



Gender  
Summit  
North America  
2013

# 2013

## Diversity Fueling Excellence in Research and Innovation: Highlights from A Roadmap for Action for North America

Hosted by the U.S. National Science Foundation  
(NSF)

Partners included:

- The Natural Sciences and Engineering Research Council of Canada (NSERC - CRSNG),
- Consejo Nacional de Ciencia y Tecnología, México (CONACYT),
- The U.S. National Institutes of Health (NIH),
- The Canadian Institutes of Health Research (CIHR), and
- Portia Ltd in the UK, in Association with the European Commission

## *Introduction*

Gender Summit 3 – North America was the third in a series of Gender Summits, initiated in Europe in 2011, that provided a forum for engaging top-level researchers, policy makers, science and innovation leaders, and other stakeholders in science, technology, engineering, and mathematics (STEM) to address gender issues in research and innovation. The aims of the 3rd Gender Summit, which was held on November 13-15, 2013 in Washington DC, were to demonstrate evidence of how incorporating the gender dimension into STEM research and innovation contributes to excellence and to build a multi-stakeholder action plan (or roadmap) to foster equity policies and practices among men and women.

This Roadmap for Action emerged from the diverse group of stakeholders at the Gender Summit. Here, we provide the main areas for action that have emerged during the discussions. It is hoped that these actions will result in greater diversity in the STEM workforce and leadership and greater inclusion of the “gender dimension” in research content and process.

For further information on Gender Summit 3 – North America, including a conference report summarizing the results of the conference, the agenda, powerpoints, video recordings, and photos see <http://www.nsf.gov/od/iia/activities/gendersummit/>.

## Policy Context

In order to ensure targeted, broad, and transparent policies that eliminate gender bias and gender discrimination in STEM careers, improve career-life balance, and provide funding support for women in STEM areas, we need to:

- **Work toward the elimination of gender discrimination in STEM employment practices, funding and support by including gender as part of strategic planning and by focusing on policy enforcement and revision as well as establishing new policies;**
- **Share successful policies that promote gender equity in STEM; and**
- **Share specific mechanisms for implementing successful policies with fidelity, precision and accuracy.**

Short term goals/actions (1-3 years)	Target Stakeholders
Enforce compliance with <b>Title IX</b> of the US Civil Rights Act (that prohibits discrimination on the basis of sex in any education program or activity receiving federal financial assistance) and other gender equality legislation in the US and elsewhere and enable universities to establish institutional structures and organizational practices to facilitate compliance .	Federal agencies and Universities in collaboration with each other
Create <b>partnerships</b> between funding agencies and universities to establish, implement, and disseminate broad and transparent <b>family-friendly policies</b> for faculty, graduate students, and postdocs.	Funding agencies and Universities in collaboration with each other
Establish <b>institution-wide and cross-sector policies</b> ensuring diversity in and training for search, selection, and evaluation committees to reduce bias.	Employers in all sectors in collaboration with each other
Establish institution-wide policies for <b>training peer reviewers</b> to reduce bias, for ensuring diversity in review panels, and for monitoring success rates.	Funding agencies
Medium term goals/actions (3-5 years)	Target Stakeholders
Develop an <b>international network</b> to address emerging international scientific frontiers and international academies to help inform policies related to gender equality.	Funding agencies and Employers in all sectors in collaboration with each other
Strengthen <b>partnerships</b> with networks of public universities and also networks between universities and federal agencies as well as private philanthropic foundations to impact STEM training, and science policy.	Funding agencies, Universities, Industry in collaboration with each other
Create an international model of <b>career-life balance</b> that can be shared.	Funding agencies, Universities, Industry, Other stakeholders in collaboration with each other

## Research Context: Content

In order to expand inclusion of the “gender dimension” in research, we need to:

- **Advance scientific knowledge and eliminate gender bias in knowledge production and application through including the gender dimension in study design, analysis and reporting; and**
- **Incorporate the gender dimension (as well as dimensions of intersectionality related to race, age, and other relevant factors) in exposure regulations (that is regulations relating to environmental exposure to hazardous materials).**

Short term goals/actions (1-3 years)	Target Stakeholders
Encourage, conduct, and disseminate studies that incorporate gender into each step of the <b>scientific process</b> and integrate gender studies and results of gendered innovations into the STEM curriculum and into STEM management training.	Researchers, Journal editors, Funding agencies and Employers in all sectors in collaboration with each other
Gather existing evidence on differences by sex and explore ways to revise <b>environmental exposure regulations</b> to incorporate the gender dimension (as well as race, age, and other relevant factors).	Regulatory agencies
Medium term goals/actions (3-5 years)	Target Stakeholders
Establish systems for researchers to include <b>sex and gender analyses</b> in proposed research and publications.	Funding agencies, Journal editors, Universities
Promote <b>gender sensitive technological innovation</b> and provide products and systems that incorporate gender.	Industry
Improve tools used for <b>collection and reporting of data</b> (household surveys) so that women and men are properly represented as resource users, resources owners and as decision makers, to identify more accurately their access to, impact of, and adaptation to environmental and life changes.	Researchers
Create recommendations to address <b>interprofessional training</b> for more effective implementation of development strategies and programs.	Funding agencies
Develop methods for <b>combined risk assessment</b> based on social, biological and environmental factors and base, for example, environmental exposure regulations on risk by gender, age, etc.	Researchers, Regulatory agencies
Long term goals/actions (5-10 years)	Target Stakeholders
Develop better conceptual frameworks and more robust <b>research methods</b> that identify the mechanisms of sex differences and the interactions of biological and socio-cultural mechanisms to explain sex and gender differences, including gender inequalities in health, exposure to contaminants, food and nutrition security, etc. and revise relevant regulations accordingly.	Researchers, Regulatory agencies

