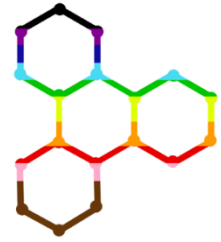


BUILDING AN INCLUSIVE LIFE SCIENCES FUTURE

Inclusion • Diversity • Equity • Accessibility



Workshop 1: Uncovering Inclusion, Diversity, Equity and Accessibility Challenges to Drive Action in Ontario's Life Sciences Sector

On December 2nd, 2021, Shift Health and Life Sciences Ontario (LSO) facilitated a half-day workshop to launch [Building an Inclusive Life Sciences Future \(BILSF\)](#). Discussions focused on prioritizing the IDEA challenges in the life sciences sector and defining actions that can help to create a more inclusive, diverse, equitable and accessible future. Consensus outcomes from the workshop are described below.

IDEA challenges in Ontario's Life Sciences Sector:

1. Unconscious bias, discrimination and systemic barriers have led to chronic underrepresentation of disabled persons, Indigenous peoples, Black individuals and other people of colour and immigrants in the sector.
2. Small and medium sized enterprises (SMEs)—which comprise the majority of organizations in the life sciences sector—lack the expertise and resources to implement IDEA best practices.
3. Inconsistent views about the importance of IDEA among leaders in the sector is slowing sector-wide action.

Actions to improve IDEA in Ontario's Life Sciences Sector:

1. Focus on building inclusive cultures rather than on aesthetic diversity to establish a sector that attracts and retains diverse talent.
2. Embrace/create opportunities to uplift individuals from equity-deserving groups to build a diverse pool of youth interested in the sciences and to strengthen diversity along the career continuum—from entry level to leadership positions.
3. Commitment from leaders in the sector to direct resources towards IDEA and have systems in place to be held accountable to IDEA pledges.

Introduction

Stakeholders across Ontario's life sciences sector have publicly committed to embedding inclusion, diversity, equity and accessibility (IDEA) within their organizations. While progress has been made, IDEA initiatives are often fragmented, limited in scope and inconsistently applied across the sector.

In recent years, organizations within the sector have focused on diversifying their workforce, increasing the number of minorities and women being appointed to boards and including IDEA on the agenda at workshops, seminars and scientific conferences. While the intention is right, efforts aimed at improving IDEA often focus on aesthetic (or visible) diversity, rather than addressing the systems and structures that inhibit inclusive, equitable and accessible workplaces. To transform systems of exclusion and oppression, aesthetic diversity alone will not suffice. We must devise solutions that address the everyday challenges faced by individuals from equity-deserving groups

trying to enter or working within the life sciences sector.

Life Sciences Ontario (LSO) and Shift Health have partnered to launch Building an Inclusive Life Sciences Future (BILSF), a community-driven effort aimed at developing a vision and action plan for IDEA within Ontario's life sciences ecosystem. BILSF is guided by a Steering Committee¹ with diverse representation across the life sciences ecosystem—including IDEA thought leaders, individuals with lived experience or from marginalized communities, trainees and early-career professionals—to ensure this effort is relevant to all members of the life sciences sector.

Held on December 2nd, 2021, the first BILSF workshop brought the life sciences community together to align on key IDEA challenges within the sector. The outputs of this workshop will be built upon through ongoing engagement with the life sciences community, with the ultimate goal of developing a plan that defines actions that stakeholders in the

¹ Dr. Imogen Coe, Professor and Founding Dean (Faculty of Science), Ryerson (X) University; Shiva Darvishi, COO, Micellae Delivery Systems; Wanda Deschamps, Founder and Principal, Liberty Co; Dr. Eugenia Addy, CEO, Visions of Science; Rob Henderson, CEO, BioTalent Canada; Heather Lau, Student Lead, Biochemistry Wellness, Equity, Diversity and Inclusion Committee, University of Toronto; Dr. Jackie Ottmann, President, First Nations University of Canada; Dr. Brett Shannon, Medical Scientist (HIV), Gilead Sciences; Dr. Mahadeo Sukhai, Vice-President Research and International Affairs & Chief Accessibility Officer, ARIA Team (Accessibility, Research & International Affairs), Canadian National Institute for the Blind (CNIB).

sector can undertake to address the sector's most pressing IDEA challenges.

