists.org/press.php
- Co-investigator (co-PI), "Experiencing Ethics," Ethics Education in Science and Engineering (EESE), National Science Foundation, Grant No: NSF/IIS-1135357,
 - September 2011-August 2015, \$299,325:
 - http://www.uh.edu/ethicsinscience
 - http://www.sciencemag.org/careers/features/2016/01/responsibly-conducting-research
- Doctoral Dissertation Research Grant, Science and Technology Studies (STS),
 National Science Foundation, Grant No: NSF/SBR-9729421, February 1998, \$8,116
- Grant-in Aid, Friends of the Center of History of Physics, American Institute of Physics, January 1997, \$2,500
- Doctoral Dissertation Research Grant, Graduate School, University of Minnesota, December 1996, \$1,000

Other

- Research Travel Grant, Charles Babbage Institute, University of Minnesota, January 1998, \$845
- Departmental Dissertation Research Travel Award, Program in History of Science and Technology, University of Minnesota, January 1998 and February 1997, \$600
- Departmental Nomination for Graduate School Doctoral Dissertation Fellowship, Program in History of Science and Technology, University of Minnesota, 1996-1997
- Departmental Nomination for Summer Dissertation Research Fellowship, Program in History of Science and Technology, University of Minnesota, Summer 1995
- Various Departmental Fellowships, Program in History of Science and Technology, University of Minnesota, Spring 1997, Fall 1995, and Spring 1992, \$9,000
- Various Awards/Travel Grants for participation in Conferences, April 1997-November 2005

Journal Publications

- I. Semendeferi, P. Tsiamyrtzis, M. Dcosta, and I. Pavlidis, "Connecting Past with Present: A Mixed-Methods Science Ethics Course and Its Evaluation," *Science and Engineering Ethics* 22:1 (2016), 251-274
- I. Semendeferi, "Feelings and Ethics Education: The Film 'Dear Scientists'," Special Theme: Scientific Ethics, *Journal of Microbiology and Biology Education* 15:2 (2014), 100-102
- I. Pavlidis, A.M. Petersen, and I. Semendeferi, "Together We Stand," *Nature Physics* 10:10 (2014), 700-702
- A. Petersen, I. Pavlidis, and I. Semendeferi, "A Quantitative Perspective on Ethics in Large-Team Science," *Science and Engineering Ethics*, 20:4 (2014), 923-945
- I. Semendeferi, "Legitimating a Nuclear Critic: John Gofman, Radiation Safety, and Cancer Risks," *Historical Studies in the Natural Sciences* 38:2 (2008), 259-301

Books

• I. Semendeferi, Creating a Nuclear Life: Technocratic Totalitarianism and the Scientific Soul (manuscript under preparation)

Academic/Educational Films: Conferences, Meetings, and Festivals

- I. Semendeferi, "Dear Scientists", Time Length: 26 minutes
 - *Annual Meeting of the Society for the Social Studies of Science (4S), Buenos Aires, Argentina, August 20-23, 2014
 - *Annual Meeting of the University Film and Video Association (UFVA), Bozeman, Montana, August 6-9, 2014
 - *Annual Executive Board Meeting of the National Institute for Engineering Ethics (NIEE), Chicago, May 20-22, 2014
 - *Ethnografilm Festival, International Social Science Council (ISSC) & Society for Social Studies of Science (4S) & University Film and Video Association (UFVA), Paris, France, April 17-20, 2014
 - *Annual Meeting of the Association for Practical and Professional Ethics (APPE), Jacksonville, Florida, Feb 27-Mar 2, 2014