## Research Context: Process

To expand diversity within the scientific process, we need to:

- **Promote diversity of thought through adopting common practices and guidelines within and across institutions, establishing checks and balances to identify and reduce bias, and collecting data to monitor outcomes; and**
- **Transform institutional practices and processes to achieve better and more innovative research cultures through fostering community and belonging and creating threat-free environments.**

Short term goals/actions (1-3 years)	Target Stakeholders
Collect and present data on bias and <b>bias-mitigating processes</b> , educate to increase awareness of bias, and mitigate bias in peer review.	Funding agencies and Employers in all sectors in collaboration with each other
Conduct research on the influences of social context and differences in <b>communication styles</b> on male/female interactions and identify the social and psychological aspects of these interactions.	Researchers
Support and advocate for <b>interdisciplinary collaboration</b> .	Employers in all sectors in collaboration with each other
Median term goals/actions (3-5 years)	Target Stakeholders
Conduct research to understand the extent and nature of bias in <b>peer review</b> , ensure accountability, and institute checks and balances.	Researchers and Employers in all sectors in collaboration with each other
Foster <b>community and belonging</b> and create threat free environments through common practices and guidelines within and across institutions.	Employers in all sectors in collaboration with each other
Long term goals/actions (5-10 years)	Target Stakeholders
Change the <b>culture of STEM disciplines</b> , by recognizing gender/sex biases, avoiding stereotyping; paying attention to disparities in cultural, ethnic, and LGBT communities, and revising concepts of merit and success.	Employers in all sectors in collaboration with each other
Enhance <b>open access</b> of science and data through networking, collaboration, improved technology transfer, access to scholarly publications, worldwide statistics.	Funding agencies

## Human Capital Development and Advancement

In order to increase diversity within the scientific workforce and leadership, we need to:

- **Increase the diversity of people and ideas at the highest levels of the STEM enterprise by establishing and promoting policies that attract, retain and advance men and women in STEM;**
- **Develop a world-class STEM talent pool for transformative discoveries, learning and innovating by providing men and women with the same opportunities to do scientific work and have time for family life; and**
- **Ensure diverse future leadership through cultivating and promoting early and mid-career**

Short term goals/actions (1-3 years)	Target Stakeholders
Make diversity integral to the whole process of <b>hiring</b> —the recruiting process, recruiting teams, and selection process.	Employers in all sectors in collaboration with each other
Promote and implement broad and transparent <b>career-life balance</b> policies within and across institutions, including improved funding support for early career women, parental leave, benefits, stopping the tenure clock, and dual hire policies.	Funding agencies and Employers in all sectors in collaboration with each other
Establish and promote opportunities for and information on <b>networking and mentorship</b> .	Employers in all sectors in collaboration with each other
Medium term goals/actions (3-5 years)	Target Stakeholders
Encourage and conduct research on <b>early career</b> stages including the need for and effectiveness of re-training/re-entry programs and policies.	Researchers, Funding agencies
Support and advocate for <b>interdisciplinary collaboration</b> .	Funding agencies and Universities in collaboration with each other
Re-invent the professional <b>career path</b> to provide more flexibility in careers.	Employers in all sectors in collaboration with each other
Long term goals/actions (5-10 years)	Target Stakeholders
Train the current and next generation of researchers in new <b>methods of sex/gender analyses</b> .	Universities
Support the advancement of women in <b>leadership</b> roles in STEM.	Employers in all sectors in collaboration with each other

## ***Multinational Collaboration: Current and Future***

In order to create and promote a multinational collaborative approach for advancing the gender dimension, we need to:

- ***Develop a parallel-funded and parallel-administered initiative—the Gender-Focused Multi-national Collaboration (GFMC)—involving the US, Europe, Canada, and Mexico that includes the gender dimension in four major areas of the scientific enterprise: human capital development, scientific research and innovation, institutional transformation, and STEM stewardship;***
- ***Maintain the GS3 Social Network as a vehicle for community building and engagement;***
- ***Partner internationally to advance greater diversity in STEM through future Gender Summits;***
- ***Foster multinational opportunities for other countries to meaningfully participate in/host future Gender Summits;***
- ***Include or make available data with the diversity perspective, such as the Latin America perspective; and***
- ***Promote the participation of other regions of the world.***

The more detailed roadmap with more specific action items directed to more specific stakeholders can be found at <http://www.nsf.gov/od/iia/activities/gendersummit/>. The detailed roadmap is unique because it is a STEM community-developed document guided by the research evidence and vision of an inclusive network of experts and scholars, resulting in a roadmap that serves as model for developing similar action plans in other regions.

## Gender Summit 3 – North America Planning Committee



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