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A Shared Mission for Progress: Gender Inequity in STEM Panel Discussion

A Science & Policy Exchange Panel

REPORT

Summary of: Gender Inequity in STEM Panel Discussion

Event Details

- Title: A Shared Mission for Progress: Gender Inequity in STEM
- Date: March 24, 2025
- Time: 5:30 PM - 7:30 PM
- Location: McGill University, Leacock 232 and via Zoom (Hybrid event)
- Organizers: Science & Policy Exchange (SPE) in collaboration with the Canadian Commission for UNESCO

Introduction

On March 24, 2025, Science & Policy Exchange (SPE) in collaboration with the Canadian Commission for UNESCO hosted "A Shared Mission for Progress: Gender Inequity in STEM," a bilingual panel discussion addressing persistent gender disparities in science, technology, engineering, and mathematics (STEM). Despite decades of initiatives aimed at increasing women's participation in STEM fields, significant challenges remain, from underrepresentation and pay inequity to systemic biases in research methodologies and workplace cultures. This event brought together diverse perspectives from academia, government, and industry to examine these issues holistically and propose actionable solutions. The discussion was of particular interest given the current climate of backlash against equity, diversity, and inclusion (EDI) efforts, with the panelists emphasizing that meaningful progress requires not just individual commitments but structural and cultural transformation. Through this panel, SPE aimed to bridge science-policy gaps, advocate for evidence-based approaches to gender equity, and foster a collaborative community committed to creating more inclusive STEM environments.

Panel Composition

1. **Dr. Mary-Rose Bradley-Gill** - Senior Program Analyst at the Natural Sciences and Engineering Research Council of Canada (NSERC)
    - PhD in Biology from McGill University where she studied genes mutated in cancer
    - Joined NSERC in 2020 as a Mitacs Canadian Science Policy Fellow

- Currently works on equity, diversity and inclusion (EDI) policy in college applied research grants
- Former Co-President of Science & Policy Exchange (SPE) in 2018
- Advocates for relating research to broader society, evidence-based policy making, and EDI in research

2. **Dr. Katie Lavigne** - Assistant Professor, Department of Psychiatry, McGill University
   - PhD in Neuroscience (2018) from the University of British Columbia
   - Completed postdoctoral fellowship at the Montreal Neurological Institute-Hospital and the Douglas Research Centre in 2023
   - Leader of the Douglas Open Science Program
   - Research focuses on cognitive dysfunction in psychiatric disorders using ecological momentary assessment and multimodal magnetic resonance imaging
   - Develops and openly shares tools to improve cognitive assessment with the research community
   - Member of the EDI committee at the Douglas Research Centre
3. **Virginie Hotte-Dupuis** - Director of Engagement & Corporate Social Responsibility at L'Oréal Canada
   - Communications graduate from Université de Montréal
   - Joined L'Oréal Canada in 2001, initially managing communications for Vichy and La Roche-Posay
   - Currently manages philanthropic programs including L'Oréal-UNESCO For Women in Science and For Girls in Science
   - Oversees the inclusive internship program with the Les Petits Rois Foundation, which has integrated eight young adults with intellectual disabilities into L'Oréal Canada
   - Serves on the board of Les Fées Marraines and has dedicated two decades to helping women and youth achieve their potential

The panel was moderated by **Serge Villemure**, an EDI Consultant who previously served as the NSERC Director of the Chairs for Women in Science and Engineering Program (2013-2021). During his tenure at NSERC, he was responsible for integrating EDI considerations into policies and programs across the agency. Villemure organized Gender Summit 11 in Montreal (2017) and has extensive experience speaking on EDI issues in the research ecosystem. He holds a B.Sc. in Kinesiology and a Masters in Administration from the University of Ottawa, and now provides consultation services in EDI for research funding agencies, universities, and other organizations.

Opening Remarks

The panel discussion opened with remarks from Eric Wootton, co-president of SPE, who outlined the organization's mission to connect science, society, and policy through knowledge-sharing initiatives. He emphasized SPE's commitment to advocating for diverse voices in science and policy, particularly addressing gender inequity in STEM fields. Eric acknowledged the event was being held on unceded indigenous land, specifically recognizing the Haudenosaunee, Anishinaabeg nations, and the Kanien'kehá Nation as custodians.