Conferences

- I. Semendeferi, M. Dcosta, A. Petersen, and I. Pavlidis, "Experiencing Ethics at the University of Houston," Poster, *Annual Meeting of the Association for Practical and Professional Ethics*, Jacksonville, Florida, Feb 27-Mar 2, 2014
- I. Semendeferi and I. Pavlidis, "Experiencing Science Ethics: Living in the Present-Connecting with the Past," Session: "Winning the Science-Ethics Wars: Historians, Philosophers, and Bureaucrats," *Annual Meeting of the History of Science Society*, Boston, November 2013
- I. Semendeferi, "Cold War's Technocratic 'Totalitarianism' and J. Gofman's Scientific Soul," Session: "STS: Challenges," Annual Meeting of the Society for the Social Studies of Science, San Diego, October 2013
- I. Semendeferi, "Regulating ALARA--As Low As Reasonably Achievable: Health-Physics Practice and Profession," Session: "Managing Risk: Assuaging Doubt," *Annual Meeting of the History of Science Society*, Pittsburgh, November 2008
- I. Semendeferi, "Regulating ALARA--As Low As Reasonably Achievable? Health-Physics Practice and Profession," Session: "Policy: Health and Energy," *Annual Meeting of the Society for the Social Studies of Science*, Vancouver B.C, November 2006
- I. Semendeferi, "The Apostate: John Gofman, the Linear Non-Threshold Radiation Model, and Cancer Risks," Session: "Human and Animal Bodies in the Age of Nuclear Fear," *Annual Meeting of the History of Science Society*, Minneapolis, November 2005
- I. Semendeferi, "Exploiting Uncertainty in Radiation Limits: Monticello Dissenters, Health Physicists, and the Civilian Nuclear-Power Debate," Session: "Scientific and Political Negotiations of Radiation Safety Issues," *Annual Meeting of the History of Science Society*, Kansas City, October 1998
- I. Semendeferi, "Science in the Civilian Nuclear-Power Debate: The Monticello Controversy and Health Physics," Panel: "Nuclear Systems and Public Trust," *Annual Meeting of the Society for the Social Studies of Science*, Tucson, Arizona, October 1997
- I. Semendeferi, "The Monticello Controversy and the National Debate of the late 1960s-early 1970s over Environmental Protection," 5th Annual Environmental Science and Engineering Conference of the Environmental Engineering Society at the University of Minnesota, Minneapolis, May 1997
- I. Semendeferi, "Is Radioactivity Guilty until Proven Innocent or Is Radioactivity Innocent until Proven Guilty? The Monticello Radiation-Standards Debate," *Annual Meeting of the Midwest Junto for the History of Science*, Ames, Iowa, April 1997

I. Semendeferi, "Nuclear Experts and the State of Minnesota in Conflict with Federal
Authorities," Panel: "Nuclear Age Science," Annual Meeting of Mephistos:
Graduate Student Conference in the History, Philosophy, and Sociology of Science, Technology,
and Medicine, Los Angeles, February 1997

Invited Talks

- I. Semendeferi, "Feelings, Ethics, and the Past's Persistence: Visualization and the Film 'Dear Scientists'," *History and Philosophy of Science Colloquium, Department of History, University of Texas, Austin*, October 2015
- I. Semendeferi, "Addressing Science Ethics, Education, and Policy: History, Visuals, and Numbers," *Department of Physics, University of Houston*, September 2014
- I. Semendeferi, "The Film 'Dear Scientists'," Energy and Environmental History Group, Center for Public History Research Colloquium, University of Houston, September 2014
- I. Semendeferi, "Cold War's 'Technocratic Totalitarianism' and J. Gofman's Scientific Soul," *Energy and Environmental History Group, Center for Public History Research Colloquium, University of Houston*. December 2013
- I. Semendeferi, "The Local Protestors: The Monticello Reactor and Radiation Standards," *Energy, Urban, and Environmental History Group, Center for Public History Research Colloquium, University of Houston*, March 2009
- I. Semendeferi, "Regulating ALARA--As Low As Reasonably Achievable: Health-Physics Practice and Profession," *Department of History, University of Houston*, November 2008

Press

- http://www.sciencemag.org/careers/features/2016/01/responsibly-conducting-research
- http://chronicle.com/blogs/ticker/team-science-tied-to-growth-in-grants-with-multiple-recipients/87077
- http://phys.org/news/2014-10-academia-hollywood.html
- http://abc13.com/news/researchers-say-academia-can-learn-from-hollywood/351532/
- http://uhhelpdesk.custhelp.com/ci/documents/view/1/AvNQ~wqKDv8S~xb~Gv9G~yKsFf0qTyf7BZaCWD7~Pv9L
- http://thedailycougar.com/2014/11/15/uv-professor-to-discuss-how-social-sciences-explain-impact-of-science-technology/
- http://www.dearscientists.org/reviews.php
- http://www.dearscientists.org/press.php
- http://www.dearscientists.org/libraries.php
- http://www.uh.edu/ethicsinscience/seminars.php

Professional Experience

- Steering Committee, Forum for the History of Science in America, History of Science Society, November 2013-November 2016
- Executive Board, National Institute for Engineering Ethics, July 2013-present
- Peer Reviewer, Springer's Science and Engineering Ethics Journal, 2014-present
- Peer Reviewer, Elsevier's Endeavour Journal, 2015-present
- Peer Reviewer, Annual Meeting of the Association for Practical and Professional Ethics, 2015-present
- Associate Instructional and Research Professor, Department of Physics, College of Natural Sciences and Mathematics, University of Houston, September 2014-present
- Assistant Instructional and Research Professor, Science Ethics & History of Science, College of Natural Sciences and Mathematics, University of Houston, February 2008-August 2014