A coordinated, sector-wide action plan will be critical to embedding IDEA within organizational practices, cultures and research and innovation systems. This will guide the sector toward *Building an Inclusive Life Sciences Future*—a future where all members of the life sciences community can maximize their potential and enable a stronger, more competitive and more innovative Ontario.

Pre-Workshop Survey

A survey was distributed to workshop invitees—policymakers, postsecondary administrators, academic researchers, individuals from government, industry and not-for-profit organizations—to understand the demographics of participants and their IDEA expertise, experiences and perspectives. 180 individuals were invited to participate in the survey and 44 responded. The data were analyzed and presented by Sharon Nyangweso of [QuakeLab](#) to inform discussions during the workshop.

Survey respondent demographics:

- 81% of respondents identified as women, 19% identified as men and 0% identified as non-binary.
- 57% of respondents identified as white.

- 64% of respondents were in their 40s and 50s and 54% were in the late stage of their career (i.e., working 20+ years).
- 10% of respondents identified as a person with a disability.
- 0% of respondents identified as an Indigenous person.
- 0% of respondents identified as having trans experience.

While the purpose of this workshop was to engage with and hear diverse perspectives related to IDEA within the life sciences sector, not all identities were represented among participants. Those who were notably underrepresented or absent included persons with disabilities, Indigenous peoples, members of the LGBTQ2S+ community and men.

Analysis of the survey data revealed eight key themes:

1. Nearly 4 in 5 respondents have experienced discrimination during their tenure in the life sciences sector.
2. People with disabilities face barriers entering and remaining in the sector, resulting in underrepresentation of disabled people in the life sciences.
3. There is a lack of Indigenous representation in the sector and a need for inclusion of Indigenous

peoples and pedagogy in decision-making.

4. There is an opportunity to enhance understanding of issues that are faced by women working in the sector to enable the development of solutions to achieve gender parity.
5. There is a need to identify and address recruitment and retention barriers that prevent full participation of equity-deserving groups in the sector.
6. The sector does not have high-quality disaggregated data to comprehensively assess IDEA and develop strategies to tackle key issues.
7. Key structures and systems in the sector are inherently biased, including the grant/peer review process, research, governance and knowledge dissemination.
8. Many individuals who are in positions of power in their workplace feel disempowered in championing IDEA work.

Discussions during the workshop elaborated on and illustrated the above themes through the perspectives of diverse participants in the sector.

The insights presented in this summary represent the perspectives, experiences and opinions of only the individuals who participated in the survey and/or were

present at the workshop. The BILSF Planning and Steering Committees welcome additional feedback and insights from the broader community of life sciences stakeholders.



“Because we do not have disaggregated data, we cannot really identify the challenges faced by marginalized people. It means we can't think through where equity challenges exist in our policies, practices and ways of working. This leaves our methods of conducting research, communicating that research and how we advise each other ripe for inequity.”

Sharon Nyangweso, Founder & CEO,
QuakeLab

IDEA Challenges

Impacting Ontario's Life Sciences Sector

Speakers and panelists drew on their personal experiences in the life sciences sector to shed light on many of the IDEA challenges that are prevalent in the sector today. Challenges included unconscious bias, systemic barriers and discrimination faced along training and professional journeys.

Systemic barriers and unconscious bias are experienced by students of all ages and are limiting the diversity of the talent pool pursuing studies in the sciences.

Children from many equity-deserving groups face unconscious biases as early as kindergarten. These biases result in lower expectations of students to pursue the sciences or perform well in school. Unconscious biases and systemic barriers continue to be a challenge for students from equity-deserving groups as they move on to post-secondary education. The 'secret syllabus' is one such systemic barrier; it is a set of unwritten rules, cultural norms and expectations around how to successfully navigate post-secondary education. These rules are usually best understood by those with friends and family who

have successfully participated in higher education in the West. Students from equity-deserving groups are also subject to a culture in which they may encounter targeted harassment from peers or even professors. Because these students may not know the norms or have adequate knowledge to make formal complaints, they are often left feeling powerless to confront perpetrators. These, as well as other challenges, perpetuate existing social inequalities that prevent underrepresented students from advancing their knowledge and developing their careers within the life sciences sector.



