



CONCURRENT PRESENTATION OVERVIEWS

Friday, May 13

Concurrent Presentations: 10:15 am - 11:45 am

Theme: Outreach
Time: 10:15 am - 11:15 am

Connecting and Collaborating: STEM Programs for Girls and Nonbinary Youth

Girls, gender nonbinary, and gender nonconforming youth continue to face barriers in their science, technology, trades, engineering, and mathematics (STEM) education. Numerous initiatives and programs supporting these youth successfully operate locally and nationally across Canada. Within this session, organizations with initiatives that support girls, gender nonbinary, and gender nonconforming youth (k-12) in STEM in Canada will be invited to present their work, learn about other complementary initiatives, discuss challenges, successes, best practices, and collaborative opportunities. This will foster a community of practice of shared learning and collaboration to support gender equity in STEM in Canada.

Presenter: Larissa Vingilis-Jaremko, Canadian Association for Girls in Science (CAGIS)

Theme: Building Better Allies
Time: 10:15 am - 11:15 am

Creating Inclusive Cultures Through Allyship

How can men see themselves as part of positive change in the gender movement and why does that matter? What could we do to accelerate culture change in the workplace? We invite women, men, and non-binary people to participate in a facilitated session to hear about the YWCA Shift Change Project through the eyes of a male supervisor and other lived experiences. You will participate in energetic table conversations around creating inclusive culture through allyship. These conversations will be an opportunity for people to listen to lived experiences, connect ideas and explore how we can transform and accelerate positive culture change in the workplace. We will spotlight the CCWESTT We Are Trades project work and how this work can support change for industry and DEI efforts. We will share our learning around training to creating a culture shift in skilled trades and understanding in this work through lived experiences that bring many voices and actors to the table. Everyone who attends will have an opportunity to participate in listening, learning and conversations. We will host a safe(r) space that seeks to include and honour each of the people who give their time and input into this session, and we commit to providing all participants with a post session summary. Take away learning, contribute to it and build forward.

Presenters: Tracy Boyer, YWCA Halifax Shift Change Project; Bonnie Douglas, CCWESTT

Theme: Culture Transformation
Time: 10:15 am - 11:15 am

SCWIST Make DIVERSITY Possible: Tools to Embed EDI into Organizations including Policies, Toolkits, Success Stories and Collective Impact – to Transform SETT Workplaces into Equitable, Diverse and Inclusive Cultures where Everyone can Thrive

SCWIST Make DIVERSITY Possible workshop will engage, advance & inspire participants to reach for the stars to collaboratively create positive impact in SETT workplaces across Canada. SCWIST will share results from its 3-yr WAGE funded project including Diversity Awareness Tool, Diversity by Design Workshop, and Road Map to Success. Our test partners include several engineering consulting firms with extensive field work including trades, a software technology company, a large life science research funding organization, entrepreneurship incubator at academic institute & sample group from SETT individuals. The workshop will encourage collaboration, alliance building and collective advocacy as part of the SCALE and STEM Forward projects to advance gender equality across Canada. Workshop resources will attract & support industry professionals, individuals working in SETT in all career stages, gender equality advocates, senior leaders, organizations, associations, and government agencies that work to advance EDI in SETT. •ENGAGE: Diversity Awareness Tool creates awareness of bias, barriers to diversity & commitment to inclusive leadership. Tools engage men as allies & organizations in collaborative alliances. •ADVANCE: Diversity by Design Workshop engages employees

and leaders to develop solutions, create inclusive cultures & advance women in leadership with the support of allies, mentors & sponsors. •INSPIRE: Success stories from SETT test partners. Lessons from global EDI partners. Create a Road Map to Success to elevate everyone to drive change. We will share resources, policies, toolkits, organizational results and examples of collective impact – to transform SETT workplaces into equitable, diverse and inclusive cultures where everyone can thrive.

Presenter: Cheryl Kristiansen, SCWIST; Anja Lanz, SCWIST

Theme: Intersectionality

Time: 10:15 am - 11:15 am

BIPOC in STEM spaces - How do we Build a More Inclusive Space for Us?

WISEST (Women in Scholarship, Engineering, Science and Technology), exists to advance diversity while empowering women in STEM fields. WISEST achieves this vision by promoting the participation of underrepresented groups which includes young women, gender-diverse folks, 2SLGBTQ+, rural, Black, Indigenous and students of colour. Do you identify as being racialized or are you a newcomer or recent immigrant to Canada? Join us in this session where 2-3 BIPOC STEM professionals will talk about their perspectives and lived experiences as it relates to pursuing a career in STEM. We strongly encourage participants to join in on the conversation to add their perspectives and lived experiences as well. In an effort to better understand the needs and barriers racialized, newcomer/immigrant communities have, experiences shared will be used to inform an upcoming project designed to help female newcomers to Canada see STEM as a viable career path. If you identify as a racialized individual, newcomer or immigrant to Canada we invite you to share your voice as part of this conversational focus group. The panel is meant to be a free-flowing session, however, there will be a moderator to help facilitate the discussion if needed.

Presenter: Helen Yip, WISEST

Theme: Recruitment/Retention

Time: 10:15 am - 11:15 am

Reflections on the Experiences, Challenges, and Successes of the L'Oréal Laureates: What More Needs to be Done?

As the L'Oréal For Women in Science program initiates the process of selection for its 20th edition, it is important to reflect and celebrate the success of the previous laureates and discuss their challenges and the strategies that they have taken to further their careers in science. Where are they now? How did the fellowships help them to be recruited and retained as scientists? L'Oréal For Women in Science fellows are great mentors for young women coming into science. Through their reflections and experience, this session will examine what has been done and what else can be done to continue supporting women in science. L'Oréal Canada and the Canadian Commission for UNESCO will also present their side of the story as supporters and sponsors of women in science. The brief presentations of the panel will be followed by a question period during which participants may also suggest ideas and strategies to remove the barriers for equity, diversity, and inclusion in science.

Presenters: Virginie Hotte-Dupuis, L'Oréal Canada; Eleanor Haine, Canadian Commission for UNESCO; Liette Vasseur, Brock University

Theme: Outreach

Time: 11:15 am - 11:45 am

Seeing the Stars? Lessons from a Grant Application to Digitize the Archives of Women Astronomers in Canada

In 2021, Ingenium Library and Archives submitted a grant application in collaboration with Queen's University Archives and University of Toronto Archives and Records Management Services to fund a project to digitize the archives of women astronomers in Canada, or, at least those archives that were already in our holdings. The grant program's aim is to 'digitize hidden collections' and women are listed as one of the groups that could have hidden histories. Four of the program's core values are: public knowledge (disseminating digitized collections as a public good); broad representation (representing communities that are currently underrepresented in digital collections); authentic partnerships (meaningful engagement with underserved communities); and, community-centered access (digital inclusion, but according to the ethical priorities of a community). Through the grant-writing process, collaborators had to answer questions like: what makes digitized archives a public good and a means to ensure broad representation in not only the historical record, but also in STEM fields today? How would these digitized archives be of service to women in STEM? It begged a very basic question, do women in STEM form a community? Ingenium's Women in STEM initiative celebrates and normalizes women in STEM. It reaches communities through strategic programming and events, a fellowship, and tools such as a poster series, timeline, video series, and teacher resources. This presentation will examine how we connected the dots (or not) between our Women in STEM programming and our aim to make our archives more accessible through digitization.

Presenters: Adele Torrance, Ingenium - Canada's Museums of Science and Innovation; Sandra Corbeil, Ingenium - Canada's Museums of Science and Innovation

Theme: Building Better Allies
Time: 11:15 am - 11:45 am

Gender Partnership: Sponsorship as the Ticket to Gender Equity

Gender equity is not a zero-sum game. In fact, the Institute for Gender Partnership reports that organizations committed to gender equity achieve 22% higher productivity, 47% return on equity and 39% increase in customer satisfaction. In a scenario where men and women have the ability to contribute equally, we have the opportunity to add \$28 trillion to the annual GDP. Effective gender partnership is a \$28 trillion dollar business decision.

Beyond the business case, gender partnership is a moral decision. It is the 'right thing to do'. To truly close the gender gap we need to engage in an organizational culture mindset shift and that requires participation of everyone – regardless of gender identification or career level. This cultural mindset shift cannot happen overnight, nor can it happen through one-off training sessions. Real change happens through a series of nudges - building awareness, knowledge, desire and, ultimately, real action. In this session participants will learn what it takes to move from awareness to action – what it means to be an active gender ally in the workplace, the first steps to engage in meaningful gender partnership and how sponsorship is 'the ticket' to gender equity.

Presenter: Lesley Parrott-Galgay, Genesis

Theme: Culture Transformation
Time: 11:15 am - 11:45 am

We Are Paying Attention Now – Culture Matters!

In a world of civil & racial unrest, certain critical events transpired during the Covid 19 Pandemic that has caused our generation to take a deeper look at Equality, Diversity, and Inclusion (EDI). In addition to protestors marching in the streets, businesses have reportedly spent billions of dollars improving racial relations among workers. Some may argue that this year is one of the most socially and culturally woke moments in history. And if this is the case, leaders must seize this moment in their areas of influence to inspire others to grow and evolve. In fairness, most leaders believe that there is more work to do in this arena. Consequently, the conversation on leading diverse populations is not new, but today, it is a conversation that the world is ready to join. This presentation will recap the impact of various political and racial events and how the world has responded. The sessions will then provide global leaders with key strategies to aid them in taking advantage of the present change management and DEI opportunities most organizations face.

Presenter: Roxanne Kemp, Cultural Intelligence Center

Theme: Intersectionality
Time: 11:15 am - 11:45 am

Equitable Scholarship - Lessons Learned from AWSN's New Scholarship Program for Alberta STEM Students

Traditionally the AWSN Scholarship program offered one \$3000 scholarship with a focus on underrepresented populations in STEM, specifically the attrition-prone third and fourth year of an undergraduate program. With the support of TC Energy, this Scholarship program was expanded to ten \$3000 scholarships and offered AWSN a chance to better define the word underrepresented. Through the guidance of a GBA+, the updated program design used an intersectional lens - defined as an interconnected analytical framework for understanding how the social and political identities of an individual intersect to create different types of systemic oppression and discrimination and lived experiences. As individuals, each of us has identifying factors that make us who we are and influences how we experience our day-to-day life. The spaces we inhabit can also (re)produce cultures that are unwelcoming and restrictive. The GBA+ lens was also used as part of a qualitative and quantitative analysis on all data collected to inform and support the AWSN Scholarship team to refine the application and adjudication process - such as identifying award distribution gaps, what community groups are being missed for scholarship application announcements, and to assist the adjudicators as they work together to combat unconscious bias and stereotyping through the evaluation process. AWSN's intentions were to design a scholarship program that would support dedicated and engaged STEM students with leadership potential who may otherwise be overlooked. This presentation will discuss the design of the program, lessons learned from the pilot year, and the plans for the scholarship going forward.