- Affiliated Faculty, Department of History, University of Houston, January 2013-present
- Organizer, "Ethics in Science Seminar Series," NSF Grant No: 1135357, University of Houston, Fall 2011-present: http://www.uh.edu/ethicsinscience/seminars
- Writer, Director, and Producer, Academic/Educational Film: "Dear Scientists," released February 2014: http://www.dearscientists.org
- Film Respondent and Moderator, Jack Lucido's film, "Across the Fence," Annual Meeting of the University Film and Video Association, Bozeman, Montana, August 6-9, 2014
- Session Chair, "The Ethics of Teaching in the Classroom," Annual Meeting of the Association for Practical and Professional Ethics, Jacksonville, Florida, Feb 27-Mar 2, 2014
- Session Organizer, "Winning the Science-Ethics Wars: Historians, Philosophers, and Bureaucrats,"
 Annual Meeting of the History of Science Society, Boston, November 2013
- Session Chair, "The Importance of Formative Assessment in Science and Engineering Ethics
 Education: Some Evidence and Practical Advice," Annual Meeting of the Association for
 Practical and Professional Ethics, San Antonio, February 28-March 3, 2013
- Ph.D. Committee Member, Department of History, University of Houston, June 2013-present
- Advisor, Senior Undergraduate Project, University of Houston, Spring 2010-Fall 2010
- Complimentary Visiting Scholar, Department of History, Rice University, January 2005-June 2011
- Assistant Laboratory Historian-Special Term Appointee, Argonne National Laboratory, April 2005-September 2005
- Research Assistant, Charles Babbage Institute, University of Minnesota, November 1997-June 1999
- Teaching Assistant, University of Minnesota, 1991-1996
- Session Organizer, "Scientific and Political Negotiations of Radiation Safety Issues," Annual Meeting of the History of Science Society, Kansas City, October 1998
- Program Committee Member, 17th Annual Meeting of Mephistos, Minneapolis, September 1998
- Session Chair, "Science after '50," Annual Meeting of Mephistos, Minneapolis, September 1998
- Awards Committee Referee, 17th Annual Meeting of Mephistos, Minneapolis, September 1998
- Manager Assistant, Marketing Department, Kronos Inc. (Greek Publishing Company), Thessaloniki, Greece, August 1989-1990

Teaching Experience

- Designer and Instructor, College of Natural Sciences and Mathematics, University of Houston,
 Ethics in Science (IDNS 6391, IDNS 4391, HONS 4397, HIST 4394):
 Fall: 2016, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008
 Science and Society/Culture in 20th Century America (IDNS 6392, IDNS 4392, HIST 4394):
 Spring: 2016, 2015, 2014, 2013, 2012, 2011, 2009
- Lecturer, Program in History of Science and Technology, University of Minnesota

 The Wartime Manhattan Project (HSci 1813/3813): Spring 1996

 Experimental Science: Physiology in 17th Century-Theory of Respiration (HSci 1812/3812):

 Winter 1995
- Teaching Assistant, Program in History of Science and Technology, University of Minnesota
 History of Ancient Science (HSci 1811/3811): Fall: 1996, 1994, 1993
 The Scientific Revolution (HSci 1812/3812): Winter: 1995, 1994
 History of Modern Science (HSci 1813/3813): Spring: 1996, 1995, 1994
- Teaching Assistant, Department of Physics, University of Minnesota
 General Physics (Phys 1xxx): Fall 1992, Winter 1993, Spring 1993
 General Physics Laboratories (Phys 1xxx): Fall 1991, Winter 1992, Spring 1992

Languages

• English (Fluent)

Reading: Excellent; Writing: Excellent; Speaking: Excellent

• Greek (Fluent)

Reading: Excellent; Writing: Excellent; Speaking: Excellent

Ancient Greek:

Reading: Good

• German

Reading: Fair; Writing: Fair; Speaking: Fair

• French

Reading: Fair

Professional Affiliations

• American Association for the Advancement of Science

*Societal Impacts of Science and Engineering

*History and Philosophy of Science

*Education

American Physical Society

*Forum on the History of Physics

*Forum on Physics and Society

- Association for Practical and Professional Ethics
- University Film and Video Association
- Society for Social Studies of Science
- History of Science Society

*Joint Caucus for Socially Engaged Philosophers and Historians of Science

• Society for the History of Technology