

## About Sheila Tobias:

Sheila Tobias is a feminist educator, an early founder of Women's Studies courses and programs and a contemporary of all the second-wave feminists in the U.S. She was trained at Harvard-Radcliffe and did a terminal master's at Columbia University in the 1960s, to become – rather than a scholar, what she dubbed a “scholar-activist” -- a change agent and early adopter of women's studies at Cornell, Connecticut Wesleyan, Vanderbilt, and UC-San Diego. She is particularly credited with efforts to enlarge the proportion of women enrolling in mathematics and the sciences *at college* and to fashion a post-graduate (master's level) STEM curriculum to meet women's changing roles. In that connection, she pioneered the issues of “math anxiety” and (physical) science avoidance, in terms of seen and unseen barriers to women's full participation in the STEM subjects. She is the author of 14 books for the general public including *Overcoming Math Anxiety*, *They're not dumb, they're different*, *Rethinking Science as a Career*, *Women, Militarism and War* (co-editor), *Science Teaching as a Profession*, and *Faces of Feminism: An Activist's Reflections on the Women's Movement*. Overall, she has devoted herself to new thinking about strategies for bringing women from margin to mainstream.

*Special thanks to our host, Alliance for Justice*

## Clearinghouse on Women's Issues

*presents:*



***Women and STEM: The Professional Science  
Masters- changing lives and careers.***

**January 28, 2014  
12:00pm**

**11 Dupont Circle NW, 2<sup>nd</sup> Floor  
Washington, DC 20036**



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[www.womensclearinghouse.org](http://www.womensclearinghouse.org)



## **Women and STEM: The Professional Science Masters- changing lives and careers.**

### **WELCOME**

**Sue Klein**

Co-President, Clearinghouse on Women's Issues

**Harriett Stonehill**

Co-President, Clearinghouse on Women's Issues

### **Introduction: Janice Koch**

### **Speaker: Sheila Tobias**

### ***About the program***

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When Sheila Tobias co-wrote *Rethinking Science as a Career* in 1995, academic jobs in science were so scarce that many PhDs were considering changing fields. The authors had no idea that the book would help launch a whole new degree. PhD students interviewed for the book repeatedly expressed regret about lacking skills in business fundamentals, computer science and writing. Tobias realized that the gap could be met by a *new master's-level curriculum*. Further research found career options after a B.S. in science or mathematics to be "limited" and that professors in graduate programs tended to steer their students toward research careers, despite a dearth of faculty positions. Meanwhile, the business leaders she interviewed said that the STEM graduates

they wanted to hire didn't have the interpersonal skills necessary for success in industry.

Tobias and her colleagues decided that if a new M.S. could be tailored to offer more professional skills along with science training, the M.S. might become a competitive degree in science and mathematics instead of a consolation prize for a "failed PhD" that was usually assumed to be the case. 15 years and \$23 million (Sloan Foundation funding) later, the PSM Professional Science (mathematics) Masters is just welcoming its 300<sup>th</sup> affiliate on one of the 127 university campuses involved. 6,000 students are currently enrolled in this year's entering classes of whom approximately 50% are female. Jobs are easy to find (Tobias and her team track graduates using social media) and, according to the Council of Graduate Schools, they are earning average salaries of \$60,000.

For women, the professional science master's provides many advantages: a "terminal" degree at age 24 (a career up and running by age 30); portability; variation in work opportunities; and a "differentiator" when competing for positions in science/math based industries. A new thrust is to increase PSM graduates' penetration into the public sector for which the government's esteemed Management Training Fellowships have just added a separate and distinct "STEM competition."

...adapted from "Guide to Professional Science Master's," *Scientific American*, November 2013.

**The Clearinghouse on Women's Issues** sponsors monthly public forums to address the social and political issues of diverse groups of women in today's society -- locally, nationally and internationally. These Washington, DC, brown bag lunches provide information to raise awareness for individuals and organizations to act as a catalyst for networking and advocacy. [www.womensclearinghouse.org](http://www.womensclearinghouse.org)