## HOS/HIS 599 Fall 2018

# Special Topics in the History of Science, Technology, & Medicine: *Reckoning with Biological Determinism*

"History is not about the past; it is about arguments we have about the past. And because it is about arguments that we have, it is about us."

Ira Berlin, *The Long Emancipation: The Demise of Slavery in the United States* (Cambridge, MA: Harvard University Press, 2015).

Professor Erika Lorraine Milam	email: emilam@princeton.edu
Tuesdays, 9:00-11:50am	office hours: Mondays 1:00-3:00pm
230 Dickinson Hall	

This seminar explores the changing intellectual grounds on which debates about biological determinism were waged, from the 18th century to the present day. The readings alternate between weeks that focus on humans and weeks that focus on non-human actors to illustrate the variety and flexibility of biological narratives in the service of naturalizing some individual, social, and political behaviors (and casting others as "unnatural"). These readings will also allow us to interrogate questions of causality in historical writings about nature(s), including mosquito empires, global populations, and epigenetic landscapes.

ASSIGNMENTS

Over the course of the semester, you will be asked to produce, on topics of your choosing, two 3,000-word essay reviews (exploring three to four books each). The final assignment is to produce a 5,000-word research proposal. If you would prefer to write a full research paper, that is also possible—it would substitute for one of the essay reviews and the research proposal.

READINGS

# Week 1RaceSeptember 18

Rana Hogarth, *Medicalizing Blackness: Making Racial Difference in the Atlantic World, 1780-1840* (Chapel Hill: University of North Carolina Press, 2017).

Lorraine Daston, "The Naturalistic Fallacy is Modern," in Isis 105/3 (2014): 579-587.

## Additional Exploration

Joyce Chaplin, Subject Matter: Technology, the Body, and Science on the Anglo-American Frontier, 1500-1676 (Cambridge, MA: Harvard University Press, 2001). Surekha Davies, Renaissance Ethnography and the Invention of the Human: New Worlds, Maps and Monsters (New York: Cambridge University Press, 2016). Britt Rusert, *Fugitive Science: Empiricism and Freedom in Early African American Culture* (New York: New York University Press, 2017).

- Suman Seth, *Difference and Disease: Medicine, Race, and the Eighteenth-Century British Empire* (Cambridge: Cambridge University Press, forthcoming Sept. 30, 2018).
- Fernando Vidal, *The Sciences of the Soul: The Early Modern Origins of Psychology* (Chicago: University of Chicago Press, 2011).
- Larry Wolff, Inventing Eastern Europe: The Map of Civilization on the Mind of the Enlightenment (Palo Alto: Stanford University Press, 1994).

# Week 2 Mosquitos September 25

- J. R. McNeill, *Mosquito Empires: Ecology and War in the Greater Caribbean, 1620-1914* (New York: Cambridge University Press, 2010).
- Nasser Zakariya, "Is History Still a Fraud?" *Historical Studies in the Natural Sciences* 43/5 (2013): 631-641.

# Additional Exploration

- David Christian, "The Case for 'Big History," *Journal of World History* 2/2 (1991): 223-238.
- David Christian, *Maps of Time: An Introduction to Big History*, 2<sup>nd</sup> ed. (Berkeley: University of California Press, 2011).
- Jo Guldi and David Armitage, *The History Manifesto* (Cambridge: Cambridge University Press, 2014): https://doi.org/10.1017/9781139923880. Deborah Cohen and Peter Mandler, response by Jo Guldi and David Armitage, "AHR Exchange: On *The History Manifesto,*" *American Historical Review* (April 2015): 527-554.
- Edmund Russell, *Evolutionary History: Uniting History and Biology to Understand Life on Earth* (New York: Cambridge University Press, 2011).
- Daniel Lord Smail, *On Deep History and the Brain* (Berkeley: University of California Press, 2008).
- Sverker Sörlin and Paul Warde, "The Problem of Environmental History: A Re-Reading of the Field," *Environmental History* 12/1 (2007): 107-130.
- Nasser Zakariya, *A Final Story: Science, Myth, and Beginnings* (Chicago: University of Chicago Press, 2017).



# Week 3 Cotton October 2

Andrew Zimmerman, Alabama in Africa: Booker T. Washington, the German Empire, and the Globalization of the New South (Princeton: Princeton University Press, 2012).

Sven Beckert, "American Danger: United States Empire, Eurafrica, and the Territorialization of Industrial Capitalism, 1870-1950," *The American Historical Review* 122/4 (2017): 1137-1170.