"I recall feeling uncomfortable but didn't understand that I was experiencing harassment. I asked myself, where do I go to report this? If I do report this, will I lose this opportunity? What if I'm just overthinking this?"

Shweta Mistry, Ph.D. Candidate,
Ryerson (X) University

Individuals from equity-deserving groups are facing challenges that prevent them from reaching their full potential as employees in the life sciences sector.

Individuals from equity-deserving groups continue to face systemic barriers as they transition from post-secondary education into the workforce in the life sciences sector. Barriers encountered differ across groups. Some individuals with disabilities not only face systemic barriers, but also physical barriers. For example, laboratory spaces and equipment are not typically accessible by design, making participation in lab research impossible for many with physical disabilities. People from racial minority groups, immigrants and women also face barriers that impact their career progression such as under-recognition or lack of appreciation of their contributions. As a result, when overlooked for promotion, these individuals may choose to leave their organizations or the sector in order to advance their careers. Many immigrants also face issues regarding credential equivalency and are required to retake courses and invest substantially in requalifying in order to be able to work in their area of training.



“I am an immigrant from Jamaica and the first thing I was told was that my credentials are not recognized here and that to further my education I will have to redo all of my courses again. While tackling this challenge, I was also subjected to biases and unfair assumptions from my professors.”

Dionne Lloyd, Regulatory Affairs Manager

The lack of diversity among life sciences leaders and funders has enabled a culture that propagates demographic homogeneity.

Lack of diversity in leadership and other positions of power (e.g., investors) within the sector has created a culture in which the majority (i.e., predominantly white men) continue to thrive, while people from equity-deserving groups continue to experience barriers to becoming and succeeding as leaders. This culture perpetuates unconscious bias and occurrences of gaslighting. For example, minorities often fall victim to harassment and/or microaggressions where the perpetrator makes them feel like they don't fit in or belong in leadership roles. These actions negatively impact self-confidence and self-esteem, resulting in many victims questioning their ability to lead. Entrepreneurs from equity-deserving groups face unique challenges with factors such as gender, cultural and socioeconomic differences impeding access to networks (e.g., for funding and mentoring). Entrepreneurs who come from privilege often have networks that enable them to make contacts and secure funding more easily than people from certain equity-deserving groups (e.g., women, immigrants). These issues, among others, make it difficult for minorities to break into or succeed as leaders.



"I remember when I was starting out and we were raising venture for Dot Health, people asked me why I didn't ask friends and family for money... I don't have friends and family with millions of dollars."

Huda Idrees, Founder & CEO, Dot Health

Solutions to Address IDEA Challenges in the Life Sciences Sector

Workshop speakers and panelists identified an urgent need to focus on solutions that prioritize building and sustaining the talent pool across the education and career continuum.

For the life sciences sector to benefit from diversity and ultimately serve our diverse population, solutions must go beyond tokenism, uplift diverse talent and build cultures that value diverse experiences.

To meaningfully improve IDEA within the life sciences sector, solutions must go beyond an emphasis on diversity to focus on inclusion. This may include:

- Supporting efforts aimed at sparking interest and building confidence to pursue science among youth from equity-deserving groups.
- Revising or creating procurement protocols and standards with a view to building workplaces that are accessible to all.
- Recognizing and embracing the value that diverse perspectives and approaches bring to the sector and ensuring that the contributions of

individuals from equity-deserving groups to organizational mandates/missions are recognized and rewarded through measures such as compensation and promotion.

- Ensuring that policies, practices and training are in place to remove all forms of discrimination from the sector.

These actions will help to build a diverse pool of students pursuing post-secondary science education and careers, foster a sense of belonging among individuals from groups that have historically been excluded from the sector and start a movement towards making workplaces inclusive and accessible by design. Together, these actions will bring new talent into the sector and facilitate retention and advancement of individuals from equity-deserving groups.

“I encourage the sector to really reflect on what IDEA means. Is it bringing in talent or is it about developing and promoting talent to bring new ideas and perspectives into the workplace?”

