# TRIUMF PHASE 2 REPORT
## Equity, Diversity, and Inclusion Survey

## LAURIER CENTRE FOR WOMEN IN SCIENCE (WinS)

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WOMEN IN SCIENCE

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## Introduction and Context

TRIUMF Inc. engaged with a third-party research group, the Laurier Centre for Women in Science (WinS) to conduct foundational inclusion work in 2024. To understand how values of inclusion are embedded at TRIUMF, it is imperative to have data to support people's experiences and perceptions. To this end, WinS used a phased, mixed methods approach, gathering qualitative data through interviews with a subset of the community, and quantitative data, gathered through an organization-wide survey.

Phase 1 included semi-structured interviews with ($n$ = 61) students, staff, and researchers at TRIUMF pointed towards initial insights and areas of foci. Phase 2 was an organization-wide survey, achieving a response rate of over 80% ($n$ = 437). Results therefore can be interpreted as somewhat representative of the TRIUMF community, and the largest equity, diversity, and inclusion (EDI) data collection effort ever undertaken by the organization.

WinS is grateful to the TRIUMF community for the collective efforts in engaging with the survey - without such enthusiastic participation, this project would not have resulted in the abundance of data represented in this report. While we cannot present all possible analyses, in this report, we include key insights supported by data and recommendations for continuing to improve inclusion.

In Phase 2, the online survey conducted from September 3, 2024 to October 8, 2024, focused on experiences and perceptions related to EDI, including **four main sections:**

1. Demographic questionnaire
2. Administrative and structural processes
3. Reporting experiences
4. Belonging, safety, and inclusion

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## Executive Summary of Phase 2

**Section 1: Demographic questionnaire.**
More than 80% of TRIUMF participated, so the data presented here are likely somewhat representative of the broader community. Respondents were Men (69%), Women (27%), and a small proportion of gender diverse people (e.g., non-binary ~3%). The most represented racial groups were White (59%), East Asian (20%), and South Asian (8%). Notably, Black (< 1%) and Indigenous (~ 2%) respondents were underrepresented compared to national statistics.

**Section 2: Structural and administrative processes.**
Results point toward a need to strengthen resources to support administrative processes, including access to resources and information. Compensation was a major concern; overall, just 18% of respondents agreed that they were fairly compensated. Approximately 53% of respondents agreed that they were informed and prepared to perform their duties through onboarding processes. Just above 1/3 of respondents perceived hiring practices as fair, transparent, and consistent.

**Section 3: Reporting experiences.**
Most respondents (77%) indicated that they knew how to report discrimination or harassment. Approximately 18% of respondents indicated having experienced discrimination or harassment at TRIUMF (at a higher rate among women and gender minorities compared to men). When asked about witnessed discrimination or harassment, this proportion rose to 35%. The most cited forms of experienced or witnessed harassment or discrimination were microaggressions (22%), offensive verbal behaviour (21%), and a poisoned work environment (16%).

Respondents indicated that discrimination or harassment (either personally experienced or witnessed) most often occurred on the basis of sex. Most respondents did not report discrimination or harassment, but those who did informed Supervisors (38%), Human Resources (30%), or Colleagues (14%), highlighting the importance of preparing the entire community to respond to disclosures. Satisfaction with the reporting process was low.

**Section 4: Belonging, safety, and inclusion.**
Overall, 60% of respondents agreed that they felt a sense of belonging at TRIUMF, whereas 55% reported trust in TRIUMF, and men reported greater trust (60%) than women (45%). Many respondents agreed that they perceived psychological safety (61.4%), and physical safety at TRIUMF (65.1%), and men felt the safest compared to women (or gender diverse people, although statistical comparisons were not possible). Respondents indicated moderate positive affect (i.e., mood) and little negative affect on a daily basis at TRIUMF, and women reported more negative mood than men.

Respondents perceived a more positive organizational climate among immediate co-workers than in divisions or among the entire organization, suggesting a need for greater interaction among all divisions. The majority of respondents agreed that they plan on staying at TRIUMF (65.9%) and would recommend TRIUMF to others as a good place to study or work (65.9%). Considering everything, most respondents indicated they were somewhat or extremely satisfied with their jobs at TRIUMF.