The event moderator, Serge Villemure, former NSERC Director of Scholarships and Fellowships who led EDI efforts at the council, introduced the panelists and emphasized the critical importance of continuing discussions on equity, diversity, and inclusion despite growing backlash against EDI initiatives. He framed the current climate as challenging assumptions about fairness, merit, and the status quo, creating opportunities for reflection and growth.

Key Discussion Points

1. Evolution of Research Through an Inclusive Lens

Dr. Katie Lavigne discussed the integration of lived experience throughout the research cycle:

- Emphasized incorporating patient partners in research design, execution, and dissemination
- Noted that people with lived experience can bring their own research questions, creating synergistic development
- Highlighted how this approach reduces stigmatizing language and improves knowledge translation

Dr. Mary-Rose Bradley-Gill outlined NSERC's approach:

- Described how funding agencies encourage EDI through policy and grant requirements
- Explained the two-fold approach: incorporating EDI into research methodologies and creating more inclusive research teams
- Observed how these requirements have increased awareness and led to more EDI-focused panels and conversations in academia

Virginie Hotte-Dupuis provided industry perspectives:

- Highlighted disparities in work-life balance support between corporate and academic environments

- Noted that even in 2024, women researchers in academia often lack access to basic supports like maternity leave and daycare
- Described L'Oréal's science outreach to youth, particularly young girls, including partnerships with NGOs and open days at their facilities

Serge Villemure added context about how traditional metrics of scientific excellence often advantage white men, referencing the book "Misconceiving Merit" which critiques how the definition of a "good scientist" favors certain demographic characteristics.

2. Building Effective Allyship in Scientific Spaces

Dr. Mary-Rose Bradley-Gill differentiated performative from meaningful allyship:

- Noted that allyship is an action rather than an identity or title one claims
- Emphasized the importance of connecting with grassroots initiatives led by people with lived experience
- Advocated for supporting authentic voices rather than speaking over them

Dr. Katie Lavigne emphasized education as the foundation for allyship:

- Suggested that effective allies first learn about issues before attempting to become allies
- Stressed the importance of understanding the situation before claiming allyship

Virginie Hotte-Dupuis described practical initiatives:

- Outlined L'Oréal-UNESCO program's training on dealing with microaggressions in partnership with Mitacs
- Mentioned L'Oréal Paris' "Stand Up" program that teaches bystander intervention for street harassment

Serge Villemure emphasized that effective allyship often requires privileged individuals, particularly white men, to be silent and listen to the lived experiences of equity-seeking groups.

3. Closing the Gender Pay Gap in STEM

Dr. Katie Lavigne shared personal experiences with salary negotiation:

- Described challenges with salary transparency and range interpretation at universities
- Recommended consulting mentors on both sides of the gender gap to understand expectations
- Emphasized the importance of allies in negotiation processes, both as mentors and as hiring managers
- Noted the discomfort many women and equity-deserving groups face when advocating for themselves

Dr. Mary-Rose Bradley-Gill addressed systemic factors:

- Referenced recent reports showing persistent pay gaps for women faculty in Canada, even accounting for position and department (Women's representation and compensation in full-time faculty positions - University Affairs)
- Explained how women are overrepresented in lower-paid departments and teaching roles
- Called for questioning biases in hiring and assessment criteria
- Emphasized the need to change definitions of merit

Virginie Hotte-Dupuis described corporate approaches:

- Highlighted L'Oréal's EDGE certification, an external audit ensuring equal pay
- Mentioned the addition of negotiation skills training to the L'Oréal-UNESCO program
- Questioned whether university pay systems could benefit from similar third-party auditing

Dr. Lavigne added that transparency can occur at the individual level through open discussions with colleagues, noting that many professors are willing to share salary information.

4. Exploring Intersectionality in STEM

Dr. Katie Lavigne addressed research methodologies:

- Cautioned against treating populations as homogeneous in research
- Described how averaging data across diverse groups can lead to null or misleading findings
- Discussed the value of qualitative research in understanding intersectionality
- Advocated for mixed methods approaches to inform quantitative research

Dr. Mary-Rose Bradley-Gill emphasized intentionality:

- Stressed that diversity doesn't happen naturally but requires targeted action
- Referenced Dr. Kimberlé Crenshaw's definition of intersectionality as creating unique levels of oppression beyond simple addition
- Provided examples of government hiring policies that helped women broadly but failed Black women due to specific criteria
- Highlighted the importance of considering who is in the room and who is not

