

MDS/WGS493r—Race and Gender in Science

Spring 2004

Tuesdays, 4-7, Harrelson 146

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Description

By the last decades of the twentieth century, the biological categorization of humans, by race and gender, had been challenged from both inside and outside of the scientific community. Though a century ago in the United States, there were economic, social, and educational conventions, practices, and laws that required and governed the separation of people by these categories, today's scientific professions have publicly renounced discrimination and embraced the ideal of diversity. The National Academy of Sciences, National Science Foundation, American Association for the Advancement of Science, and the National Institutes of Health, among others, have issued formal statements to encourage the education and hiring of women and minorities for all levels of professional practice. The conventional wisdom today is that the advancement of scientific knowledge is enhanced by cultural and social diversity.

Despite these significant changes in perspective, the vestiges of nineteenth-century science have lives of their own. This course explores the historical roots and contemporary forms of resilient and persisting debates about the empirical viability and significance of distinctions based on race and gender. The course draws on theory and research from psychology, Africana Studies, gender theory, women's studies, sociology, philosophy, and history to examine these debates in the context of the representation of women and people of color in science and engineering and in light of contemporary social, political, and public health issues.

Goals

1. Students will be able to understand how the practice of science subordinated racial and gender positions.
2. Students will be able to look more astutely at the place of race and gender in formulating the problems and approaches to scientific work.
3. Students will be able to examine the links between race and gender in science.
4. Students will be able to describe how scientific research has influenced social perspectives and assumptions about racial or gender differences.
5. Students will be able to explore how social perspectives and assumptions about racial and gender differences have influenced scientific practices and research.

Evaluation

Students will be asked to complete three of four writing assignments, with deadlines scheduled across the semester. Each paper will be 8-10 pages long, double-spaced, and each will address a question that asks students to synthesize course readings as well as material from class discussions. Deadlines are February 17, March 16, April 6, and May 4. Questions for all of the papers will be distributed on February 3. Each paper is worth an increasing amount toward your grade: paper #1 (20%), paper #2 (25%), and paper #3 (30%), with course attendance and participation an additional 25%.

Text

Sandra Harding, ed., *The “Racial” Economy of Science: Toward a Democratic Future* (Bloomington: Indiana University Press, 1993; \$24.95 paper). All readings are from the text unless otherwise indicated. Other readings are available on our course website. We will also have guest speakers, and we will distribute any readings they require.

I. Foundations in Critiques of Science as “Western”

- January 13 Introductions, course overview and requirements
- January 20 “Eurocentric Scientific Illiteracy,” Sandra Harding (pp. 1-29)
 “Poverties and Triumphs of the Chinese Scientific Tradition,” Joseph Needham (pp. 30-46)
 “On Race, Gender, and Science: Black Women as Objects and Agents of Sociological Knowledge,” Patricia Hill Collins (website)
- January 27 “Black Athena: Hostilities to Egypt in the Eighteenth Century,” Martin Bernal (pp. 47-63)
 “Early Andean Experimental Agriculture,” Jack Weatherford (pp. 64-77)

II. Science Constructs “Race”

- February 3 Introduction, “Science Constructs ‘Race’” (pp. 81-83)
 “American Polygeny and Craniometry before Darwin: Blacks and Indians as Separate, Inferior Species,” Stephen Jay Gould (pp. 84-115)
 “Racial Classifications: Popular and Scientific,” Gloria Marshall (pp. 116-27)

***** **Paper Options Distributed.**

- February 10 “The Study of Race,” S.L. Washburn (pp. 128-32)
 “IQ: The Rank Ordering of the World,” R. C. Lewontin, Steven Rose, and Leon Kamin (pp. 142-60)

“The Health of Black Folk: Disease, Class, and Ideology in Science,”
Nancy Krieger and Mary Bassett (pp. 161-69)

February 17 “Appropriating the Idioms of Science: The Rejection of Scientific
Racism,” Nancy Stepan and Sander Gilman (pp. 170-93)
“New Technologies of Race,” Evelyn Hammonds (website)

Paper Option #1 Deadline.

III. Science Constructs Class

- February 24 “Aesculapius Was a White Man: Race and the Cult of True Womanhood,”
Ronald Takaki (pp. 201-9)
“Co-Laborers in the Work of the Lord: Nineteenth-Century Black Women
Physicians,” Darlene Clark Hine (pp. 210-227)
“Ernest Everett Just: The Role of Foundation Support for Black Scientists
1920-1929,” Kenneth Manning (pp. 228-238)
“The Impact of the “Cult of True Womanhood” on the Education of Black
Women,” Linda Perkins (website)
- March 2 “Never Meant to Survive: A Black Woman’s Journey-An Interview with
Evelynn Hammonds,” Aimee Sands (pp. 239-53)
NSF data and contemporary representation issues (from NSF.gov website)
- March 9 Spring Break
- March 16 “The Tuskegee Syphilis Experiment: ‘A Moral Astigmatism,’”
James Jones (275-86)
“Calling the Shots? The International Politics of Depo-Provera,”
Phillida Bunkle (287-302)
- ***** **Paper Option #2 Deadline.**