Dionne Lloyd, Regulatory Affairs Manager

Leaders in the life sciences sector must create and embrace opportunities to elevate individuals from equity-deserving groups into leadership positions.

Leaders must put time and resources toward supporting individuals from equity-deserving who are (or should be) seeking leadership positions. This may include:

- Prioritizing recruitment (e.g., through engaging specialized firms to support recruitment) and promotion of talented individuals from equity-deserving groups into leadership roles and board positions.
- Supporting individuals from equity-deserving groups through activities such as mentorship and providing access to personal/professional networks.
- Passing on speaking/panel opportunities to colleagues from equity-deserving groups, particularly those who are overlooked the most in conversations regarding IDEA.
- Funding ventures led by individuals from equity-deserving groups.

These actions will elevate individuals from groups that have historically been excluded from positions of power and influence—creating acceptance and space for others from diverse backgrounds.



“I’ve been at some science conferences recently, where the topic has been equity, diversity and inclusion, and there’s no discussion about accessibility. If we look at some of the data about people with disabilities and chronic illnesses, they are significantly underrepresented, in all areas, in all stages of the life sciences sector and if we are in fact committed to equity for all groups, then we need to be including people with disabilities in these conversations.”

Ainsley Latour, Clinical Genetic Technologist at a large hospital in Southern-Ontario; Co-Founder, IDEA-STEM Inc.

Cultural change within organizations and the sector at large will not occur until individuals in positions of power and privilege accept responsibility for and direct resources toward improving IDEA.

Leaders can catalyze cultural change by leading by example and ensuring that structures are in place to hold themselves and employees accountable to IDEA. This may include:

- Dedicating time and creating a safe space of honest discussion about current IDEA concerns within the community.
- Challenging resistance/skepticism regarding the importance of IDEA from colleagues and counterparts in the sector.
- Building boards that represent the diversity within the organization and/or sector.
- Incorporating metrics that assess contributions to IDEA into performance management frameworks and ensuring processes are in place to keep leaders accountable to their IDEA goals and commitments (e.g., through assessments of progress in advancing IDEA).

These actions will allow individuals from equity-deserving groups to openly share their experiences and challenges, help to accelerate the acceptance of IDEA as

a critical issue and priority for leaders and ensure that leaders are held accountable for their commitments to IDEA.



“I had a very supportive Board chair, who happened to be a white man. We looked at the Board and said, this composition is far too white with far too many men for the students that we represent and more importantly for where we wanted to go as a university with respect to our values around EDI.”

Steven Murphy, President & Vice-Chancellor, Ontario Tech University

Taking action to build and cultivate the talent pool of individuals in the sector, create and embrace opportunities to elevate individuals from equity-deserving groups into leadership positions and hold our leaders accountable to their IDEA commitments will not only enhance IDEA within the sector, but also have meaningful impact on innovation and the economy.



"Between 2016 to 2026, there are 350,000 Indigenous students turning 15—the age at which Statistics Canada considers an individual to be a potential member of the labour force. If we engage and support these Indigenous students, the economic return for Canada has been estimated at \$27.7 billion."

Jacqueline Ottmann, President, First Nations University of Canada ^{1,2}

¹ Skudra, M., Avgerinos, A., & McCallum, KE. (2020). [*Filling Canada's Indigenous skills gap would be an economic boon*](#). Policy Options.

² National Indigenous Economic Development Board. (2016). [*Reconciliation: Growing Canada's Economy by \\$27.7 Billion*](#).

Aligning on Priority Challenges

Workshop participants engaged in breakout discussions where each group was given a set of IDEA challenges to refine, expand and prioritize.