Presenter: Alicia Bjarnason, CCWESTT

Theme: Recruitment/Retention

Time: 11:15 am - 11:45 am

Collaborating for Greater Gender Diversity in University Engineering Programs

Since 2011, Engineers Canada has set a national target of 30% women newly admitted to provincial orders by 2030. Engineers Canada's 30 by 30 initiative shows the need to take concrete action in our universities. Indeed, the focus on increasing the number of women in engineering mainly concerns Canadian universities that are mandated with graduating more women students in these fields. To this end, the Chair for Women in Science and Engineering in Quebec has developed a project to identify recruitment, retention and academic support practices for women students in engineering faculties, schools and departments in Quebec. In this proposed presentation, we will present the report Collaborating for Greater Gender Diversity in University Engineering Programs as a result of this project. This report is a tool that universities can use to devise an action plan. It is divided into three parts. The first presents the design of the inventory, the practices collected and the key findings. The second features a discussion of the measures proposed in the inventory, supported by a literature review, and gives examples of promising or proven practices in Western countries. The third part concludes with 14 recommendations for the university community in order to effectively guide efforts to improve women's representation in engineering. Although the project was conducted for the engineering field at the university level, it could be transposed to science programs and college programs in science and engineering. Moreover, this report sets forth findings and information that could inspire the field of science.

Presenters: Joëlle Pelletier-Nolet, NSERC Chair for Women in Sciences and Engineering (Quebec Region); Eve Langelier, NSERC Chair for Women in Sciences and Engineering (Quebec Region); Jade Brodeur, NSERC Chair for Women in Sciences and Engineering (Quebec Region); Vincent Belletête, Université de Sherbrooke; Nolwenn Crozet, Université Laval

Concurrent Presentations: 1:45 pm - 3:15 pm

Theme: Outreach

Time: 1:45 pm - 2:30 pm

Island WISE in Cape Breton: Developing an Innovative Board Game to Encourage Girls to Pursue STEM Fields

Island WISE hosts a variety of outreach events that engage young women across Cape Breton Island. Our events provide hands-on experience in Science, Technology, Engineering, and Math (STEM) through fun, purposeful, and engaging activities. We strive to include rural and indigenous communities in all our events. It is a fact that women have historically been underrepresented in STEM fields. They are less likely to choose careers in STEM, more likely to drop out of STEM programs, and less likely to advance in STEM careers. It is known that girls' interest in STEM peaks in middle school, but then drops off in high school. Coincidentally, middle school is the most vulnerable time for confidence building in both genders, but especially girls. To tackle these challenges, we developed an innovative board game called "STEMs" to target this age group. The game takes a multi-faceted approach to introduce players to what it is like to pursue a career in STEM fields. It teaches players about successes and setbacks along the way to becoming a professional scientist, and how grit and determination can help them advance despite the challenges that might be encountered. Players will also learn about scientists who overcame significant barriers during their pursuit of science. And players' abilities to overcome challenges will be put to the test with What Would You Do (WWYD) scenarios. The board is designed as a tree, and players travel from the bottom of the tree through the branches that symbolize "STEMs" along their career paths.

Presenters: Katherine Jones, Cape Breton University; Stephanie MacQuarrie, Cape Breton University;

Theme: Building Better Allies

Time: 1:45 pm - 2:30 pm

We are all Mentors: A Panel Discussion with Women Across the Many Professional Stages of Water Engineering from Early Master's and PhD Studies to Postdoctoral Fellows and Alumni

As the gender gap in water engineering begins to narrow in younger employees (< 45-year-olds), there remains a significant imbalance at higher levels of leadership, leaving younger women to navigate their early career stages with an abundance of these male-dominated manager/management relationships. In response, members of the Centre for Water Resources Studies (CWRS) research team will offer an all-woman panel discussion with participants representing multiple stages across the training and professional development trajectory, including early master's students, PhD students, post-doctoral fellows, research associates, and alumni who have gone on to careers in the water industry. The panel discussion will include both planned questions to highlight participants' experiences with leadership development, associated feelings of insecurity and success, involvement in community engagement, and any obstacles – both internal and external – that they have encountered in their journeys. Additional time will be available for an open question and answer period with the audience. Given the relative lack of women leaders to look to for guidance, the panel discussion will focus on approaches, solutions, and the role of peer-mentorship to find professional success in this male-dominated industry.

Presenters: Wendy Krkosek, Halifax Water; Kalli Hood, Dalhousie University; Meghan Swanburg, Acadia University; Crystal Sweeney, Dalhousie University; Sarah Jane Payne, Queen's University; Jennie Rand, Acadia University

Theme: Culture Transformation
Time: 1:45 pm - 2:30 pm

FEMINEN - Employees Standing Up for Inclusion and Driving Change Through Storytelling, Mentorship, and Intersectionality

Founded in 2012 the Enbridge FEMINEN Employee Resource Group (ERG) supports females and their allies in science, technology, engineering, and math (STEM) careers by facilitating opportunities for members to network, develop and learn from each other. Key members of the FEMINEN leadership team will share some of our challenges and triumphs in the growth and evolution of this ERG across multiple chapters in North America. We will highlight many of our successful programs including our Inclusive Storytelling Platform where employees bravely shared their authentic experiences in front of large audiences and had courageous conversations with senior leadership as we Stand Up for Inclusion. You will also hear about our Engineering Futures Program and how mentoring Indigenous youth has increased cultural awareness, sparked interest in STEM and increased graduation rates. FEMINEN is leading cultural transformation in diversity and inclusion as we break down barriers, celebrate our differences, and embrace allyship. Join us to hear more about our rewarding journey.

Presenters: Kevin Tsang, Enbridge; Edie Bates, Enbridge; Lia Squires, Enbridge; Tina Uribe, Enbridge

Theme: Other
Time: 1:45 pm - 2:30 pm

Digital Science Communication: Background, Barriers and Battleplan

WISEST (Women in Scholarship, Engineering, Science and Technology), exists to advance diversity while empowering women in STEM fields. WISEST achieves this vision by promoting the participation of underrepresented groups which includes young women, gender-diverse folks, 2SLGBTQIA+, rural, Black, Indigenous and students of colour. An emerging issue is the lack of diversity in Digital Science Communication (DSC). In this session, we will provide background as to why this is an emerging barrier, tackle some of the challenges faced when embracing this way of communicating and give strategies to improve your own digital science presence such as how to start putting together a personal brand. This session aims to engage young professionals who are just beginning their journey in the STEM fields through to seasoned professionals who are looking to find new and innovative ways to increase visible diversity in STEM through social media. This presentation will be delivered as an interactive workshop where participants will get to work with each other on the personal branding exercises.

Presenters: Helen Yip, WISEST

Theme: Recruitment/Retention
Time: 1:45 pm - 2:30 pm

WinSETT – Who are We? Where We’ve Been and Where We’re Going – Help us Shape our Future in Support of Women and Employers in SETT

WinSETT was launched at the CCWESTT Conference in 2010 to develop leadership programming that would enable and encourage early- and mid-career women to enter, grow, stay and lead at all levels in SETT workplaces. Over the last decade, we’ve built in-person and online leadership programs for women and through our project work with researchers and employers, initiated efforts to influence SETT workplace culture to be more respectful and inclusive. This action-oriented mission is what drives us. We strive for a world where women participate fully in science, engineering, trades and technology. At CCWESTT in 2020, WinSETT had planned a session to celebrate our 10-year anniversary and hoped to engage attendees in a vision of our next 10 years. In this fun interactive session, Marg Latham, Chair of WinSETT along with Sarah Watts-Rynard, Vice Chair and Edna Dach will present the past, present and future of the WinSETT. Come along and discover information about the WinSETT Centre and the work that has been accomplished to date including the most recent project with WAGE, Reducing Systemic Barriers in Science, Engineering, Trades and Technology to Advance More Women In SETT. During the session participants will break into groups to discuss future opportunities for WinSETT. They will also have the opportunity to see a never-before-seen video of our founder, Dr. Margaret-Ann Armour. We will draw on the collective expertise of CCWESTT attendees to help us chart a path for the next decade and understand where we can build continued impact for women in SETT.

Presenters: Marg Latham, WinSETT Centre; Sarah Watts-Rynard, WinSETT Centre; Edna Dach, WinSETT Centre

Theme: Building Better Allies
Time: 2:30 pm - 3:00 pm

Allies Through Mentorship

One of the most important ways of advancing and retaining women and underrepresented groups in STEM careers is building robust social and professional networks. Mentorship programs with the goal of increasing chances for networking, creating a culture of inclusiveness and establishing role models within the field are the foundation to advancing women and underrepresented groups. Since 2015, Women in Science, Engineering and Research (WiSER), and University of Alberta Women in Science and Engineering (UA-WiSE) have successfully developed and implemented a mentorship program to support women and underrepresented individuals in STEM. The mentorship program is uniquely designed with a trio structure consisting of one undergraduate student, one graduate student or early-career professional, and one experienced professional. This structure provides a sustainable system for individuals at various stages of their STEM careers to connect, share, and learn valuable insight from one another. To date, the program has helped 136 trios build lasting mentor-mentee relationships. The successes and challenges of this program will be discussed. This talk will also provide tips on mentorship best practices based on our experiences with past and present program participants.

Presenter: Noor Al-Zanoon, WiSER, University of Alberta

Theme: Outreach
Time: 2:30 pm - 3:00 pm

New Boots - How our Provincial Network Combines Outreach with Recruitment to Hopefully Produce Retention!

New Boots: Progressing Women in Trades is New Brunswick's provincial network and resource hub that aims to promote, support and mentor women in non-traditional skilled trades sectors such as: construction, maintenance, manufacturing, automotive, truck and transport and forestry. Our networks goal is to promote, support and mentor girls and women who choose a skilled trade career in NB. Through the years we have changed our outreach activities to include children, teenagers and adults. If most of our work is geared to girls and women by our NB tradeswomen themselves, we now include boys in some of our outreach activities to normalize both gender in our sectors as there is no gender to a career! Come find out about our provincial network and our outreach efforts.

Presenter: H el ene Savoie-Louis, MAP Strategic Workforce Services Inc.

