

W19 Women in the Sciences: Examining Systemic Barriers and Becoming Agents of Change

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After attending this presentation, attendees will become better acquainted with the state of female representation in the sciences. Attendees will also learn how this representation has shifted over the past several decades, the systemic inequalities in equity and parity between the sexes, and gender-specific micro- and macro-aggressions. Finally, attendees will discuss how these issues manifest within the forensic sciences and how to work collaboratively to conceive strategies for change.

This presentation will impact the forensic science community by demonstrating how gender-specific societal bias in the sciences creates barriers for the advancement of women, contributes to gender inequity in leadership positions, and undermines forensic science's ability to live up to its full potential.

Over the last two years, gender equality has made headlines in the sciences, beginning with the ill-judged "trouble with girls" comment by a British biochemist to more serious cases of endemic sexual misconduct in astronomy and biological anthropology. As more women populate the sciences, specifically forensic science, blatant discrimination is less common, but women face numerous invisible and unacknowledged obstacles. Evaluation criterion for hiring, promotion, invited talks, and awards has been shown to still be biased toward men. In our own Academy, from 2000-2016 eighty-eight percent of AAFS presidents have been men (15/17). The International Academy of Legal Medicine (IALM) has never had a female president (1936-present).

In 2005, the National Academies created the Committee on Maximizing the Potential of Women in Academic Science and Engineering. This committee was designed to provide recommendations on how to maximize female talent in science and engineering. In 2007, the committee reported its findings. Specifically, they found that despite women having the cognitive ability to succeed in science and engineering, women interested in such fields are lost at every educational transition. Moreover, once in these professions, women are more likely to experience discrimination from implicit biases as well as face disadvantageous subjective evaluation criteria and organization structure. In response to this report, the National Institutes of Health formed the Working Group of Women in Biomedical Careers to consider barriers to women in the sciences, to develop recruitment and advancement initiatives, and created \$16.5 million in funding opportunities to support research on these topics. Nearly a decade after the initial report, the results of this funding still find significant gender inequalities in compensation, research funding, work-life integration, gender consciousness, and access to mentorship. These topics will be explored in this workshop through podium presentations, panel discussions, and break-out sessions.

An overview of the current trajectory of women in the sciences and conclude by discussing current approaches and best practice to capturing and capitalizing on female talent will be provided. Finally, the audience will be challenged to create action plans to limit systemic barriers and societal biases that deprive the American Academy of Forensic Sciences and their own institutions/organizations of talented and accomplished women across all levels of leadership.

Women, Science, Inequality

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