Virginie Hotte-Dupuis focused on recruitment strategies:

- Described L'Oréal's recent initiative to diversify campus recruitment beyond elite institutions
- Noted the expansion from 4-5 target universities to nearly 23 across Canada
- Emphasized how this approach brings diverse perspectives to the company

5. Current Challenges and Response to Backlash Against EDI

Virginie Hotte-Dupuis described L'Oréal's approach:

- Revealed that L'Oréal's strategy toward recent backlash against EDI is to maintain activities without making statements
- Emphasized continuing programs without backtracking despite challenging climate

Dr. Mary-Rose Bradley-Gill discussed the institutional landscape:

- Expressed gratitude for NSERC's strong commitment to EDI
- Acknowledged concerns about potential government policy changes
- Suggested that backlash indicates effective progress and meaningful change
- Emphasized the importance of grassroots initiatives if institutional support wavers

Dr. Katie Lavigne addressed academic implications:

- Noted specific concerns about funding cuts for EDI-focused research
- Described how researchers have invested in incorporating EDI in response to funding agency requirements
- Observed that despite concerns, day-to-day practices haven't changed significantly yet

Serge Villemure framed backlash positively as an indicator that EDI efforts are making an impact and creating meaningful change.

Q&A Session Highlights

1. Question on departmental prestige and salary disparities:
    - Discussion of how traditionally female-dominated fields (nursing, teaching) are systematically undervalued
    - Panelists acknowledged the complex societal and historical factors at play
    - Villemure noted research showing men in nursing receiving higher starting evaluation scores than women

2. Question on practical workplace implementation of personal values:
    - Dr. Lavigne described accommodations for research participants and development of inclusive lab manuals with student feedback
    - Dr. Bradley-Gill discussed designing webinars and training, as well as addressing issues at personal and institutional levels
    - Hotte-Dupuis explained her focus on considering program winners in all decisions and raising her son to be aware of his privilege

3. Question on handling challenging EDI situations:

- Dr. Lavigne shared experiences mediating conflicts about accommodations
- Dr. Bradley-Gill discussed engaging with resistant colleagues through examples and relationship building rather than facts alone
- All panelists emphasized persistence despite not always changing minds immediately

4. Question on EDI-relevant grant adjudication:
    - Dr. Bradley-Gill recommended specific, thoughtful approaches to EDI sections rather than generic responses
    - Hotte-Dupuis described L'Oréal-UNESCO program's addition of youth mentoring activities as evaluation criteria
    - Dr. Lavigne suggested researching committee membership to understand reviewer perspectives

5. Question on formulating job descriptions that encourage a diverse applicant pool:
    - Recommendations included using gender-neutral language, focusing on essential competencies, avoiding unnecessary requirements
    - Dr. Lavigne mentioned recognizing non-traditional research outputs
    - Reference was made to resources from Canada Research Chairs program

Practical Recommendations and Future Directions

1. For Research Organizations:
    - Integrate people with lived experience throughout the research cycle
    - Implement transparent salary ranges and benchmarks
    - Provide work-life balance support including maternity leave and childcare
    - Develop mentorship programs and negotiation training
    - Consider third-party equity audits similar to corporate certification

2. For Funding Agencies:
    - Continue requiring EDI considerations in grant applications
    - Support implementation of narrative CVs to recognize diverse contributions
    - Provide resources and training for effective EDI implementation
    - Maintain commitment despite potential political shifts

3. For Individual Researchers and Leaders:
    - Question traditional metrics of excellence and broaden definitions of merit
    - Learn about EDI issues before attempting to act as allies
    - Consider qualitative and mixed-methods approaches in research
    - Recognize non-traditional research outputs in evaluation
    - Share salary information to increase transparency

4. For Industry Partners:
    - Diversify recruitment beyond elite institutions
    - Implement certification programs to ensure pay equity
    - Support outreach to youth, particularly girls interested in STEM
    - Provide training on addressing microaggressions and harassment

Throughout the discussion, panelists emphasized that despite current backlash, EDI efforts must continue with intentionality and commitment from all stakeholders. They stressed that the goal is not just numerical representation but fundamental cultural change in how we define excellence, value diverse contributions, and create truly inclusive environments in STEM.

The event concluded with Serge Villemure thanking the panelists and inviting attendees to continue conversations during the networking session with refreshments in the foyer.