Theme: Culture Transformation
Time: 2:30 pm - 3:00 pm

Building a Sexual Harassment Free Workplace for Women in Electricity

According to the 2018 update of Canada's Center for Gender, Diversity and Inclusion Statistics, 60 percent of survey participants reported having experienced harassment in the workplace and 30 percent said they had experienced sexual harassment. As a male-dominated industry, women in electricity occupations across Canada are at higher risk to be sexually harassed in the workplace. EHRC, building on its strong relationships with employers across Canada, aims to foster a constructive dialogue and increase awareness about sexual harassment in the workplace. EHRC will do this through the development of an educational outreach program to inform employers about sexual harassment, including strategies to address and prevent it. The program will remind employers and employees of laws, responsibilities, and rights to actively to prevent sexual harassment and respond to complaints appropriately. The program will be supported by a set of educational tools fostering a respectful and harassment-free work environment. This session will speak to the project preliminary findings as well as the project itself and how conference participants may want to be involved. Learning Outcomes: 1. Gain familiarity with EHRC's Building a Sexual Harassment Free Workplace for Women in Electricity project, and how stakeholders can get involved 2. Understanding the critical components of an a physically and emotionally safe work environment built on trust, collaboration, healing, and recovery to support the well-being of employees by preventing practices and behaviours that may inadvertently re-traumatize 3. Evidence of how awareness and knowledge of sexual harassment in the electricity sector workplace prevents sexual harassment, shift mindsets, and shape attitudes

Presenter: Anita Gara, Electricity Human Resources Canada

Theme: Other
Time: 2:30 pm - 3:00 pm

A Look at the Co-op Training Experience of Women Students in Science and Engineering

In Canada, women represent nearly half of the labour force, but are underrepresented in the science and engineering fields (SE). Why? For many reasons: Studies suggest a powerful effect of gender and social stereotypes, sociocultural context, low exposure to women scientific role models as well as women's and men's representations of science and engineering and the associated careers. And what about co-op placements? How do they impact the career path of women in SE? In different aspects, co-op placements, which are offered in several universities, have a positive impact on students, women and men. However, few

researches have explored the experience of women students in co-op placements settings where they are underrepresented relatively to men. This is why the team of the Chair for Women in Science and Engineering in Quebec (CWSE) conducted a study, from 2018 to 2021, to understand the perception of the women students of their co-op experience. To do this, semi-structured individual interviews were conducted with 36 women students in SE (14 students in sciences and 22 students in engineering). What are the study results? For example, more than a quarter of the total women students interviewed (sciences and engineering) mentioned the development of new skills (31%) and the creation of a network of contacts (25%) as the main benefits of the co-op placements. Conversely, the main challenges identified by the women students interviewed were supervisors' interactions (53%) and technicians' or other workers' interactions (25%). In the proposed activity, we will present the full study results.

Presenters: Jade Brodeur, NSERC Chair for Women in Sciences and Engineering (Quebec Region); Eve Langelier, NSERC Chair for Women in Sciences and Engineering (Quebec Region); Joëlle Pelletier-Nolet, NSERC Chair for Women in Sciences and Engineering (Quebec Region); Vincent Belletête, Université de Sherbrooke; Nolwenn Crozet, Université Laval

Theme: Recruitment/Retention

Time: 2:30 pm - 3:00 pm

Exposure to Engineering: High School Participation in Outreach Programs, Role Models, and Recruitment Events and Likelihood of Engineering Program Graduation

Girls and women are under represented in engineering. Researchers recommend building awareness and maintaining interest in STEM careers through more frequent exposure to STEM, including through relationships with role models, participation in outreach programs, and university and program information. However, limited research is available looking at the long term outcomes of this programming for students. We take an occupational fit perspective to look at whether exposure to engineering prior to entry, such as through outreach programs, leads individuals to better assess the fit between their values and interests and ultimately to complete their engineering degree. In this study, we surveyed students about their outreach program, role models, and recruitment event participation in high school and assessed whether they graduated or not 5 years later. Results suggested that there are differences among male and female students and also point to future research directions for understanding girls and women's attraction and retention in engineering.

Presenter: Nicole Wilson, University of Alberta

Theme: Outreach

Time: 3:00 pm - 3:15 pm

Academic, Professional, and Personal Effects for Students Leading STEM Outreach

The integrative STEM Team Advancing Networks of Diversity (iSTAND) program started in 2014, with the initial objective to engage youth in hands-on science activities. To undertake this program, post-secondary students were engaged as volunteers and staff in outreach activities. This study explores the academic, professional and personal career benefits of leading STEM outreach, from the perspective of undergraduate student leaders. Post-secondary staff from traditional and non-traditional STEM fields led programs and therefore we consider university students in STEM broadly from health to engineering, as well as gender and type of position (paid or volunteer) in this evaluation. Data were collected through an online survey completed by 30 former student STEM outreach leaders from the University of British Columbia. Survey data indicated that STEM outreach had a moderately strong impact on academic, professional and personal career development. Outcomes did not differ between genders and paid work was found to contribute to greater personal and professional impact. The positive influence of outreach on academic and professional decision making was higher in traditional STEM fields than STEM based health-science studies. Future studies are needed to fully understand how demographics and year of study might differentially inform career decision making within as well as between STEM fields to maximize university student leader involvement and create advances in the university-leaders academic and professional development. The outcomes of this research will further inform the relevant impacts of STEM outreach on university student leaders.

Presenters: Jennifer Jakobi, Westcoast Women in Engineering, Science and Technology (WWEST); Elizabeth Saville, UBC Okanagan; Sabre Cherkowskil, UBCO Okanagan

Theme: Inclusive Leadership
Time: 3:00 pm - 3:15 pm

Inclusive Leadership - Unlocking the Power of Diversity

Women in Resource Development Corporation will offer a condensed session of our successful Inclusive Leadership training. Whether you are in a formal leadership role or not, this professional development workshop explores how we all can incorporate the principles of inclusive leadership into our work lives. Together we will unpack the concept of what it truly means to be inclusive, how to lead diverse teams effectively and why it matters. This workshop will help you reflect upon your own leadership style and understand the signature traits of inclusive leadership, specific inclusive behaviors and how to put them into practice.

Presenter: Tanya Hawco, Women in Resource Development Corporation

Theme: Culture Transformation
Time: 3:00 pm - 3:15 pm

ReacHER

EHRC is an industry leader in promoting and fostering change and growth across the sector. Over the last two years we have seen the COVID-19 pandemic drastically impact women's representation in an already male-dominated sphere. Coined a she-cession, the pandemic has further highlighted and intensified the need to address the issues of systemic gender roles and imbalances that result in male-dominated spaces. We know that caregiving and the unpaid labour of family responsibilities fall primarily on women. This impacts their capacity to participate in the public sphere under its current conditions and employment expectations. We will be sharing learnings from our project ReacHER, a pilot program designed to support women and caregivers who are returning to the workforce after an extended time away from the labour force. We have designed a toolkit that consists of recommendations to both employers and their HR policies for how they can better adapt to the needs of individuals who take on primary caregiver roles, including how best to engage with those returning to work after a period of absence. The program has looked for ways to retain women who are trying to re-enter the workforce. With the great resignation on its way, we have developed tools for employers to better meet the needs of their employees; whether with continuous learning paths, development opportunities and networking, skills development, flexible work schedules, or childcare supports.

Presenters: Pamela Flynn, Electricity Human Resources Canada; Emily Griffiths, Electricity Human Resources Canada

Theme: Recruitment/Retention
Time: 3:00 pm - 3:15 pm

COVID-19 and its Effect on our Tools - Stop the Leaky Pipeline

Mentorship has long been found by research to be the best method for retention, when done correctly. Before the concept of 'bias' and ' ' were terms used commonly in workplace trainings, social science research had found them integral to why minorities in male-dominated workplaces left in disproportionate numbers. While the concept of the workplace has continue to evolve- none so rapidly as by the catalyst of COVID-19. With more people working from home (large numbers of them identifying as women), and more social programming being cut for safety reasons- we are potentially hitting a new leak in the 'leaky pipeline'. This presentation will look at the research we have, as well as the stats coming out of COVID-19 to project new issues employers and alike may wish to keep aware of to avoid more women leaving WESTT fields.

Presenter: Lori Wareham, University of Saskatchewan/McInnes Cooper

Theme: Recruitment/Retention
Time: 3:00 pm - 3:15 pm

She Persisted, or Did She? The Role of Belongingness and Utility Value in Women's Persistence in STEM

The degree to which women expect, perceive, and are influenced by negative stereotypes pertaining to their abilities or interests acts as a barrier to entry and persistence in science, technology, engineering, and math (i.e., STEM) fields. In this presentation, we will review results from a multi-institutional study examining the impact of stereotype vulnerability on differing aspects of university students' commitment to their academic major (i.e., personal identity versus obligation and perceived costs) along with the potential mediating effects of belongingness, life satisfaction, and utility value. We surveyed Canadian undergraduate students (N = 496) enrolled in a range of academic majors (i.e., physical sciences [pSTEM], life sciences [lsSTEM] and non-STEM). Results of moderated mediation analyses indicate that women are more vulnerable to stereotypes than men, particularly in pSTEM fields. Moreover, women's vulnerability to stereotypes serves as an antecedent to reduced belongingness, a devaluing of their major, and reduced life satisfaction, all of which predict lower levels of identity-based academic commitment. Findings underscore the importance of dispelling negative cultural stereotypes about women's abilities, particularly within pSTEM fields, as a way of encouraging women to enter and persist in these fields.

Presenters: Hanna Bincik, Acadia University, Department of Psychology; Randy Lynn Newman, Acadia University, Department of Psychology; Joseph Hayes, Acadia University, Department of Psychology; Tamara Franz-Odendaal, Mount Saint Vincent University, Department of Biology, and NSERC Chair of Women in Science and Engineering (Atlantic)

Concurrent Presentations: 3:45 pm - 5:15 pm

Theme: Outreach

Time: 3:45 pm - 4:30 pm

Collaborating to Inspire, Celebrate and Engage: Lessons Learned from Initiatives Aimed at Fostering a Culture of Inclusion

The Women in STEM initiative by Ingenium, launched in 2019, is driven to engage, advance, and retain the interest of young women in STEM fields. We know women have always made important contributions to STEM fields throughout history, yet gender inequity persists, especially at the highest levels of academia and industry. This underrepresentation results in a lack of visibility of women and non-binary people in STEM. In order to improve this lack of profile the Women in STEM initiative is inspired by the notion of “If I can see her I can be her!”. It has created outreach resources including 70+ posters, more than 20 videos, an interactive timeline, and a travelling exhibition that share stories of the contributions of women and non-binary people in STEM. Moreover, its accompanying educational resources and activities, designed for multiple audiences and age groups, serve as launchpads for discussions that shed light on persistent, often implicit, gender biases, how different social identities impact the experiences and representation of women in STEM, and the advantages of diversity in STEM. In combination, these resources educate, inform and build allies to tackle gender inequity.

Presenters: Sandra Corbeil, Ingenium - Canada's Museums of Science and Innovation; Eleanor Haine, Canadian Commission for UNESCO; Andrea White, Office of Fisheries and Oceans Canada

Theme: Building Better Allies

Time: 3:45 pm - 4:30 pm

Sett for Life-Allyship in Action Alligning Stars for Everyone

As we reflect on our action plans how do we connect intersectionality, inclusive leadership, recruitment, retention, outreach and cultural transformation with an allyship lens? What roles do Boards and Staff play in Equity, Diversity, and Inclusion initiatives? Various dimensions of diversity such as race, gender, culture, class, and ability have historically created privileges as well as barriers. In today's workplace organizations, through leadership awareness and action are now working on different initiatives that build more inclusive work environments to improve participation and access for underrepresented and marginalized groups. Our workshop we will start with a personal inventory exercise which will set the stage for our overview and introduction to ally-ship. Our discussion will allow us to have an engaging courageous conversation, share resources and be informed on what actions in our roles as leaders, learners, educators and community members we can take to reduce barriers and promote diversity and inclusion through meaningful ally-ship. In this workshop we will identify relevant terminology with respect to ally-ship; including what it is, the various types, strategies to act in ally-ship with minorities and active ways to make one's privilege work for others. Demonstrate an understanding of the current and historical barriers that certain groups of people encounter in the community, when entering and within the workforce. Reflect on how these barriers can affect the vision and values within and outside the and ways to overcome them.