Many respondents (64%) agreed that EDI should be prioritized at TRIUMF, through actions focused on equitable pay and promotions (74.6%), improving relationships between management and staff (48.7%), enhancing access to affordable housing (48.3%), ensuring safe conditions for workers (45.8%), and optimizing organizational structures and processes (44.2%).

## Evidence-Based Recommendations

Five priority recommendations are outlined below. Further recommendations that can be addressed over time, and example actions to implement recommendations are in Appendix A.

Most respondents agreed that TRIUMF is making efforts to improve the workplace culture.

Now is the time to maintain this momentum. TRIUMF can use the findings from the various surveys and assessments to continue implementing actions that address priority issues.

Regular communication with the TRIUMF community about planned actions, intended outcomes, progress, and setbacks can help maintain transparency and demonstrate an authentic commitment to the process of reflection and responsiveness. Mechanisms for community feedback are important.

It is also important to highlight the already existing initiatives underway at TRIUMF through strategic and EDI-focused action plans, and by groups who have engaged in action (e.g., Early Career and Students: EDI). Complementing existing work, the recommendations below are priorities based on data from more than 80% of the community.

### Charting a Path Forward at TRIUMF

**The findings and recommendations in this report can help TRIUMF 'CHART' an evidence-based path forward as they continue efforts to improve inclusion and access for all.**

1. **Compensation**: Work with a qualified third-party to review compensation practices and conduct pay equity analyses periodically, in line with provincial legislation.

2. **Hiring**: To attract and retain a diverse community, review hiring and promotion practices and implement procedures that prioritize equitable access, transparency and communication.

3. **Action**: TRIUMF should act on the EDI priorities identified by the community, and provide regular updates on progress, embedding mechanisms for regular feedback.

4. **Responsiveness**: Equip anyone in a supervisory capacity to recognize and respond effectively to witnessed, experienced, or disclosed harassment, bullying, and/or discrimination.

5. **Transformation**: TRIUMF's culture can be transformed through inclusive leadership.

**Compensation**

**Hiring**

**Action**

**Responsiveness**

**Transformation**

# Phase 2 Methodology

## Recruiting Respondents at TRIUMF

Respondents were recruited via communications sent internally by TRIUMF. In September 2024, TRIUMF estimated the total potential respondent pool to be $n = 586$. Given approximately 10% of potential respondents were on medical leave, parental leave, etc., we took $n = 530$ as the total possible sample. To achieve an 80% response rate, we required $n = 424$ respondents. The survey was accessed by $n = 499$, and responses were retained if the survey was completed to 50% or more (i.e., demographic variables and at least 1 outcome measure).

**Our goal was surpassed with a final sample of $n = 437$ respondents, representing an 82.4% response rate.** According to the Workforce Science Association, the global average response rate for annual workplace census surveys is 76%, with a typical range of 60%-90%. The average for the professional, scientific, and technical services industry is 75%.

Respondents were invited to participate in the online survey through a successful, TRIUMF-led communications strategy to promote engagement. The survey contained an optional field for providing a TRIUMF email address, stewarded by WinS and only used to link current survey data to future survey data. Approximately 33% of respondents provided an email address.

## How Did We Analyze the Data?

Quantitative responses were analyzed to provide frequency distributions and descriptive statistics, like averages and proportions. Inferential statistical tests were run to examine potential differences between various demographic and vocational groups (e.g., gender groups, employees vs. students), if sample sizes were appropriate to do so (i.e., large enough to have well-powered statistical comparisons, approximately equivalent variances). For quantitative data, responses for the full sample are described, followed by trends across demographic groups (i.e., gender groups, students and employees, racialized [i.e., BIPOC or Black, Indigenous, Persons of Colour] and non-racialized [White]).

Some demographic information (e.g., gender, race, sexuality) was combined into overarching variables (e.g., underrepresented groups in science, such as women, racialized people, people with disabilities, gender and sexual minorities vs. those who were not members of these groups). Similarly, at times, Black, Indigenous, and Persons of Colour were combined into one category. This practice is common in social science research, but not ideal, as it obscures potentially important differences between groups. However, we employ these practices to protect anonymity and maintain statistical power when working with smaller sub-samples.

