Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering

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Review of the report by the National Academies, with a focus on action strategies in the physical sciences. Women face barriers to hiring and promotion in research universities in many fields of science and engineering; a situation that deprives the United States of an important source of talent as the country faces increasingly stiff global competition in higher education, science and technology, and the marketplace. Eliminating gender bias in universities requires immediate, overarching reform and decisive action by university administrators, professional societies, government agencies, and Congress. Forty years ago, women made up only 3 percent of America’s scientific and technical workers, but by 2003 they accounted for nearly one-fifth. In addition, women have earned more than half of the bachelor’s degrees awarded in science and engineering since 2000. However, their representation on university and college faculties fails to reflect these gains. Among science and engineering Ph.D.s, four times more men than women hold full-time faculty positions. And minority women with doctorates are less likely than white women or men of any racial or ethnic group to be in tenure positions. The report urges higher education organizations and professional societies to form collaborative, self-monitoring body that would recommend standards for faculty recruitment, retention, and promotion; collect data; and track compliance across institutions. A “report card” template is provided in the report. To read the report online, add a comment, or purchase hard copy, go to: http://www.engineeringpathway.com/ep/learning_resource/summary/index.jhtml?id=94A4929D-F1B2-432E-8167-63335569CB4E.