OVERVIEW OF N.I.H. GRANT PROJECT:
Assessing and Reducing Gender Bias in STEM Recruitment, Mentorship, and Evaluation
Wendy M. Williams, P.I.
Stephen J. Ceci, Co-P.I.

Numerous commissions, panels, and symposia have lamented the dearth of women in science, especially in math-intensive fields where women's underrepresentation is greatest (Ceci, Williams, & Barnett, 2009; National Academy of Science, 2005; National Science Board, 2006). The inclusion of more women in the academic workforce has been identified as a critical national need (Shalala et al., 2006); talented women complete Ph.D.s, yet they do not transition into tenure track academic positions at the rate their numbers appear to warrant (e.g., Ceci et al., 2009; Ginther, 2001, 2004; Shalala et al., 2006). This project, **Assessing and Reducing Gender Bias in STEM Recruitment, Mentorship and Evaluation**, explores how predoctoral women and men are recruited to and informally trained in graduate school, and how they are evaluated when they apply for their first tenure-track position. We seek to better understand, and ultimately improve, norms of behavior that may consciously or unconsciously lead current professors to create gender-biased recruitment, mentorship, and evaluation environments. The studies explore whether current practices induce identity threat in prospective women STEM graduate students (thus reducing female enrollments and retention), and whether STEM professors treat their male and female graduate students differently in the advice and training they dispense. The studies also examine current professors' use of gender and gender-related information in evaluation of applicants for assistant professorships. A national canvass of deans and provosts to ascertain the desirability and feasibility of recommendations emerging from studies 1-3 and an educational campaign disseminating the findings are part of the research plan.

This research (consisting of two national data collections, one laboratory study, one canvass of provosts and deans, and one widescale educational dissemination component) spans the biological, physical, and social/behavioral sciences, to broaden our understanding of gender-related recruitment, mentorship, and evaluation norms and behaviors and how they vary across fields. This research will illuminate reasons for the success—or lack thereof—of women's versus men's transition from college to graduate school and ultimately to academia. Our results will help hone unbiased, effective recruitment, mentorship, and evaluation practices, leading to greater gender-fairness in the scientific recruitment, training, and job-placement processes. We plan to disseminate broadly our results with the goal of initiating and enhancing explicit discussions of key aspects of professional training often not discussed openly or even acknowledged. These experiences may differentially impact success of male versus female graduate students due to biased recruitment, faculty mentorship, and job-selection practices, particularly as a consequence of differential career/life trajectories of women and men scientists.