## Interpreting Results

For all questions that included a 'prefer not to answer' option, responses were omitted from the calculation of descriptive statistics, but included in frequency distributions. For inferential tests of statistical comparisons, we apply conventions from social sciences research, such that the common significance value, or α level, is 0.05, or 5%. This means that researchers are willing to accept a 5% chance of making a Type I error, which is assuming a relationship between two variables when one does not exist. Standard deviations represent the average spread of scores from the observed sample means. Throughout the document, statistically significant group differences are marked with an *. We acknowledge that while this data is not a random sample, it can be helpful to conduct inferential statistical analyses to explore patterns of potential group differences. When we cite percentages of agreement in text, this includes those who selected 'somewhat agree' or 'strongly agree' on response scales ranging from 1-5.

# RESULTS
## Section 1: Demographic Questionnaire in Context

**Overview**

The demographics section of the survey collected information on age, gender, sexual orientation, race, nationality, language, religious affiliation, disability, caregiving, education, work and income. The average age of respondents was 43 years old.

Demographics at TRIUMF somewhat reflect the demographics of the Canadian population, but with important exceptions. TRIUMF lacks diversity in gender, caregiving status, disability, and religious affiliation. Although there is some racial diversity, Black and Indigenous persons are underrepresented.

Most respondents were men, White, heterosexual, and were born outside of Canada, fluent in English, not disabled, and had no religious affiliation or a secular affiliation. Most respondents were highly educated, full-time employees earning more than $50,000 per year, and working 31-40 hours per week at TRIUMF. Most respondents were not caregivers. Diversity and inclusion are associated with enhanced learning in physics (Binning et al., 2024) and with innovation and creativity (Hofstra et al., 2020; Wolley et al., 2010). However, many demographic groups remain underrepresented in physics including women and gender minorities, Black, Indigenous, and People of Colour (BIPOC), and people with disabilities (Hennessey et al., 2024).

Underrepresented groups face systemic barriers when pursuing education and careers in the sciences. For example, women experience bias in the peer review process (Witteman et al., 2019), stereotypes, lack of role models and mentors, and barriers in institutional policies and practices (e.g., family-friendly policies; The Expert Panel on Women in University Research, 2012). BIPOC researchers face racism in the workplace, unconscious biases (e.g., affinity bias), precarious work, tokenism, wage gaps, and higher workloads (Henry et al., 2017).

Research on the physics context shows that underrepresented group members face barriers including micro-aggressions, bias and discrimination, exclusion from professional networks, devaluation, and other experiences of harm (Kim & Meister, 2022; Maries et al., 2024), and women in physics have lower access to critical resources including lab space and travel funding (Ivie & Langer Tasfaye, 2012). These barriers can hinder recruitment, retention, advancement, and the research contributions of diverse talent. Recognizing these systemic barriers, the Tri-agencies have made a commitment to equity, diversity, and inclusion. In line with Tri-Agency recommendations, by removing barriers to diversity, equity, and inclusion, TRIUMF can more readily support a culture of research excellence, where talented researchers are recruited, retained and supported.

# RESULTS
## Section 1: Demographic Questionnaire in Context

**Gender Identity.** Compared to the Canadian population, men are overrepresented at TRIUMF, and women are underrepresented. Among respondents, 69.5% were men (compared to 48.9% of the Canadian population; Statistics Canada, 2022a) and 26.8% were women (compared to 50.9% of the Canadian population, Statistics Canada, 2022a). However, the gender diversity of respondents was comparable to other particle physics institutes in North America.

Fermilab (with ~2000 employees) reports that 28.3% of their workforce is female, and 71.7% is male (Fermilab Office of Equity, Diversity, Inclusion, and Accessibility, 2024). Brookhaven National Laboratory reported that 26.6% of their workforce were women, 65.7% were men, and 7.7% did not report their gender (Brookhaven National Laboratory Diversity, Equity, and Inclusion Office, 2023). Data from a national survey of physicists in Canada (Hennessey et al., 2024) showed that women (29%) were underrepresented among physics professionals, and men (69%) were overrepresented. Similar distributions in gender identity were reported by the Canadian Association of Physicists (2023) departmental survey.