Presenter: Tinaye Manyimo, Shumba Consulting

Theme: Culture Transformation

Time: 3:45 pm - 4:30 pm

Diversity and Inclusion at Transport Canada

Through the varying personal and professional experiences of the panelists, we will explore the meaning of Diversity and Inclusion to the individual panelists and to the larger organization of Transport Canada. From a candid perspective, we will discuss initiatives that have worked and those that have fallen flat. Given the varying experiences and experience levels of the panelists, we will explore the present initiatives and how diversity intersects with their positions at Transport Canada. Taking a look to the future, we will explore the future of diversity and inclusion in the workplace. What is the future of diversity and inclusion as we move into a post-pandemic workplace? How does our current construct of diversity and inclusion need to change as we face long-term hybrid and remote work? Finally, the panelist will share some best practices and practical strategies that we can implement in our circles of influence (be they small or large).

Presenters: Andrea Watts, Transport Canada; Shari Currie, Transport Canada; Rumbi Muvingi, Transport Canada

Theme: Other
Time: 3:45 pm - 4:30 pm

Leapfrogging to Online: Sharing Lessons Learned and Effective Practices Moving the WinSETT in Person Leadership Program to the Virtual World

In 2020-21, WinSETT launched 14 Leadership Program for Women in SETT Skill Builders with virtual delivery. We learned a lot along the way. We leaned on experts to teach us and built our in-house capacity to design and delivery engaging online learning experiences. All our online Skill Builders are as close to in person as possible in that they are live, interactive, action focused, evidence based, and self-reflective. This session will share our lessons learned and practices we found particularly helpful and effective. Participants will be asked to share their own lessons learned, their promising and effective practices as well as discussing “what’s next in our virtual training”?

Presenter: Susan Hollett, WinSETT Centre

Theme: Recruitment/Retention
Time: 3:45 pm - 4:30 pm

Building a Diverse and Inclusive Talent Pipeline for the Ocean and Marine Sector of Atlantic Canada

COVE boasts a well-established history of championing EDI (Equity, Diversity, and Inclusion) in the blue economy, not only demonstrated internally at COVE through our programming and with our 60 resident businesses, but also with far-reaching partnerships and initiatives nationwide with corporate Canada and equity seeking groups. Since our core workforce development work began, education and outreach has been fundamental to its purpose and mandate. We have built and delivered very successful workforce development programming focusing on career education, exploration and diversifying the talent pipeline for close to a decade. Our outreach ranges from elementary school pupils and educators to mid-career professionals and industry leaders. Our session will share the best practices and examples of talent pipeline activities for inclusive and diverse recruitment and retention in our sector (particularly focusing on high school and post-secondary students), as well the mindful approach in of project/program development in how we weave EDI into all of our workforce development projects and initiatives.

Presenter: Tanya Lush, COVE

Theme: Outreach
Time: 4:30 pm - 5:15 pm

Collaboration- a Key to Sustainability and Expanding your Organization’s Impact

Established in 1982, at the University of Alberta, WISEST (Women in Scholarship, Engineering, Science, and Technology) has 40 years of experience in encouraging diversity while empowering women to succeed in STEM. In 2016, WISEST was at a crossroads, a crisis. The dilemma -a growing demand for initiatives attracting women and gender diverse students to STEM within the very real constraints of reduced funds, increased competition for new funding, overtaxed staff, and operational capacity limits. The question we were faced with was how to meet the demand within these constraints? Over time, the answer that emerged was a recognition, that we could only do so much, but if we could leverage relationships with other groups that were value-aligned, and have those relationships develop fruitful outcomes that attracted more individuals to STEM, then we would be able to expand our impact. Based on lessons learned from organizational successes and missteps resulting from WISEST’s strategic shift to developing collaborative relationships and partnerships, this session will offer insight and strategy on how to approach collaborations so that they can be true win-win relationships. We will outline the benefits of building a foundational framework based on values-alignment and examine the strategic advantages of 1) giving alumni a voice and platform - leveraging program alumni and committed volunteers, 2) amplification through shared audiences - partnerships with community groups with the same target demographic, and 3) knowing your own value - developing relationships with organizations that want access to your expertise and to your audience.

Presenter: Fervone Goings, WISEST

Theme: Building Better Allies
Time: 4:30 pm - 5:15 pm

Engineers Canada’s EDI Training for Engineers

Engineers Canada and the engineering regulators understand the importance of supporting Equity, Diversity and Inclusion (EDI) within the engineering profession. EDI in engineering means engaging and retaining the best minds of the profession, which includes but is not limited to all genders, LGBTQ2S+ communities, Indigenous people, Black people, people of colour, and persons with disabilities. In order to engage a diversity of perspectives and lived experiences, engineers and engineering workplaces need to promote a culture of inclusion and address existing stereotypes and systemic discrimination that result in a culture of exclusion in the profession. As part of Engineers Canada’s 2019-2021 strategic plan and its operational imperative to promote diversity and inclusion in the profession that reflects Canadian society, Engineers Canada has identified the need for greater understanding and competencies related to EDI within the profession. Engineers Canada has partnered with Engineers and Geoscientists British Columbia to form the EDI Training

Task Force to aid in creating an EDI training module for engineers. The training is one step towards supporting more inclusive leadership, building better allies, and embedding EDI into the engineering profession through self-reflection and learning.

Presenters: Cassandra Polyzou, Engineers Canada; Christine Plourde, Wood PLC; Ailene Lim, Engineers and Geoscientists BC

Theme: Culture Transformation

Time: 4:30 pm - 5:15 pm

Scientific Expertise and Women in STEM

Researchers in science studies have given a lot of thought to scientific expertise, to the point where some have organized the field into three waves, distinguished by the way in which scientific expertise is conceived. This work – and some work carried on in science education – allowed to build models to better understand scientific expertise and its development (e.g., Collins and Evans’s periodic table of expertise), strategies used to undermine or enhance a person’s expertise (e.g., Jasanoff’s game board of expertise) and the relations a person can have with scientific experts (e.g., Groleau and Pouliot’s model of relationships to scientific experts). During this communication, I will present the concept of scientific expertise, a few of those models and ways to use them to analyze various aspects of the situation of women in STEM.

Presenter: Audrey Groleau, Université du Québec à Trois-Rivières

Theme: Culture Transformation

Time: 4:30 pm - 5:15 pm

“The Missing Link”: The Role and Use of Sustainability Themes to Increase Gender Diversity in Engineering

There has been increasing awareness that diversity and its proper management can yield strategic and competitive advantages in the business world. Research has shown that organizations with more gender-diverse management teams have better financial, ethical, and operational performance. Despite the benefits, women continue to be under-represented in Engineering, even though it encompasses many of the largest industries in the world, including those that are responding to the urgent call for sustainable development. Although engineering is a prominent field, in Canada, as of 2017, women accounted for only 17.1 percent of the country’s total population of registered professional engineers. Research has also shown that women are drawn to careers that focus on sustainable applications, e.g. those that benefit community, the environment, societal well-being, and the economy. It is proposed that the various facets of sustainability increase gender diversity and facilitates an educational experience that enhances and promotes not only design, innovation, and creativity, but a sustainability mindset in Engineering. In addition, diversity and intersectionality result in engineers who are global citizens in addition to being problem solvers and critical thinkers. The engineering graduate of the future and the nature of engineering education will be transformed as a result. This proposed panel discussion will analyse the role and use of sustainability themes as drivers for increasing gender diversity in engineering in an academic setting, as observed through Grades 7-12 outreach, undergraduate education, graduate research and training, and technology transfer.

Presenter: Amy Hsiao, UPEI Faculty of Sustainable Design Engineering

Theme: Recruitment/Retention

Time: 4:30 pm - 5:15 pm

Let’s Talk: Women in STEM and Science Teaching

How many women in STEM in the contemporary era? What were/are their major contributions to STEM fields? And how can science teaching, at the elementary, secondary and university levels, contribute to a better promotion/participation of women in STEM for the benefit of all society? These are some of the questions we want to address with the audience, during the talk to which women and men are all invited. The floor is yours!

Presenter: Catherine Mavriplis, University of Ottawa

Concurrent Presentations: 10:30 am - 12:00 pm

Theme: Outreach

Time: 10:30 am - 11:00 am

WISE NL Student Summer Employment Program - A Shift in Pandemic Times

The WISE NL Student Summer Employment Program (SSEP) provides meaningful summer employment opportunities in STEM to Level 2 females throughout Newfoundland and Labrador (NL). SSEP has successfully employed over 1000 young women in STEM placements in its 32 years of existence. Alumni include a Google executive, university professors and a Rhodes scholar. When the Covid-19 Pandemic shut down the world in 2020, the difficult decision was made to cancel SSEP for the first time in 30 years to protect the safety of our staff, students, and supervisors. For the 2021 program, SSEP shifted to a combination of remote and in-person employment opportunities. This allowed for the inclusion of student participants from more areas of the province. This shift allowed WISE to offer remote positions and the program reached students in more rural areas of the province who may not have been able to participate in SSEP otherwise. In addition to allowing us to hire young women from 11 different communities across NL, by implementing a remote work option we were able to hire 7 Indigenous youth, expanding our outreach to multiple under-represented groups in STEM (young women, rural youth, and Indigenous youth). The overall goal of SSEP is to educate young women in NL about the options for education and employment in SETT and provide them with the opportunity to gain meaningful employment experience in areas which they may be considering pursuing future education. It is our hope that SSEP participants will consider education and careers in SETT going forward.

Presenter: Clare Graves, WISE NL; Kelsey Howlett, WISE NL

Theme: Building Better Allies

Time: 10:30 am - 11:00 am

LGBTQ+ Postdocs in Science: Perspectives on Representation, Mentorship, and Coming Out

Increasing representation and inclusion of marginalized groups in science would increase opportunities for these groups and advance equity. However, Western science has historically been male-dominated and associated with hegemonic masculinity. While there is a substantial body of literature on women's inclusion in science, less is known about LGBTQ+ representation. There is also little data about the postdoc experience. To explore these topics, we conducted a qualitative study on the experiences of LGBTQ+ Canadian postdocs in science fields. The study was framed within a post-structural lens. We recruited participants through postdoc associations and social media channels. Fourteen self-identifying LGBTQ+ participants completed semi-structured interviews about their postdoc experiences. Data were analyzed thematically. Representation, mentorship, and coming out were themes that emerged from the data. Most participants voiced that LGBTQ+ representation in the sciences is important for younger scientists to see. However, coming out was described as a personal choice, and participants chose carefully which contexts to come out in. Overall, these results show the critically important role representation and mentorship play for marginalized groups in science in Canada.