IV. Science Constructs Gender

- March 23 “Science, Sex, and Education,” Janice Trekker (website)
“Race and Gender: The Role of Analogy in Science,” Nancy Stephan
(359-76)
- March 30 “Sociobiology, Biological Determinism and Human Behavior,”
Ruth Bleier (website)
“Walking a Tightrope: The Feminist Life of a Drosophila Biologist,”
Marta Wayne (website)
- April 6 “Science, Sex, and Stereotypical Images in Scientific Advertising,” Mary
Barbercheck (website)
“Gender and Science: An Update,” Evelyn Fox Keller (website)
- ***** **Paper Option #3 Deadline.**

V. Democracy, International Development and the Future

- April 13 "Colonialism and the Evolution of Masculinist Forestry," Vandana Shiva (pp. 303-14)
 "Applied Biology in the Third World: The Struggle for Revolutionary Science," Richard Levins and Richard Lewontin (pp. 315-25)
 "Environmental Racism," Karl Grossman (pp. 326-34)
- April 20 "Modern Science in Crisis: A Third World Response," Third World Network (pp. 484-518)
 "Is Science Multicultural," Sandra Harding (website)
- April 27 Course review. We will dedicate this day to reviewing the course content, including any new topics or material of interest to students, and evaluation.
- May 4 Scheduled final exam period.

***** **Paper Option #4 Deadline is 5 PM, May 4.**

Additional Readings

- "Constructing Race: Differentiating Peoples in the Early Modern World: Special Issue."
William and Mary Quarterly 54.1 (1997):3-352.
- Barkan, Elazar. *The retreat of scientific racism: Changing concepts of race in Britain and the United States between the world wars*. Cambridge: Cambridge Univ. Press, 1992.
- Bloom, Lisa. "Constructing Whiteness: Popular Science and the National Geographic in the Age of Multiculturalism." *Configurations* 2.1 (1994):15-32.
- Clarke, Adele. "Genetic Disorders, Social Order." *Socialist Review* 21 (1991):171-176.
 Note: Review of Duster's *Backdoor to Eugenics*.
- Duster, Troy. *Backdoor to Eugenics*. New York: Routledge, 1990.
- Gates, E. N. "The Concept of "Race" in Natural and Social Science." In *Critical Race Theory: Essays on the Social Construction and Reproduction of "Race"*. Edited by E. N. Gates. New York: Garland Publishing, Inc., 1997.
- Gordon, Linda. *Woman's Body, Woman's Right: A Social History of Birth Control in America*. New York: Grossman, 1976.
- Hammonds, Evelyn. "Race, Sex, AIDS: The Construction of 'Other'." *Radical America* 20.6 (1987):28-36.

- Haraway, Donna. "Universal Donors in a Vampire Culture. Its All in the Family: Biological Kinship Categories in the Twentieth Century United States." In *Uncommon Ground*. Edited by William Cronon. New York: Norton, 1995. 321-66, 531-36. Note: Includes a thought provoking chart of changing terms concerning race and kinship in 20th century America. Republished in 1997 in her book *Modest Witness@Second_Millennium. FemaleMan_Meets_OncoMouse* (New York, Routledge).
- Hine, Darlene Clark. *Black Women in White: Racial Conflict and Cooperation in the Nursing Profession 1890-1950*. Bloomington: Indiana University Press, 1989.
- Hunt, Nancy Rose. "'Le bebe en brousse': European Women, African Birth Spacing and Colonial Intervention in Breastfeeding in the Belgian Congo." *International Journal of African Historical Studies* 21.3 (1988):401-32.
- Laqueur, Tom. *Making Sex: Body and Gender from the Greeks to Freud*. Cambridge: Harvard University Press, 1990.
- Lewontin, Richard C., Leon J. Kamin, and Steven P. R. Rose. *Not in our genes: biology, ideology, and human nature*. New York: Pantheon Books, 1984.
- Moldow, Gloria. *Women Doctors in Gilded-Age Washington: Race, Gender, and Professionalization*. Urbana: University of Illinois Press, 1987.
- Nelkin, Dorothy, and M. Susan Lindee. "The mediated gene: Stories of gender and race." In *Deviant bodies: Critical perspectives on difference in science and popular culture*. Edited by Jennifer Terry and Jacqueline Urla. Bloomington: Indiana Univ. Press, 1995. 387-402.
- Roberts, Dorothy E. *Killing the black body: race, reproduction, and the meaning of liberty*. New York: Pantheon Books, 1997.
- Sacks, Karen. *Caring by the Hour: Women, Work, and Organizing at Duke Medical Center*. Urbana: University of Illinois Press, 1988.
- Savitt, Todd. "A Journal of Our Own: The Medical and Surgical Observer and the Beginnings of an African-American Medical Profession in Late-19th-Century America." *Journal of the National Medical Association* 88.1 (1996):52-60.
- Smith, Susan L. *Sick and Tired of Being Sick and Tired: Black Women's Health Activism in America, 1890-1950*. Philadelphia: University of Pennsylvania Press, 1995.
- Stoler, Ann. "Sexual Affronts and Racial Frontiers: European Identities and the Cultural Politics of Exclusion in Colonial Southeast Asia." *Comparative Studies in Society and History* 34.2 (1992):514-51.
- Tobach, Ethel, and Betty Rosonoff. *Challenging Racism and Sexism: Alternatives to Genetic Explanations*. New York: Feminist Press at the City University of New York, 1994.