Gender diverse respondents at TRIUMF (i.e., genderqueer, gender fluid, trans, non-binary) were more represented (3.2%) than in the overall Canadian population (although measurements differ). According to Statistics Canada, in 2021, .33% of the Canadian population 15 years+ were trans or non-binary. The small proportion of gender diverse respondents at TRIUMF is consistent with a national survey on physicists in Canada that found 3.5% of respondents were gender diverse; Hennessey et al., 2024).

### Gender Identity
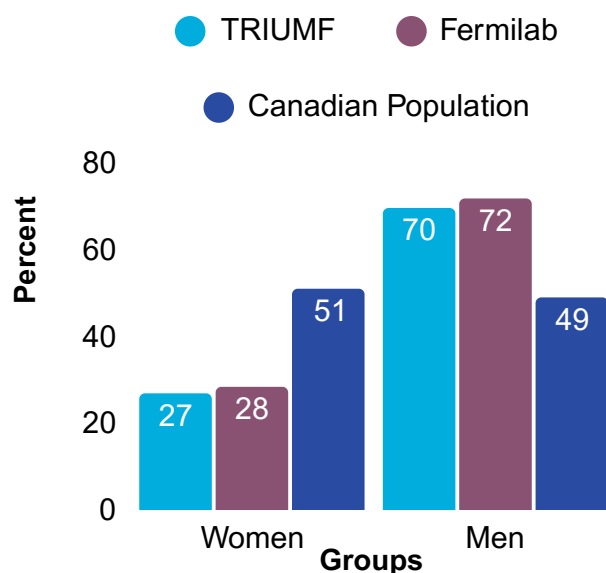


### Sexual Orientation
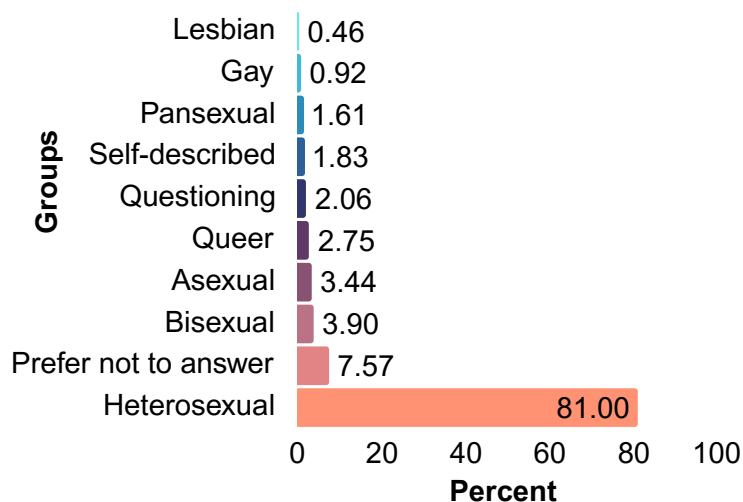


**Sexual Orientation.** Relative to the Canadian population (96%; Statistics Canada, 2022b), a smaller proportion of respondents identified as heterosexual (81.0%). The most common 2SLGBTQIA+ identities reported by TRIUMF respondents were Bisexual (3.90%), Asexual (3.44%) and Queer (2.75%). Sexually diverse respondents (i.e., lesbian, gay, pansexual, self-described, questioning, queer, asexual, bisexual) were more represented (16.97% if combined) at TRIUMF than in the overall Canadian population (although measurements differ). According to Statistics Canada, approximately 1.3 million Canadians identify as 2SLGBTQ+, which is 4.4% of the population aged 15 years+.

# RESULTS
## Section 1: Demographic Questionnaire in Context

**Race.** There is racial diversity at TRIUMF, but this diversity does not necessarily parallel the Canadian population. Most respondents at TRIUMF were White (58.5%). Among the Canadian population, approximately 70% of people are White (Statistics Canada, 2022c). Among other particle physics institutes in North America, Fermilab report that 71.5% of their workforce is White (Fermilab Office of Equity, Diversity, Inclusion, and Accessibility, 2024), and Brookhaven National Laboratory reports that 62.66% of their workforce is White (Brookhaven National Laboratory Diversity, Equity, and Inclusion Office, 2023).