Presenters: Drew Burchell, WISEatlantic; Tamara Franz-Odendaal, Mount Saint Vincent University, Department of Biology, and NSERC Chair of Women in Science and Engineering (Atlantic); Phillip Joy, MSVU

Theme: Culture Transformation

Time: 10:30 am - 11:00 am

Solving the 'Lonely Only': The Canadian Black Scientists Network and the Advantages of a National, Multidisciplinary Coalition in STEM

Black Canadians are under-represented in most professional fields, and this is particularly true in STEM. This fact in itself presents substantial challenges to change. A dearth of Black exemplars, mentors, and leaders affects pathways into STEM fields ('see it to be it'), the success of those already in those fields (decoding unwritten rules, supporting success) and the development of efficacious programs and policies to reverse institutionalized anti-Blackness ('nothing about us without us'). This leads to several questions. How do we effect change when visibility and representation are so important, but there are so few who have 'made it'? How do we maximize the impact of those who are established in their fields, when many are working in environments rife with bias and racism, and anti-racism work is not compensated or rewarded? How do we ensure that successful policies and programs are available across the country, when progress is often made in institutional or regional silos? We discuss our approach of organizing across regions and disciplines to create a high-visibility coalition of Black Canadians in STEM. This national organization can drive national adoption of innovative programming more effectively than any regional or single-discipline entity. This is an effective, if virtual, solution to the 'lonely only' problem. We discuss engagement in responsible data collection, program vetting, mentorship, outreach and increased visibility. We also discuss barriers to success, including a dearth of operational funding and the time pressures inherent in creating and stabilizing such a structure.

Presenters: Maydianne Andrade, University of Toronto Scarborough; Juliet Daniel, McMaster University

Theme: Inclusive Leadership
Time: 10:30 am - 11:00 am

Bring an IDEA Plan into Research Labs

Research labs often struggle in how to integrate issues of equity, diversity, and inclusion into good practices in the lab. We all know that a strong commitment to inclusion, diversity, equity, and accessibility (IDEA) promotes and diversifies talents in research groups. But how to effectively do this is another question. While Canadian universities have their institutional EDI policies, in practice in the lab, most of these actions are not really feasible. We developed a toolkit intended to assist Canadian research groups, mainly principal investigator and/or professors, achieve an inclusive culture free of racism and discrimination and foster deeper respect and appreciation for different perspectives, merits, and skills. While this toolkit mainly focuses on providing a holistic IDEA approach for research groups, many of the considerations can be applied to other groups, institutions, and organizations. We focused on three major IDEA areas: 1) Inside the laboratory (admission, recruitment, curriculum, workload, mentorship); 2) Outside of the laboratory (field work, community engagement, science communication); and 3) Administration (decision-making, evaluation, training). The development of this toolkit has been supported by the Canadian Commission for UNESCO. It is part of a reflection that has been ongoing for a few years on practical considerations that should be added in various fields to enhance women and other underrepresented groups to ensure their full, equal and inclusive participation in society. In this session, we will discuss these good practices as a group for new ideas.

Presenter: Liette Vasseur, Brock University

Theme: Inclusive Leadership
Time: 10:30 am - 11:00 am

WISE Planet: A Framework for Change Leadership

Diversity in science, technology, engineering and mathematics (STEM) is necessary for addressing broader societal issues, such as the alienation of women and other underrepresented groups in the digital revolutions. As a result, we need leaders that 1) recognize the systemic inequalities that are deeply embedded in cultures and systems that further perpetuate discrimination and injustices and 2) cultivate creative collaboration that can be used to ensure that these technologies and systems are designed with inclusion and accessibility at the forefront. To achieve these opportunities, we present the Women in Science and Engineering (WISE) Planet Programming, which provides women and underrepresented groups in tech with the training and the network to be change leaders. Specifically, this program focuses on delivering change leadership training to participants to empower them to take the lead as change leaders, champions, and mentors themselves. The core premise of WISE Planet is that we should train diverse STEM participants to make the change they want to see instead of focusing on teaching them to succeed in the existing systems. In this presentation, we will discuss the components of the change leadership training, which include four modules centred on topics: (i) Personal Leadership, (ii) Systems, Culture and Activism, (iii), Design for Disruptive technologies (iv) Sustainability Leadership. We discuss how this framework can shape the future of our workplace and the roles of experiential learning and networking in programming through interactive exercises. Lastly, we will discuss how such programs can be scaled.

Presenters: Lorena Solis, University of Calgary; Laleh Behjat, University of Calgary; Jennifer van Zelm, WISE Planet; Stacia McCoy, University of Calgary; Matthew Bardsley, University of Calgary

Theme: Outreach
Time: 11:00 am - 11:30 am

The Engineering Problem-Solving Process to Make School Tasks in Technology Meaningful and Interesting for Girls

For two decades, in Quebec as in several OECD countries, engineering and technologies have been part of the official programs of compulsory general secondary education. However, despite the consensus on the importance of quality technological education for all students, several studies reveal major deficits in the training to teach these disciplines, at the international level (Cunningham et al. , 2007; Daugherty et al., 2012; Bousadra et al. 2018; Honey et al. 2014).

Several problems still arise: how to transpose knowledge belonging to very varied authentic engineering practices into school knowledge with an educational aim?

In this communication, we present training devices designed and tested at the Faculty of Engineering of the Université de Sherbrooke and in secondary schools. The devices emphasize authentic activity in the school task proposed to the student. The objectives are to help the student understand the choices that have been made and to identify the needs of users, the functions of a product as well as the constraints to be managed.

The results show that after a period of resistance experienced by learners, a transformation in perceptions clearly emerges.

Presenters: Eve Langelier, NSERC Chair for Women in Sciences and Engineering (Quebec Region); Fatima Bousadra, Université de Sherbrooke; Abir Ouerhani, Université de Sherbrooke; Nicolas Félix, Lacombe

Theme: Culture Transformation

Time: 11:00 am - 11:30 am

Building DEI Culture Without Getting Overwhelmed

Consulting engineering is both an engaging and demanding profession. We juggle several projects at once, trying to deliver high quality projects efficiently and within a set period of time. The challenges of such a high pressure environment can become great opportunities within a corporate culture that enables innovation by celebrating differences and nurturing authenticity. This is fundamental to allow each individual to thrive unconditionally.

Two years ago, a couple of employees saw a need for a more formal approach to diversity, equity, and inclusion (DEI). They did some research and prepared a presentation for senior management with the benefits of an employee-led DEI program to our culture and overall health of the organization. The presentation was very well received and inspired the creation of a committee focused on all things related to DEI. The Inclusion, Diversity, Equity, Advice and Support (IDEAS) group has been flourishing since it began and has taken on a life of its own!

At CBCL we believed that an employee driven advisory committee for diversity and inclusion was critical for reaching these goals and this presentation will discuss the challenges and opportunities associated with this initiative and the successes and lessons learned for the last two years.

Presenters: Victoria Fernandez, CBCL Limited; Holly Sampson, CBCL Limited; Alan Ehrenholz, CBCL Limited

Theme: Culture Transformation

Time: 11:00 am - 11:45 am

A Positive and Impactful Manifesto on the Situation of Women in STEM

In the winter of 2020, members of the Association de la francophonie à propos des femmes en sciences, technologie, ingénierie et mathématiques (AFFESTIM ; Association of Francophone Women in STEM) held a strategic planning meeting in which they discussed the progress made since the 1980s, but also the road ahead regarding the situation of women in STEM. They wanted to take those thoughts further and to put them into writing. Members of AFFESTIM, with approximately forty people from various backgrounds, wrote a book. It is a positive and impactful manifesto on the situation of women in STEM, containing 50 short texts, each on a theme related to women in STEM: how to produce inclusive pedagogical resources in STEM, how women in STEM have experienced the COVID-19 pandemic, the importance to produce and maintain archives on women in STEM, a look back to 40 years of work by pioneers, etc. The texts adopt a positive tone and propose solutions, even if they show the obstacles that still stand on the way of women in STEM. The book was recently published, and is also available in an electronic open-access version for wide distribution. It will also soon be available in English and in Spanish. In this communication, we present the process of drafting the manifesto, the main findings it arrives at and the recommendations it makes to guide the work of women's associations in STEM in the coming years.

Presenters: Louise Lafortune, Université du Québec à Trois-Rivières; Claire Deschênes, Université Laval; Audrey Groleau, Université du Québec à Trois-Rivières

Theme: Building Better Allies

Time: 11:00 am - 12:00 pm

Building a Collaborative Network

During the COVID-19 pandemic, the Network of NSERC Chairs for Women in Science and Engineering (WISE) developed a Network of Collaboration program for faculty and postdoctoral women researchers centered around building creative collaborations in science, technology, engineering, and mathematics (STEM). The purpose of the initiative was to facilitate connections and collaborations between women academics from across Canada and from all career levels in STEM who were experiencing increased isolation due to the pandemic. The specific goals of the program included: 1. Building connections and providing networking opportunities; 2. Providing practical tools and resources for effective collaborations; and 3. Facilitating research and academic collaboration. This presentation showcases the use of creative collaboration tools to establish and develop networks based on the WISE Network of Collaboration program. The program includes practical tools such as conflict resolution, creativity, financing/entrepreneurship, leadership, and suit-training. Based on the experience of the WISE Network of Collaboration program, information is presented on how to build and maintain inclusive collaboration networks where women in STEM are supported. Outcomes from the program are presented as well as opportunities to apply creative collaboration tools to other areas that support women in becoming change leaders in STEM.

Presenters: Laleh Behjat, University of Calgary; Shohini Ghose, Wilfrid Laurier University; Catherine Mavriplis, University of Ottawa; Anne Ndegwa, University of Calgary

Theme: Recruitment/Retention

Time: 11:00 am - 12:00 pm

Better Together: Accelerating SETT Women's Personal and Professional Success through Group Coaching and Online Community

WinSETT is contributing to the recovery from the impacts of COVID-19 for Canadian women in SETT. Working virtually added a new complexity and getting noticed can be more difficult than ever. We have all had to acclimatize to remote work and may find ourselves cut off from normal opportunities to socialize and build relationships. Leadership, communication, career management and other so-called 'soft' skills are important tools that propel women toward their career objectives. Generic leadership training may help but fail to illuminate the gender-based obstacles that may be holding SETT women back. In May 2022, we'll kick off the pilot of a new 8-week program for women in SETT and their allies (all genders welcomed). Through the combination of online learning, online group coaching sessions and an online community, we'll help our participants find: -clarity on their most important professional and personal goals, -confidence on the actions they need to take to make their goals happen, and -community and practical support to get them done: thus, providing each participant an accelerated path to success – as they define it for themselves. Our programs attract a wide array of SETT women and their allies across Canada. Our participants will connect and network, share stories and discover which challenges they share. Each group coaching will be led by an expert facilitator who will provide personalized insights and recommendations, as well as practical, actionable tips and strategies. Most importantly our participants will lift each other up and watch each other succeed.

Presenters: Erica Lee-Garcia, Women in Science, Engineering, Trades and Technology (WinSETT); Christina Gale, Women in Science, Engineering, Trades and Technology (WinSETT)

Theme: Outreach

Time: 11:30 am - 11:45 am

From Hair Ties to Lab Coats: The Impact of STEM Programming on Young Women

Madyn and Molly are both past participants of WISEatlantic programming who are now actively working towards inspiring young girls to pursue Science, Technology, Engineering and Math (STEM) careers. Their talk will detail their experiences as young women in STEM and the role WISEatlantic played during their formative years. Touching on how STEM outreach has impacted their lives and how they've used their experiences to continue that outreach, they will speak on their time facilitating summer camps, retreats and developing and running their own app contest 'Living WISEly' in 2021.

