

## **Women in Science Course Materials, Using Biographies to Illustrate Historical Changes and Theories**

Laura L Mays Hoopes,  
Pomona College,  
Claremont CA 91711

### **I History of women's acceptance as scientists in the USA**

Resource materials:

Margaret Rossiter *Women Scientists in America: Forging a New World since 1972* (volume 3), Johns Hopkins Press, 2012,  
*Women Scientists in America: Before Affirmative Action, 1940-1972* (Volume 2) Johns Hopkins Press, 1998,  
*Women Scientists in America: Struggles and Strategies to 1940* Johns Hopkins Press, 1984.

**II Biographies illustrating early issues** such as denial of university education, outright rejection as scientists, need to be workaholic loners,  
Resource materials:

*A Feeling for the Organism*, Evelyn Fox-Keller (on Barbara McClintock)  
*In Praise of Imperfection*, Rita Levi-Montalcini  
Nobel autobiography (online), Gertrude Elion

### **III. Theory and Issues for women scientists.**

Who were the white men doing science when women began knocking at the door? Why did they want to do science? Why did others want to prevent women from entering their field? What was at stake? What strategies did people pursue to break in/deny entrance?

Resource materials:

Vivian Gornick. *Women in Science, Then and Now*  
Henry Etzkowitz, Carol Kemelgor, and Brian Uzzi *Athena Unbound*  
Donna Harroway, *Simians, Cyborgs, and Women: The Reinvention of Nature*. Routledge, NY, 1991, Chapter 9, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective" pp183-201  
Sandra Harding, excerpt from *The Science Question in Feminism*. Ithaca, Cornell University Press (1986).  
Anne Fausto Sterling excerpt from *Myths of Gender: Biological Theories about Women and Men*. New York, Basic (1985).

IV, **Biographies illustrating later issues** such as welcome that varied at different locations, ways of dealing with rejection, plusses and minuses of claiming to be feminist.

Resource materials:

Eugene Strauss, *Rosalyn Yalow, Nobel Laureate: Her Life and Work in Medicine*, Basic Books, 2000.

Laura L Mays Hoopes, *Breaking Through the Spiral Ceiling: An American Woman Becomes a DNA Scientist*. Lulu.com. 2009 second edition 2013.

#### V. **Are Women Equipped for Science?**

Are we ready to discuss the possible biology of sex differences? What's at stake? Can sex differences in the brain be established for humans from data at hand? Is asymmetric responsibility for motherhood inherent in biology?

Resource materials:

Linley Erin Hall, *Who's Afraid of Marie Curie?* Seal Press, 2007.

Rebecca Jordan-Young, *Brain Storm: The Flaws in the Science of Sex Differences*. Harvard University Press, 2011.

Emily Monosson, editor, *Motherhood: The Elephant in the Laboratory, Women Scientists Speak Out*. ILR Press, 2010.

VI. **Biographies illustrating current issues** such as respect by scientists and non-scientists for women in science, ways that women scientists try to bypass barriers, science with single motherhood, role of anti-LGBT bias in careers of women in science.

Resource materials:

C Brady, *Elizabeth Blackburn and the Story of Telomeres*. MIT Press, 2009.

Laura L Mays Hoopes, "Women on Ice: Arctic Researchers" *AWIS Magazine*, 2009.

Neena Schwartz, *A Lab of My Own*. Rodopi (Value Inquiry), 2010.

Margaret Lowman, *Life in the Treetops*, Yale University Press, 2000.