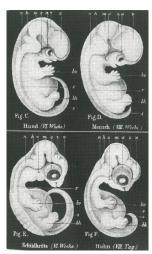
Additional Exploration

Daniela Bleichmar, Visible Empire: Botanical Expeditions and Visual Culture in the Hispanic Enlightenment (Chicago: University of Chicago Press, 2012).

Philip Pauly, *Fruits and Plains: The Horticultural Transformation of America* (Cambridge, MA: Harvard University Press, 2007).

Theodore Porter, *Genetics in the Madhouse: The Unknown History of Human Heredity* (Princeton, NJ: Princeton University Press, 2018).

Week 4



EmbryosOctober 9Nick Hopwood, Haeckel's Embryos: Images, Evolution, and Fraud<br/>(Chicago: University of Chicago Press, 2015).

Robert N. Proctor, "Agnotology: A Missing Term to Describe the Cultural Production of Ignorance (and Its Study)," in *Agnotology: The Making and Unmaking of Ignorance* (Palo Alto: Stanford University Press, 2008), 1-37.

Additional Exploration

Adriana Novoa and Alex Levine, *From Man to Ape: Darwinism in Argentina, 1870-1920* (Chicago: University of Chicago Press, 2010).

Jim Endersby, *Imperial Nature: Joseph Hooker and the Practices of Victorian Science* (Chicago: University of Chicago Press, 2010).

# First Essay Review Due: October 12, 2018

Week 5	Culture	October 16

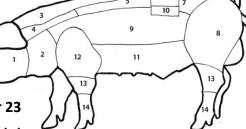
Tracy Teslow, Constructing Race: The Science of Bodies and Cultures in American Anthropology (New York: Cambridge University Press, 2014).
Ian Hacking, "Making Up People," London Review of Books 28/16 (17 August 2006): 23-26.
Joel Isaac, "Tangled Loops: Theory, History, and the Human Sciences in Modern America," Modern Intellectual History 6/2 (2009): 397-424.

## Additional Exploration

Geoffrey Bowker and Susan Leigh Star, Sorting Things Out: Classification and Its Consequences (Cambridge, MA: MIT Press, 2009).

# Week 6

October 23



Tiago Saraiva, *Fascist Pigs: Technoscientific Organisms and the History of Fascism* (Cambridge, MA: MIT Press, 2016).

Pigs

John Berger, "Why Look at Animals," in *About Looking* (1980: New York: Random House, 1991), 1-30.

Additional Exploration

William Cronon, "Annihilating Space: Meat," in *Nature's Metropolis: Chicago and the Great West* (New York: Norton, 1991), 207-261.

Lorraine Daston and Gregg Mitman, eds. *Thinking with Animals: New Perspectives on Anthropomorphism* (New York: Columbia University Press, 2005). Frederick Wiseman, *Primate* (Zipporah Films, 1974).

## – FALL BREAK –

#### **REMEMBER TO VOTE**

## Week 7 Populations November 6

Alison Bashford, *Global Population: History, Geopolitics, and Life on Earth* (New York: Columbia University Press, 2014).

Nikolas Rose, "The Human Sciences in a Biological Age," *Theory, Culture & Society* 30/1 (2013): 3-34.

Additional Exploration

Michelle Murphy, The Economization of Life (Durham: Duke University Press, 2017).

Nikolas Rose, *Inventing Ourselves: Psychology, Power, and Personhood* (Cambridge: Cambridge University Press, 1998).

Dana Simmons, *Vital Minimum: Need, Science, and Politics in Modern France* (Chicago: University of Chicago Press, 2015).

## Week 8 Sex November 13

- Dagmar Herzog, *Cold War Freud: Psychoanalysis in an Age of Catastrophes* (Cambridge: Cambridge University Press, 2017).
- Joanne Meyerowitz, "'How Common Culture Shapes the Separate Lives': Sexuality, Race, and mid-Twentieth-Century Social Constructionist Thought," *Journal of American History* 96/4 (2010): 1057-1084.

Additional Exploration

- Anne Harrington, *Re-Enchanted Science: Holism in German Culture from Wilhelm II to Hitler* (Princeton: Princeton University Press, 1999).
- Joanne Meyerowitz, *How Sex Changed: A History of Transsexuality in the United States* (Cambridge, MA: Harvard University Press, 2002).
- Daniel Todes, *Ivan Pavlov: A Russian Life in Science* (New York: Oxford University Press, 2014).
- Camille Robcis, Todd Shepard, Suzanne Stewart-Steinberg, Regina Kunzel, Michal Shapira, and Dagmar Herzog, "FORUM: Texts, Contexts, and the History of Psychoanalysis," *Modern Intellectual History* 15/3 (2018): 36 pp.
- Fernando Vidal, "Brainhood, Anthropological Figure of Modernity," *History of the Human Sciences* 22/1 (2009): 5-36.