Presenters: Madyn Bourque, WISEatlantic; Molly Murray, WISEatlantic

Theme: Inclusive Leadership

Time: 11:30 am - 11:45 pm

Academic Training, Beyond the Classroom: Formal and Informal Initiatives to Build Leadership Skills in Women Engineering Students

Drs. Gagnon and Stoddart's research group at Dalhousie University's Centre for Water Resources Studies (CWRS) trains engineers in the water industry with a focus on producing the next generation of leaders. Formal and informal initiatives within the group aim to instill women with communication, project management, and leadership skills to equip them for their futures. This presentation will summarize the best practices employed by the research group and offer a broader reflection on the role of gender in the Atlantic Canadian water and wastewater industry through the discussion of the recently completed Atlantic Canada Water and Wastewater Association (ACWWA) report: Diversity in the Atlantic Canadian Water and Wastewater Industry. The ACWWA report found that nearly a third of respondents were over 50 years of age, indicating that in the next 10 to 15 years a substantial portion of the water and wastewater industry will be retiring. Further, young career respondents were more than half females, signifying that within 15 years the gender distribution of leadership and management roles could approach parity. If industry wants make a lasting shift in demographics, skill development is key so that women are prepared to take on leadership roles and in turn foster a sense of belonging in management and leadership positions. To this end, the CWRS is providing training activities beyond the classroom to help prepare women to lead. Examples of current activities and outcomes will be provided and future plans for improving these practices to be more inclusive.

Presenters: Dallys Serracin-Pitti, Centre for Water Resources Studies; Jennie Rand, Acadia University; Megan Fuller, Centre for Water Resources Studies

Theme: Outreach
Time: 11:45 am - 12:00 pm

Accessibility, Inclusion, and Gender Parity - SuperNOVA at Dalhousie University's Approach to Inspiring the Next Generation of Women and Girls in STEM

In an effort to reach gender parity in STEM fields, SuperNOVA has established core programming dedicated to all-girls engagement that includes clubs, workshops and camps. The proposed talk will showcase SuperNOVA's intentional program design which creates capacity for girls to explore STEM fields in a safe and approachable way. Key elements used by SN to create this impact include providing mentorship from industry experts and pairing this with high-quality content that promotes deep learning and connects to provincial curriculum. Programs offered by SuperNOVA that incorporate this approach include ITS (Industry, Technology, Science) For Girls, a program that introduces girls in grades 4-9 to mentors working and studying in the STEM fields; and Girls Count, a weekly mathematics mentorship program that introduces girls aged 11-13 to mathematics concepts through activities, mentorship engagements, and homework help. Female-identifying STEM professionals are invited to showcase a range of careers and industries in these programs. Mentorship is particularly impactful and important, as the mental health of those with a supportive adult is significantly better than those who do not. Guest speakers are recruited to best represent the diversity of STEM professionals and the range of related career opportunities, through the Dalhousie community, industry and conferences such as the Queer Atlantic Canadian STEM Colloquium. SN's all-girl programs are inclusive of all female-identifying and non-binary participants, and have accommodated participants from these groups previously. Past ITS for Girls mentors have self-identified as 2SLGBTQI+ individuals and were able to address intersectional barriers for queer women in STEM fields.

Presenter: Clayton Murphy, SuperNOVA at Dalhousie University

Theme: Inclusive Leadership
Time: 11:45 am - 12:00 pm

8 Strategies for Inclusive Leadership in Tech

We are seeing a growing knowledge pool of professionals taking up the challenge of being disruptors and innovators in the global reaching realm of technology. There are a plethora of tech-focused opportunities and many different journeys to arrive at the destination. This presentation will provide insights on the journey and strategies that employers can leverage for inclusive leadership, leveraging the experiences of a Tech-focused entrepreneur. We have seen technology develop under a narrow scope of representation for decades and as the world transforms, we see a widening gap in relative technology development. The good news is that recognizing this disproportionate development has ushered in a time of greater opportunity and inclusion; fostering a greater era of innovation and development in the tech world.

Presenter: Emily Smits, Modest Tree Media

Concurrent Presentations: 1:45 pm – 3:15 pm

Theme: Outreach
Time: 1:45 pm - 2:15 pm

ProGRES: Authentic Mentorship Through Research in Engineering and Sustainability

ProGRES, which stands for "Promoting Girls in Research in Engineering and Sustainability," is UPEI FSDE's directed effort to contribute to Engineers Canada's 30-by-30 Initiative and address the issue of underrepresentation of women in the fields of Engineering. This presentation will highlight the key factors contributing to ProGRES' success, including industry collaboration, community support, and organizational leadership. This presentation will also provide insight from ProGRES alumna on what outreach strategies are effective and why, including the positive effect and lifelong impact that authentic mentorship through independent research can achieve. ProGRES has had a profound impact, not only with the 22 young women who were selected for the program between 2017 to 2019, but with their classmates, high school teachers and counselors, and the communities at large who have heard about the ProGRES experience and now understand better what engineering is and what engineers do. ProGRES focuses on the mentorship relationship to encourage and inspire young women to pursue engineering. The success of the five weeks is founded on cooperation and creativity to offer unique hands-on learning in an academic research environment, i.e. with an independent project, introduction to computer-aided design, programming and laboratory conduct and safety training, site visits and tours, and impromptu experiences to experience the culture and spirit of an Engineering environment. The ProGRES students also have the opportunity to witness various possible career paths in engineering, meeting Engineers-in-Training starting their careers, professional engineers mid-career, and P.Engs. who have leadership, management, or other advanced roles in their careers.

Presenters: Amy Hsiao, UPEI Faculty of Sustainable Design Engineering; Sydney Wheatley, UPEI Faculty of Sustainable Design Engineering

Theme: Building Better Allies
Time: 1:45 pm - 2:45 pm

How Settler Allies can Walk with Indigenous Engineers

The Engineering Profession is still predominantly in demographic held by European descendants, typically of male gender. We know though that the math and science capability exist in all genders and ethnic backgrounds. One important demographic that needs strong allyship, sponsorship, and partnership is that of Indigenous Peoples – First Nations, Metis, and Inuit. This interactive session will touch on oppressive Canadian history, the challenges for Indigenous Peoples and Communities, what this Indigenous, female Engineer is looking for in an ally and how you can start implementing the Calls to Action every day in both your personal and professional life. The learning outcomes of this session will be an ability to articulate Canada's historic oppression towards Indigenous Peoples, understand the impact of historic events on individuals and communities, build confidence to be able to respectfully be an ally to Indigenous Peoples, and understand how the Calls to Action can be implemented every day. By the end of this session, participants will feel more comfortable in engaging in Truth and Reconciliation conversations and find themselves motivated to take small steps towards a strong and more reciprocal relationship with Indigenous Peoples and Communities.

Presenter: Jessica Vandenberghe, University of Alberta, Faculty of Engineering

Theme: Culture Transformation
Time: 1:45 pm - 2:45 pm

Workplace Transformation: CCWESTT Projects and Initiatives

This session will highlight CCWESTT projects and initiatives that explore what workplace transformation looks like in SETT workplaces. Participants will learn the findings from the We Are Trades project, and be presented with the steps for successfully creating safe and inclusive skilled trades workplaces for women. Local employers and organizations will share their experiences advocating for, supporting, and implementing change, including what it will take for employers to implement. Next steps for CCWESTT as a part of workplace transformation will be explored, including an introduction to the work so far on their new project: Gender Inclusion in SETT Workplaces: Effective Strategies for Systemic Change and how this project connects with the CCWESTT Strategic Plan.

Presenters: Bonnie Douglas, CCWESTT; Gurpreet Chana, WEST of Windsor Inc.; Stephanie Allen, WEST of Windsor Inc.; Lorraine Hewlett, CCWESTT; Alicia Bjarnason, CCWESTT

Theme: Other
Time: 1:45 pm - 2:45 pm

Equity, Diversity and Inclusion in SETT

Equity, diversity and inclusion (EDI) is a hot topic. However, the attention of organizations is often mainly, even only, focused on diversity targets to be achieved. Predominantly male workplaces such as SETT would benefit from a culture change to improve inclusion of people from underrepresented and minority groups. Also, retention and progression are part of the equation. In the proposed session, participants will deepen their reflection about questions such as: Is recruiting diverse enough? What are the challenges faced by underrepresented and minority groups? How to build an ecosystem that considers equity, diversity and inclusion (EDI)? What can I, as an individual, do? To do so, key EDI concepts will be presented. Thereafter, participants will team up to work on case studies figuring women in SETT. The presenters will support and guide them through the activities and will provide them with EDI resources (white papers about recruitment, unconscious bias, managing a diverse team, challenges facing designated or marginalized groups, GBA+, and more). Time will be given for discussion and co-creation of solutions.

Presenters: Eve Langelier, NSERC Chair for Women in Sciences and Engineering (Quebec Region); Joëlle Pelletier-Nolet, NSERC Chair for Women in Sciences and Engineering (Quebec Region); Jade Brodeur, NSERC Chair for Women in Sciences and Engineering (Quebec Region); Nolwenn Crozet, Université Laval; Vincent Belletête, Université de Sherbrooke

Theme: Building Better Allies
Time: 1:45 pm - 2:45 pm

A Game of Adding Ladders

While discussions around Equity, Diversity, and Inclusion (EDI) issues are often difficult, we can bring levity and cooperation through gamification. In this session, we show how major issues can be discussed in a friendly and disarming manner. We have developed a board game called Adding Ladders. This game is based on the game of Chutes and Ladders. In the game participants explore and discuss the issues facing women and minorities in STEM and collaborate to find solutions to overcome these issues. The session will start by placing the participants in groups of up to 8. We will do a quick introduction, followed by explaining the background and rules of the game. Then the participants will be asked to play the board game in their group. The game starts by each participant rolling a dice and moving to a square. There is a card associated with each square. Once a participant lands on a square, the card is picked up and read to the rest of the team. Each card discusses an issue faced by women in STEM. The group will try to find solutions for the problem to gain points. The game is

played for approximately 30 minutes, after which the presenters will spend 10 minutes debriefing the participants. The ultimate goal of this workshop is to promote equity, diversity, and inclusion through gamifying these discussions. We want all participants to walk away thinking about how they can continue to support these discussions in their everyday life through constructive discussions.

