

203 N La Salle Street, Suite 1675 Chicago, IL 60601-1267

Testimony for Stacey DelVecchio, President Society of Women Engineers (SWE) U.S. Senate Committee on Appropriations FY15 Hearing: Driving Innovation Through Federal Investments

On behalf of the Society of Women Engineers (SWE), I applaud the Senate Appropriations Committee for holding the hearing, "FY15: Driving Innovation Through Federal Investments." I am pleased to submit outside witness testimony on SWE's behalf, and look forward to working with the Committee, our many Congressional champions (Republican and Democrat), and other advocacy partners to advance this agenda.

Since its inception in 1950, SWE has been the driving force that establishes engineering as a highly desirable career aspiration for women. SWE strongly believes that dramatically improving the participation of women and talent from other under-represented groups will address this increasing demand of STEM-based workers, while at the same time leveraging diversity to fuel the innovation necessary for our nation's global competitiveness. As you consider the FY15 federal budget, we are pleased to make the following policy recommendations.

- Target resources from federal science, technology, engineering, and mathematics (STEM) education programs to high-need populations, and scale up tested models. We will achieve a higher return on our investments in American competitiveness when Congress focuses the government's limited resources on under-represented populations. Congress must also continue to support and expand programs with proven results in addressing diversity issues in the STEM fields, like those authorized in the America COMPETES Act focused on teacher training and recruitment and systemic reform of STEM education.
- Assess student achievement in science, so that schools can measure their students' progress and determine appropriate improvement. This assessment would also ensure more class time be spent on science subjects, exposing more students to STEM fields. According to a 2012 paper prepared for the Noyce Foundation, instructional time for science in the elementary grades has dropped to an average of 2.3 hours per week, the lowest level since 1988. The paper also correlates the decrease in instructional time to lower scores on the National Assessment of Educational Progress (NAEP).
- Enact recommendations from National Academies' Beyond Bias and Barriers report, which requires agencies that fund scientific research to host anti-gender bias workshops for agency program officers, university department chairs, and members of review panels; instructs such agencies to enforce existing federal anti-discrimination laws at universities and other higher education institutions through regular compliance reviews



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and prompt and thorough investigation of discrimination complaints; and requires that grant data composite information be collected, stored, and published. The STEM Opportunities Act of 2013 (H.R. 1358), introduced in March by Representative Eddie Bernice Johnson (D-TX), enacts many of these recommendations.

- Use Title IX as a tool to eliminate the barriers that still exist for girls and women pursuing STEM programs. Congress should conduct oversight hearings and call for enhanced agency enforcement. Policymakers should also undertake or fund a comprehensive education campaign to educate students and their parents, and STEM faculty, about their rights under the law. Federal agencies should initiate regular, systematic compliance reviews that have general relevance across institutions and that are consistent across funding agencies. The NASA Title IX reviews could serve as an example for such reviews; NASA's two recent publications, *Title IX and STEM: Promising Practices for STEM* and *Title IX and STEM: A Guide for Conducting Title IX Self-Evaluations*, could serve as resources. Information from any federal reviews should be disseminated publicly to ensure that best practices receive widespread visibility and problematic practices can be identified and eliminated.
- Funding for federal agency programs that promote equity for women and underrepresented groups. Congress should continue to fund gender equity programs that examine ways to retain women in academic STEM careers like the ADVANCE program at the National Science Foundation (NSF). Congress should encourage broader participation in these programs by the STEM academic community, and both Congress and federal agencies should disseminate information about successful programs.

In conclusion, we currently have an untapped pool of potential workers, and we must leverage the diversity of these individuals to fuel the innovation necessary for our future global competitiveness. We strongly support efforts to increase the participation of women and other under-represented groups in STEM fields.

SWE appreciates the opportunity to provide comments, and is committed to working with the Committee, our many Congressional champions, and other advocacy partners to increase the competitiveness and security of the United States by growing the STEM workforce through the expansion of its diversity. If we can be assistance in the future, please do not hesitate to contact me or our Washington representative, Melissa Carl, at <u>melissa.carl@swe.org</u> or 202-785-7380.