Week 9 Blood November
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- Joanna Radin, *Life on Ice: A History of New Uses for Cold Blood* (Chicago: University of Chicago Press, 2017).
- Kimberly TallBear, "Genomic Articulations of Indigeneity," *Social Studies of Science* 43/4 (2013): 509-533.

#### Additional Exploration

- Aaron Panofsky, *Misbehaving Science: Controversy and the Development of Behavior Genetics* (Chicago: University of Chicago Press, 2014).
- Marianne Sommer, *History Within: The Science, Culture, and Politics of Bones, Organisms, and Molecules* (Chicago: University of Chicago Press, 2016).
- Kimberly TallBear, *Native American DNA: Tribal Belonging and the False Promise of Genetic Science* (Minneapolis: University of Minnesota, 2013).
- Keith Wailoo, Alondra Nelson, and Catherine Lee, eds. *Genetics and the Unsettled Past: The Collision of DNA, Race, and History* (New Brunswick: Rutgers University Press, 2012).

Week 10 Bodies	November 27
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- Dorothy Roberts, Fatal Invention: How Science, Politics, and Big Business Re-Create Race in the Twenty-First Century (New York: New Press, 2011).
- Ruha Benjamin, "Black AfterLives Matter: Cultivating Kinfulness as Reproductive Justice," in Adele Clarke and Donna Haraway, eds. *Making Kin not Population: Reconceiving Generations* (Chicago: Prickly Paradigm Press, 2018): pages.
- Duana Fullwiley, "Race, Genes, Power," British Journal of Sociology 66/1 (2015): 36-45.

Additional Exploration

- Ruha Benjamin, *People's Science: Bodies and Rights on the Stem Cell Frontier* (Cambridge, MA: Harvard University Press, 2013).
- Sarah Franklin, *Biological Relatives: IVF, Stem Cells, and the Future of Kinship* (Durham: Duke University Press, 2013).
- Helen Longino, *Studying Human Behavior: How Scientists Investigate Aggression and Homosexuality* (Chicago: University of Chicago Press, 2013).
- Alondra Nelson, *The Social Life of DNA: Race, Reparations, and Reconciliation After the Genome* (Boston: Beacon Press, 2016).
- Jenny Reardon, *Race to the Finish: Identity and Governance in an Age of Genomics* (Princeton, NJ: Princeton University Press, 2004).

#### Second Essay Review Due: November 30, 2018

#### Week 11 Development December 4

- Susan Squier, *Epigenetic Landscapes: Drawing as Metaphor* (Durham: Duke University Press, 2017).
- Sarah Richardson, "Plasticity and Programming: Feminism and the Epigenetic Imaginary," Signs 43/1 (2017): 29-52.
- Miranda Waggoner, "Cultivating the Maternal Future: Public Health and the Prepregnant Self," *Signs* 40/4 (2015): 939-962.

## Additional Exploration

- Elizabeth Armstrong, Conceiving Risk, Bearing Responsibility: Fetal Alcohol Syndrome & the Diagnosis of Moral Disorder (Baltimore: Johns Hopkins University Press, 2003).
- Miranda Waggoner, *The Zero Trimester: Pre-Pregnancy Care and the Politics of Reproductive Risk* (Berkeley: University of California Press, 2017).
- Sarah Richardson, *Sex Itself: The Search for Male and Female in the Human Genome* (Chicago: University of Chicago Press, 2013).

#### Week 12 Mushrooms December 11

- Anna Tsing, *Mushrooms at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton: Princeton University Press, 2015).
- Joyce Chaplin, "Can the Nonhuman Speak? Breaking the Chain of Being in the Anthropocene," *Journal of the History of Ideas* 78/4 (2017): 509-529.

## Additional Exploration

- Rob Nixon, Slow Violence and the Environmentalism of the Poor (Cambridge, MA: Harvard University Press, 2011). Megan Raby, American Tropics: The Caribbean Roots of Biodiversity Science (Chapel Hill: The University of
- North Carolina, 2017). Thom van Dooren, *Flight Ways: Life and Loss at the Edge of*

*Extinction* (New York: Columbia University Press, 2014).



# Final Project Proposal / Research / Historiographic Paper Due: January 15, 2019