# ENGENDERING SUCCESS IN STEM

## Project RISE: Realizing Identity-Safe Environments

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## Project Goals and Reasons to Partner with Us

- Project RISE is part of a multi-year federally funded research initiative that aims to create positive cultural change for women and men working in science, technology, engineering, and math.
- This randomized control trial will use the best scientific practices to test the effectiveness of a cutting-edge intervention designed to mitigate implicit bias and create cultural change.
- Participants will complete a half-day intervention workshop (see Workshop Architecture) delivered at your company and outcome surveys conducted 1 and 2 years later (see Assessments).
- We seek Industry Partners to support this integrative evidence-based intervention that aims to develop the most effective tools and best practices for enabling all employees to excel.

### **Our Expertise and Credentials**

- The ESS Consortium includes three **Canada Research Chairs** and a team of leading scientists who have published over 250 research articles on implicit gender bias and bias-reduction.
- As an independent team of scientists, we are ideally situated to use objective data-driven methods to identify best practices and tools for creating a positive, diverse company culture.
- The Consortium also includes two **Associate Deans** in STEM faculties of top universities, three **NSERC Chairs for Women in Science and Engineering**, and two named chairs for Women in STEM representing **four leading research universities in Canada**.
- Our STEM experts have proven success in outreach efforts: The entering engineering cohorts at UBC and Waterloo are close to 30% female thanks to efforts by Drs. Croft and Wells.

## **Benefits to Industry Partners**

- Involvement in an integrative, evidence-based intervention to improve workplace culture.
- Reports tailored to your company to identify areas of success and areas for improvement.
- One-on-one consultation with team members on your company's internal assessment tools.
- Early access to annual infographic and video white papers and best practices toolkits (for sample white papers from our group, see: http://wwest.mech.ubc.ca/diversity).
- Invitation to attend Knowledge Sharing Conferences to learn about other best practices.

## **Contributions from Industry Partners**

Estimated time commitment from employees who consent to participate includes:

- 8 hours in Year 1, 3 hours in Year 2, and 1 hour in Year 3 (i.e., 12 hours across 25 months).
- Year 1 includes a 4-hour workshop on Team Dynamics and Management (see Workshop Architecture), using proven techniques to increase team cohesion/leadership effectiveness.
- In Years 1 and 2, participants will complete 10 consecutive days of brief 2-minute surveys during their workday to capture social dynamics at work, followed by a final survey in Year 3.

### Estimated commitment from industry partners includes:

- \$12,000 cash in Year 1 for each pair of workshops (two workshop minimum)
  - Each workshop should include 15-30 employees (at least 33% women).

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#### • In-kind commitment that includes:

- 12 hours of employee time for a minimum of 30 personnel (at least 33% women).
- Support from staff in recruiting employees for the research.
- Assistance from staff to compile HR information and complete surveys on policies.
- Space for the workshops to take place and catering for the day.

### Workshop Architecture (Year 1)

Workshop attendees will be men and women working as engineers or applied scientists (in physics or computing) who will meet in person for a 4-hour group workshop. Participants will be randomly assigned to complete one of two workshops on Team Dynamics and Management:

*Workshop A:* In this workshop, men and women collaborate to complete exercises designed to: (a) build mutual trust and respect, (b) reinforce shared organizational values, (c) convey evidencebased information about implicit gender bias, and (d) foster cooperative problem-solving and action plans to combat bias. Workshop materials derive from successful interventions, and implicit bias measures from Harvard University's Project Implicit.

*Workshop B:* In this workshop, men and women will complete individual exercises designed to: (a) identify leadership competencies and weaknesses, (b) reinforce personal leadership values, (c) convey evidence-based information about leadership styles, and (d) foster effective decision-making and action plans for advancement. Workshop materials derive from winSETT's leadership skill training as well as other best practices for leadership development.

## Assessments (Years 1-3)

The metrics listed below will be used to assess the effectiveness of the intervention for:

#### a. Creating beneficial social connections

- Sense of social support and belonging at work
- Positivity of workplace interactions with both male and female colleagues
- Structure of social networks at work

#### c. Benefiting personnel

- Self-efficacy, workplace burnout, and organizational commitment
- Awareness of and concerns with being stereotyped

#### b. Reducing gender bias

- Tendency to implicitly associate Science/ Engineering with men more than women
- Perception of the prevalence of implicit and explicit gender bias at work
- Personal efforts to counteract any biases

#### d. Benefiting the organization

- Perceptions of current organizational climate and gender-inclusive policies
- Attitudes toward gender-inclusive policies
- Job performance and promotion data

## How to Become a Partner

To be a leading company in this scientific initiative aimed at mitigating gender bias and improving work culture, please register via **SuccessinSTEM.ca** or email Dr. Schmader at **RISE@psych.ubc.ca**.

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## **Project RISE:** Realizing Identity-Safe Environments

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#### **Our Team**

Experts in the Science of Gender Bias





Toni Schmader, Ph.D. (PI) Canada Research Chair UBC Social Psychology The Ohio State University



Sonia Kang, Ph.D. University of Toronto Rotman School of Management



U of Waterloo Philosophy

**Advisory Board** 

- **Mark Abbott**
- Mahzarin Banaii Ph.D.
- **Geoffrey Cohen** Ph.D. •
- **Thomas Coyle** Sc.D. •
- Valerie Davidson Ph.D.
- Andrew Meltzoff Ph.D.
- Marisa Sterling P.Eng.

Experts in the Science of Bias Reduction



Steve Wright, Ph.D. Elizabeth Page-Gould, Ph.D. Canada Research Chair Canada Research Chair SFU Social Psychology SFU Social Psychology



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Experts in

STEM Outreach





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NSERC Chair for WSE SFU Engineering

P.Eng., MBA Engineering Change Lab and Engineers without Borders Harvard University

- Stanford University
- University of Toronto
  - University of Guelph
  - University of Washington
- York University

#### Non-Industry Partners of the Consortium