Presenters: Laleh Behjat, University of Calgary; Jennifer van Zelm, WISE Planet; Matthew Bardsley, University of Calgary

Theme: Outreach

Time: 2:15 pm - 2:45 pm

Evidence-based Approaches to Supporting Girls in STEM

Girls and women continue to face barriers in their science, technology, trades, engineering, and mathematics (STEM) interests, education, and career aspirations. These barriers are hypothesized to be caused by ongoing societal bias and are expressed by differential evaluation of work (e.g. assignments, applications) and differential access to opportunities (e.g. mentorship). This leads to an under-representation of girls and women in a variety of STEM fields in the educational system and workforce. However, there are evidence-based approaches that can support girls' ongoing interests and aspirations. This session will present research related to barriers girls and women face, evidence-based approaches to supporting girls' interest in STEM, and provide an example of a program that is successfully supporting girls' interest in STEM: the Canadian Association for Girls in Science (CAGIS).

Presenter: Larissa Vingilis-Jaremko, Canadian Association for Girls in Science (CAGIS); Francine Karmali, University of Toronto

Theme: Outreach

Time: 2:45 pm - 3:00 pm

Building STEM Connections Through Indigenous Mentorship Outreach Programs

The Westcoast Women Engineering, Science and Technology (WWEST) and the integrative STEM Team Advancing Networks of Diversity (iSTAND) program work collaboratively with the Indigenous Programs Services, to design and implement an Indigenous Mentorship Outreach Program for post-secondary students. Through this program, Indigenous post-secondary students are trained in the development, implementation and leading STEM activities locally, so they can replicate them in their home communities, in order to enhance STEM programming for K-12 youth. Building connections through creating outreach activities, directly related to BC Education curricular outcomes, and specific school and community needs, has made these learning experiences valued, appreciated and sought after. Indigenous Mentors build professional skills, mentorship abilities and event planning processes, that enable them to grow as youth and community leaders. STEM programs delivered by young adults in community at no cost to community, also allows for inclusive and accessible opportunities for diverse Indigenous communities. Feedback from teachers and mentorship students supports the ongoing development of sessions, and strengthens ties between post-secondary institutions and Indigenous communities. These mentorship programs promote and engage youth in STEM related activities, building the foundation for long term relations as well as recruitment and retention in STEM disciplines.

Presenters: Rebecca McCullough, Westcoast Women in Engineering, Science and Technology (WWEST); Jennifer Jakobi, Westcoast Women in Engineering, Science and Technology (WWEST)

Theme: Building Better Allies

Time: 2:45 pm - 3:15 pm

Mentoring as a Team Sport

It takes a village. Peer-to-peer or group mentoring is gaining momentum, especially in situations where there are few senior mentors in a given location or profession. I will use our Women-in-Engineering POD (yes, as in peas in a pod) example - a peer mentoring group for women in engineering. Based on the model of a conversation-based mentorship and peer support program. The intention is for group members to participate in a discussion around a selected topic and have the opportunity to hear and share opinions and advice around that theme. Each mentoring session or meeting is an opportunity to have meaningful discussion, build deep personal and professional relationships, collaborate with others, all while supporting the professional development of participants."

Presenter: Denise Pothier, Stantec

Theme: Other
Time: 2:45 pm - 3:15 pm

Experimental and Longitudinal Examinations of Outperformance-Related Discomfort Among Women Studying STEM

Why do women remain underrepresented in some STEM (Science, Technology, Engineering, and Math) fields? Recent research in social psychology has explored the effects of contextual variables such as belongingness cues. Outperformance-related discomfort may be yet another factor explaining women's underrepresentation in STEM. We conducted two studies to explore this topic. In Study 1, university students (N = 256) were randomly assigned to respond to vignettes in which they imagined outperforming classmates in STEM or Arts/Humanities courses. Results revealed that women—more than men—perceived the outperformed person(s) as upset and were concerned about the outperformance, regardless of domain (STEM vs. Arts/Humanities). Study 2 recruited female and non-binary STEM students in their first year of university. At Time 1 (Fall 2021), students (N = ~200) completed a measure of the tendency to experience outperformance-related discomfort and several STEM outcome variables: belongingness in, interest in, intention to persist in, and identification with STEM. In Winter 2022, these students will be invited to complete the STEM outcome measures a second time. We hypothesize that the tendency to experience outperformance-related concerns at Time 1 will negatively predict STEM outcomes at Time 2. In other words, female and non-binary students who tend to experience outperformance-related discomfort may be especially likely to lose a sense of connection to STEM as their first year in university progresses. Ultimately, results of this research may highlight the importance of fostering a sense of identity and belongingness among female and non-binary students studying STEM.

Presenters: Erika Koch, St. Francis Xavier University; Tamara Franz-Odendaal, Mount Saint Vincent University, Department of Biology, and NSERC Chair of Women in Science and Engineering (Atlantic); Abby Davis-Janes, St. Francis Xavier University

Theme: Other
Time: 2:45 pm - 3:15 pm

10 Lessons I Wish I Learned 10 Years Ago: My Path to Leadership as an Introvert

It is widely accepted that leadership positions are more frequently held by extroverts versus introverts. A quick online search for 'qualities of successful leaders', will mention traits like innovative, active listener, compassionate, confident, strong communicator, fair, motivated... the list goes on. However, these main leadership traits are not unique to extroverts. Extroverts may simply be more at ease openly displaying these qualities, resulting in a more visible profile and greater development opportunities. How then, does an introvert build and display their leadership skills? That's a question my 17-year-old introverted self would have liked an answer to. Ultimately, and despite my introversion, I did achieve a label of 'leader' in my field, but the path to leadership was bumpy and winding. This presentation is a retrospective look at my journey to leadership. From my aversion to the saying 'fake it to till you make it', to why it's sometimes okay to set the bar low, I'll present 10 lessons I wish I learned 10 years ago as a shy, introverted teenager setting off to begin my career in research and engineering.

Presenter: Isobel DeMont, Dalhousie University

Theme: Intersectionality
Time: 2:45 pm - 3:15 pm

Intersectionality and Outreach: Engineers Canada's Commitment to the Next Generation

Engineers Canada's purposes include: fostering recognition of the engineering profession's value; sparking the next generation's interest; and promoting EDI in the profession that reflects Canadian society. As described by CCWESTT, achieving the goal of full participation of women at all levels involves attracting a wider pool of women and girls. Our submission focuses on promising emerging practices for incorporating intersections of diversity into outreach programs that: help foster an inclusion culture; inspire a wide range of students to pursue further SETT studies, with a focus on engineering; and inspire educators/parents to encourage diverse students to pursue SETT careers, with a focus on engineering. For example, students who identify as Black and are socio-economically challenged are subject to additional cumulative barriers. Our presentation will describe how Engineers Canada's approach, engaging youth from K-12 through post-secondary, is unique from most other professional associations and is enabling us to better mobilize the profession and achieve our vision to advance Canadian engineering through national collaboration. Through this presentation, we will discuss why Engineers Canada is investing in the next generation of engineers with an intersectional lens. This presentation will: focus on our K-12 outreach efforts and provide brief case studies, including Engineers Canada's Future City Experience and the evolution of Engineers Canada's Girl Guide crest program; and share successes/lessons learned and how our unique position and approach is shaping the future of engineering. We will also include discussion of how strategic partnerships support our objectives, metrics to evaluate our efforts and future collaboration opportunities.

Presenters: Kim Bouffard, Engineers Canada; Jeanette Southwood, Engineers Canada

Theme: Outreach
Time: 3:00 pm - 3:15 pm

Inspiring Youth Towards SETT in an Aging, Rural Town

A 2019 survey by Inspiring Communities highlighted that the aging population, job insecurity and declining education are top concerns for the general population in Digby, Nova Scotia. Statistics Canada (2016) reported 58.8% of residents in Digby have no post-secondary education, and 25.5% residents aged 25-65 have no degree/diploma, which is double the provincial rate of 12.2%. The Inspiring Communities survey highlighted employment is a key concern for youth in their 20s and late teens. Among youth in their 20s, 70% worried about various issues related to jobs and the area's economy. Many of these youth expect they will have to leave the area to find suitable employment and/or to pursue further education or training. Furthermore, technological advancements and cultural change has made navigating life-after-high school become drastically different between generations, thus outdated parental advice. Consequently, the lack of youth from out-migration and a high number of first-generation secondary/post-secondary students results in a gap of role models in programs such as Science, Engineering, Technology and Trades that requires post-secondary education. To overcome the gap in mentorship, since 2019 volunteer panelist annually meet with senior students to speak on their experiences and answer questions regarding post-secondary education. The panel of recent graduates from the school is diverse in education and lived experiences. The session provides students with support from locals who share stomping grounds. This talk highlights the steps, challenges and successes from this youth-driven project in hopes to inspire more peer-mentorship initiatives.

Presenters: Gillian Stanton, Inspiring Communities; Morgan Dunn, Inspiring Communities; Jesselyn Nesbitt, Inspiring Communities

Concurrent Presentations: 3:30 pm – 5:00 pm

Theme: Outreach
Time: 3:30 pm - 4:15 pm

Techsploration Alumnae Outreach: Young Women 'SETT' for Success

Since 1998, Techsploration has delivered its award-winning program to provide young women in Grades 9 through 12 with the information and experiences required to make informed career decisions in science, engineering, trades, and technology (SETT) fields – fields where women are still significantly underrepresented. The result? Nearly 60 per cent of Techsploration alumnae go on to pursue studies and careers in these sectors. In 2012, Techsploration launched its Alumnae Tracking Project to re-connect with Techsploration participants over the age of 18 in order to better understand the long-term impact of the program and opportunities to provide further support to alumnae as they navigate studies and career paths in SETT. The information Techsploration continues to receive through this project has become vital to influence the program's growth and evolution, and overall organizational sustainability. Join Techsploration's Executive Director and a panel of Techsploration alumnae and teachers for insight and shared experiences on the impact of structured and consistent outreach to foster continuous engagement in SETT programming. Techsploration's Alumnae Tracking Project has allowed the organization to connect with young women who have come full-circle from program participant to role model. Each year, the non-profit is able to recruit new role models for its core Grade 9 to 12 program from this process. Alumnae who continue to engage with Techsploration post high school are provided with an extended network to support job searches, further mentorship opportunities, and peer-to-peer networking, which has directly impacted career trajectories and the retention of women in SETT.

Presenter: Emily Boucher, Techsploration

Theme: Building Better Allies
Time: 3:30 pm - 4:15 pm

Engineers and Geoscientists BC EDI Journey: Actions we are Taking and How Industry can Support EDI

Diverse experience and perspective are key to human innovation. Engineers are leaders in innovation, and as such are reliant on the different people that enter the profession. In order for professionals of all backgrounds to be able to do their best work, they need to feel like they belong to their professional community. This is where Equity, Diversity, and Inclusion (EDI) become fundamental to engineering. As a profession, it is important to excite and inspire action towards developing an inclusive culture for current and future generations of engineers and truly reflect Canada's diverse society. This presentation will discuss why advancing EDI in our professions is important, the actions that Engineers and Geoscientists BC are taking, and how industry can support these actions. As part of Engineers and Geoscientists BC's strategic priorities, fostering diversity and inclusion has been a key area of focus. This presentation will discuss the organization's journey in developing its EDI strategy and action plan, as well as the framework for our continued journey to lead change towards equity and inclusion within the professions of engineering and geoscience. We will share some of the key initiatives the organization is taking to embed EDI within our programs and within our role as a regulator, including the development of the Equity, Diversity, and Inclusion Professional Practice Guidelines which are applicable to all registrants, including individuals and firms. Sharing what we have learned, this presentation will build connections between our actions and what can be done by those in industry.