Table 1. IDEA Challenges in the Life Sciences Sector

IDEA challenges that are well known and often discussed	IDEA challenges that are known by many but not spoken about frequently	IDEA challenges that are not known by most and are not discussed
<ol style="list-style-type: none"> 1. Women are not moving up the ranks 2. Underrepresentation of disabled individuals in the life sciences 3. People from some equity-deserving groups are particularly underrepresented 4. Low representation of people of color at senior levels 	<ol style="list-style-type: none"> 1. Lack of diversity is limiting research impact 2. Inconsistent views about the importance of IDEA in the sector 3. The systems and structures to make change in IDEA are not prevalent in the sector 4. A significant gender pay gap exists in the life sciences sector 	<ol style="list-style-type: none"> 1. Lack of disaggregated data 2. Lack of IDEA champions among the majority 3. Reliance of SMEs on their own networks for hiring 4. Inequitable distribution of benefits stemming from IDEA initiatives

The breakout discussions shed light on three overarching IDEA challenges for Ontario's life sciences sector that can be addressed through BILSF's follow-up activities. A summary of key workshop outputs is presented in Table 2.

Table 2. Overarching IDEA Challenges and Preliminary Solutions

Overarching IDEA Challenges	Specific IDEA Issues	Potential Actions
<p>1. Unconscious bias, discrimination, and systemic barriers have led to chronic underrepresentation of disabled persons, Indigenous peoples, Black individuals and other people of colour and immigrants in the sector.</p>	<ul style="list-style-type: none"> • Indigenous Peoples, Black people and people with disabilities experience systemic barriers, biases and discrimination as early as elementary school, which continue after entering the life sciences sector. • People of colour and immigrants are present within the sector, but systemic barriers, biases and discrimination inhibit their progression toward leadership positions. • Many IDEA policies and solutions overlook the impacts of intersectionality (i.e., overlapping identities) and ignore individual experiences, thereby often failing to achieve the intended outcome. • A lack of disaggregated data is limiting our ability to identify and address barriers faced by marginalized groups and to assess the impacts of intersectionality. 	<ul style="list-style-type: none"> • Continued outreach to spark interest in science among marginalized youth. • Develop an understanding of accessibility needs and implement inclusive policies and practices that attract, retain, and promote people with disabilities. • Legislate mandatory disclosure and reporting of IDEA metrics (e.g., demographic data). • Continuous collection of disaggregated data within the sector.

Overarching IDEA Challenges	Specific IDEA Issues	Potential Actions
<p>2. SMEs—accounting for the majority of organizations within Ontario’s life sciences sector¹ — lack in-house expertise, financial resources, and incentives to implement IDEA best practices.</p>	<ul style="list-style-type: none"> • Reliance on pre-existing networks and relationships to identify talent often excludes certain groups (e.g., BIPOC individuals, immigrants, women) from recruitment opportunities. • Insufficient resources to establish policies to embed IDEA within the day-to-day operations of the organization. • Larger organizations (with more resources) are drawing individuals from equity-deserving groups away from SMEs, limiting the ability of SMEs to retain diverse talent and/or achieve their IDEA goals. 	<ul style="list-style-type: none"> • Targeted training, mentorship and support for SMEs to implement IDEA into hiring practices. • Develop tools and guidelines to support SMEs with implementing more equitable practices (e.g., workplace accessibility statements, performance management tools, frameworks to ensure pay equity). • Increase government-supported funding for SMEs to enable salaries for individuals from equity-deserving to be competitive with larger organizations.
<p>3. Inconsistent views about the importance of IDEA across the life sciences sector.</p>	<ul style="list-style-type: none"> • Individuals unaffected by IDEA barriers often have an incomplete understanding of the importance of/need for structural change. • IDEA topics evoke feelings of discomfort and vulnerability resulting in key stakeholders (i.e., those with privilege) being absent from conversations. 	<ul style="list-style-type: none"> • Establish safe venues for open discussion, training and coaching in IDEA for leaders. • Promote the benefits (e.g., to innovation, the bottom line) of improving IDEA when advocating for more inclusive policies/practices.

¹ BioTalent Canada. (2021). [Labour Market Intelligence: Close-up on the bioeconomy \(Ontario\)](#).

Next Steps

Over the coming year, BILSF will convene additional community events to:

- **Align on a vision for IDEA** in the life sciences sector; and
- **Define a high-level action plan** to address the IDEA challenges prioritized during this first workshop.

Presenting Organizations



Sponsoring Organizations



Presenting Organizations: Life Sciences Ontario and Shift Health.

Sponsoring Organizations: Canadian Institutes of Health Research, Stryker Canada, Johnson & Johnson and the Canadian National Institute for the Blind.