Presenters: Ailene Lim, Engineers and Geoscientists BC; Marcie Cochrane, Engineers and Geoscientists BC

Theme: Building Better Allies

Time: 3:30 pm - 4:15 pm

**What Do Managers of SETT Women Need to Support Gender Inclusive Change in their Workplace Culture?
Sharing the Results of the WinSETT Needs Assessment**

This session will share the results of that Needs Assessment and engage participants in helping analyze that data. The Needs Assessment will probe what knowledge and skills they managers need, how would they like to learn and develop the knowledge and skills and what supports they need to do so. As WinSETT develops its Human Resources Certificate Program for Employers and Managers of SETT Women, we will lean heavily on the evidence of the Needs Assessment and the insight of CCWESTT participants as they review and discuss the results of the Needs Assessment. This session will provide participants with an insight into what managers have told us is needed to successfully support gender inclusivity in their workplace.

Presenters: Carrie Vos, WinSETT Centre; Susan Hollett, WinSETT Centre

Theme: Culture Transformation

Time: 3:30 pm - 4:15 pm

APEGA's 2018-2021 WAGE (Women and Gender Equality Canada) Sponsored Research on the Barriers Women Face in the Engineering and Geoscience Workplace in Alberta

This presentation shares the research findings and final recommendations from three years of work (2018-2021) by APEGA's EDI team on the barriers that women face in the Engineering and Geoscience workplace in Alberta. The research included an online survey of professional members, follow-up focus groups, detailed analysis of womens' labour market participation in the Engineering and Geoscience industries in Alberta, as well as an historic pay equity analysis of 5 years (2014-2018) of APEGA's voluntary salary survey data. Generally, the results show that men and women experience very different worlds at work; with the top-mentioned barriers to workplace inclusion for women being the traditionally masculine work environment, issues with career development and advancement, bias, discrimination, and harassment, and issues related to maternity/parental leave, among other reasons. We present recommendations and action items that individuals, leaders, and organizations can take to remove the barriers that women experience and shift the Engineering and Geoscience workplace to a more inclusive one. Through the adoption of these behaviour and policy changes, our industries will not only become more welcoming to women, but more inclusive for members of many different traditionally underrepresented identity groups.

Presenters: Ana Jaramillo, APEGA; Asyah Saif, APEGA

Theme: Culture Transformation

Time: 3:30 pm - 4:15 pm

The Missing Piece in STEM Success – Supporting the Support Networks

Time and again, research has shown that support networks are a key success factor contributing to the retention of women in STEM. However, little is known about what contributes to the success of these networks themselves – the community groups, non-profits, professional associations, and grassroots organizations that collectively contribute thousands of hours to advancing diversity & inclusion in STEM. In Canada alone, there are over 40 organizations dedicated to this very issue, reaching thousands of women across the country. The pressing question we must answer is: How might we amplify their impact even further? In order to drive meaningful change in this space, we believe the focus must expand beyond empowering individual women to ensuring sustainability of the supporting infrastructure. After all, these organizations form the backbone of the women in STEM mission. In this presentation, we explore the common pain points experienced by community groups (such as limited funding, resources, engagement, and time); share real-life success stories and best practices for minimizing these pain points (developed through our own experience leading non-profits and primary data); and identify key enablers to facilitating collaboration between community groups in order to maximize impact. We end with calls-to-action for all stakeholders to implement, in order to further enhance the community infrastructure. The adoption of a “systems thinking” approach requires acknowledgement of the deep interdependencies between companies, community groups, and individuals. A shift in perspective from “I” to “we” might be the missing piece to unlocking the success and potential of all women in STEM.

Presenters: Jasmine Shaw, Solace; Angelica Tilli, Society of Women Engineers - Ottawa; Diane Watson, Nokia

Theme: Intersectionality

Time: 4:15 pm - 5:00 pm

Breaking Down Barriers for Women and Creating a Culture Transformation Through Collaboration

This interactive 60-minute session will tell the story of how a newcomer and refugee provider agency became an agent for change and partnered with education, unions and employers to create culture transformation while assisting women break barriers to explore careers in the skilled trades. Women's Enterprise Skills Training of Windsor Inc. (WEST) Women's Enterprise Skills Training of Windsor Inc. (WEST) was developed as a response to disproportionately high levels of unemployment among women attempting to enter the workforce. During the course of development, it became apparent that the most disadvantaged women were visible minorities. One exceptionally troubling issue that was recognized in our community was a mismatch between the abilities and talents of the currently unemployed workforce and jobs that are in need of workers with a particular skill set, especially in the traditionally male-dominated skilled trades sectors. A plan was implemented to design a program to meet the needs of the skilled trades industry and women facing barriers.

- Learn, how a newcomer agency created collaborations with local partners to host a program geared towards improving women's barriers to employment while addressing the unique needs of the local labour market.
- Understand the reality and challenges for women in the skilled trades and how collaborative efforts between agencies, education, and employers can create positive culture transformation.
- Reflect on the best practices learnt and challenge your organization to create partnerships to unlock untapped possibilities for creating culture change within SETT

Presenters: Gurpreet Chana, Women's Enterprise Skills Training of Windsor Inc. (WEST of Windsor Inc.); Stephanie Allen, Women's Enterprise Skills Training of Windsor Inc.

Theme: Building Better Allies

Time: 4:15 pm - 5:00 pm

Best Practices from Active Allies: A Transformative Study on the Recruitment and Retention of Women in Saskatchewan Mining and Engineering

Women and Indigenous peoples continue to be under-represented in many professions and industries in Canada, including the mining industry. Using a participatory research approach between industry and academic researchers, this International Mineral Innovation Institute (IMII) and Mitacs-funded study will put recommendations into action to shift Saskatchewan mining workplace culture to be inclusive and welcoming of all actual and potential employees. In this presentation, researchers will share findings from the second phase of the multi-phase study. In the second study phase, researchers interviewed allies and champions to capture examples and best practices of equity, diversity, and inclusion (EDI) implementations in workplaces and institutions. Study participants are implementing broad equity changes, including a focus on gender and Indigenous engagement and reconciliation. In this presentation, researchers will share actions and learnings from participants. Furthermore, researchers will share recommendations and strategies to activate workplace allies, a necessary element to creating an inclusive and equitable workplace where diversity can thrive. Workplace allies may or may not be part of under-represented groups and may hold power and privilege within the organizations in which they work. In future phases of the study, researchers will implement and test recommendations to activate allies in a pilot program at the University of Saskatchewan's College of Engineering and then test implementations on a larger scale at a Saskatchewan mine site. The outcomes of this multi-phase study will put recommendations into action to shift Saskatchewan mining and engineering workplace culture to be inclusive and welcoming of all actual and potential employees.

Presenters: Jocelyn Peltier-Huntley, University of Saskatchewan; Jovita Dias, University of Saskatchewan

Theme: Culture Transformation

Time: 4:15 pm - 5:00 pm

Revitalizing the WinSETT Checklist of Strategies for Women in SETT

In 2008, WinSETT published the Checklist of Strategies through the Women in Science, Engineering, Trades and Technology/Femmes en sciences, genie, métiers et technologies (WinSETT)Femmes en SGMT) project. The checklist was designed to be utilized by organizations to assess and articulate organizational barriers that hinder women's full participation in SETT and to provide direction on the development of progressive policies and procedures. Although other checklists have been developed over time, the WinSETT Checklist remains focused on advancing the objectives of women in STEM. Organizational assessment of an organization's equity and inclusion current state broadly and those policies and procedures that impact women's experience, more specifically is a critical first step in developing and implementing EDI strategy. Since 2008, WinSETT and their community, through implementation and feedback on the Checklist, has gathered a considerable amount of knowledge and expertise in understanding how these assessment lead to more progressive organizations. Through the generous support of WAGE, (add project title here) WinSETT has undertaken a revitalization of the Checklist to ensure its resonance, relevance and utility in the changing workplaces over the last 13 years for women and to continue to foreground those aspects of organizational life that are key to the overall objectives of supporting STEM women. In this session, Dr. Lori Campbell, will present results of this revitalization project, focusing on aspects of the Checklist that continue to advance the original goals of raising

Presenter: Lori Campbell, WinSETT

Theme: Culture Transformation

Time: 4:15 pm - 5:00 pm

Ranking of Factors Affecting Workplace Equity, Diversity and Inclusion (EDI) for Decision Making

Research has shown that having an equitable and inclusive culture promotes diversity and drives personal development and professional growth resulting in successful workplaces. Factors affecting EDI concerns have been identified in many studies, both qualitatively and quantitatively. The latter, typically, involves statistical analysis of the responses reported as percentages with/without correlations to participant demographics in science, engineering, technology and/or the trades. However, studies relating the significance of these factors for driving decision to address workplace concerns were not been found. This research examines survey data to rank literature-identified factors using Analytic Hierarchy Process (AHP) and Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS). Surveyed participants compare both psychological and environmental factors by assigning a level of importance. The opportunity to provide anecdotal EDI-related situations with strategies and outcomes were also collected and summarized to assess techniques for improving EDI. During the presentation, session attendees may engage in a safe, anonymized environment to further efforts in achieving EDI in the workplace. Interactive responses will involve real-time data analytics. Some of the factors examine inclusion/isolation feelings, personal self-confidence, influential role models, promotional possibilities, collaborative and advisory activities, mentorship and/or ally-ship programs, workplace policies and practise relating to EDI, and others. This presentation reviews and compares survey data and encourages engagement on today's EDI challenges. To conclude, using decision making tools; such as, AHP and TOPSIS provides an objective way to assess the most influential factors for directing action for multi-criteria decision analysis methods.

Presenter: Denise Stilling, University of Regina

Theme: Culture Transformation

Time: 4:15 pm - 5:00 pm

Sector Wide Approach to Cultural Transformation on D&I

Engaging the leadership of organizations to unleash their power and influence as allies to lead diversity and inclusion transformation is the key to unlocking a shift in the workplace culture to be more welcoming of women and other underrepresented groups. By meeting this target audience where they are at – articulating the value proposition to them through an economic lens – and leading them through understanding that they are the solution, not the problem to achieving this shift, is where true traction across an organization takes place. With the leadership confidently knowing how to be the change and make the change across their organization, meaningful and impactful change can occur over a relatively short period of time. Mobilizing the combined efforts of their executive, human resources, and communication teams, effective actions can be taken on: •Conducting data analytics and tracking key indicators on women and other underrepresented groups related to pay inequities; policies and programs, etc.; •Providing skills and training development on how to overcome resistance to D&I, inclusive leadership and allyship; as well as •Repositioning the brand/image of the organization on how it portrays itself both internally and externally The Centre for Social Intelligence has spearheaded this approach over the last three years across the whole of the forest sector and seen amazing results. Arguably one of the most male dominated sectors, this presentation will speak to this approach and how the forest sector is moving from laggards to leaders on D&I.

Presenter: Kelly Cooper, Centre for Social Intelligence