### Race & Ethnicity

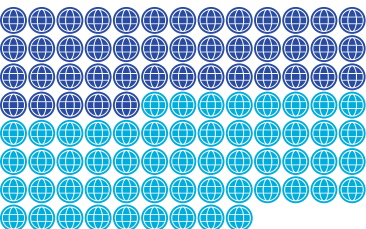| Group | Percent |
| --- | --- |
| Black | 0.69 |
| Caribbean | 0.92 |
| Indigenous to Canada | 1.15 |
| Middle Eastern or West Asian | 2.75 |
| Biracial or Multiracial | 3.21 |
| Prefer to Self-Describe | 3.21 |
| Prefer Not to Answer | 3.67 |
| Latine | 3.90 |
| Southeast Asian | 4.59 |
| South Asian | 8.03 |
| East Asian | 19.50 |
| White | 58.50 |
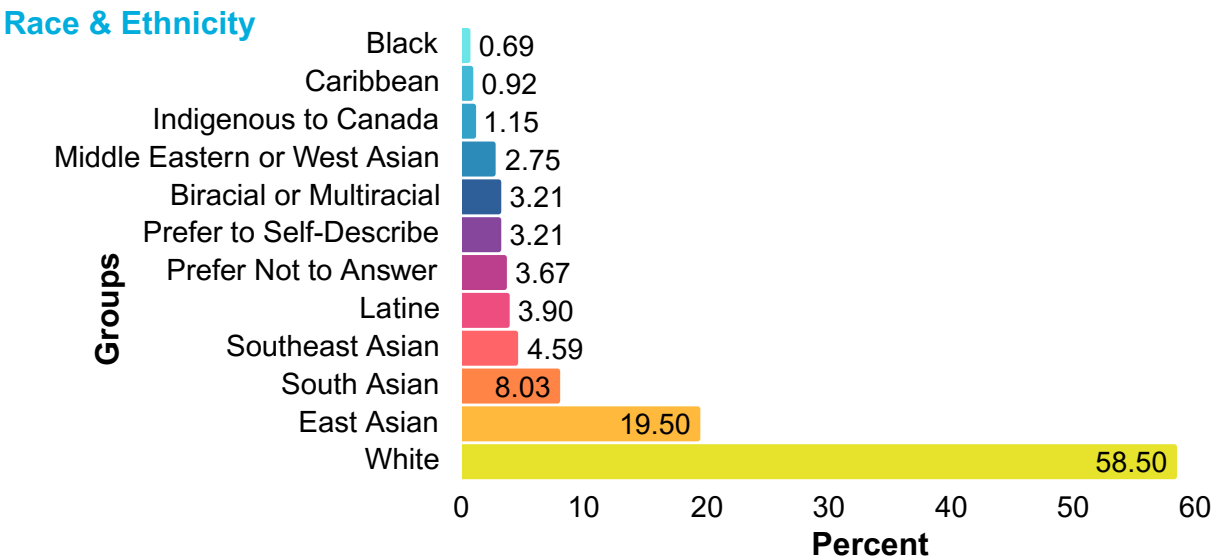
The second most common racial group at TRIUMF were East Asian (19.5%), who are overrepresented compared to the Canadian population (5.6%; Statistics Canada, 2022c), followed by South Asian (8.03% of TRIUMF respondents, and 7.1% of the Canadian population; Statistics Canada, 2022c). Black and Indigenous staff and researchers are significantly underrepresented at TRIUMF. 4.3% of the Canadian population is Black (Statistics Canada, 2022c), compared to .69% of TRIUMF respondents, and 1.2% of respondents to a national survey of physicists (Hennessey et al., 2024). 6.1% of the Canadian population is Indigenous (Statistics Canada, 2022c), compared to 1.15% of TRIUMF respondents, and .3% of respondents to a national survey of physicists (Hennessey et al., 2024).

**Nationality and Citizenship.** More than half of the respondents indicated they were born outside of Canada (55%). Of those respondents, more than half were Canadian citizens (57.3%), and many were permanent residents (22.0%). Some respondents were at TRIUMF on a work permit (11.6%), or a study permit (6.22%).

### Nationality & Citzenship

44% born in Canada



55% born outside Canada

| Group | Percent |
| --- | --- |
| Co-op work permit | 0.41 |
| Not included | 0.83 |
| Prefer not to answer | 1.67 |
| Study permit | 6.22 |
| Work permit | 11.60 |
| Permanent resident | 22.00 |
| Canadian citizen | 57.30 |
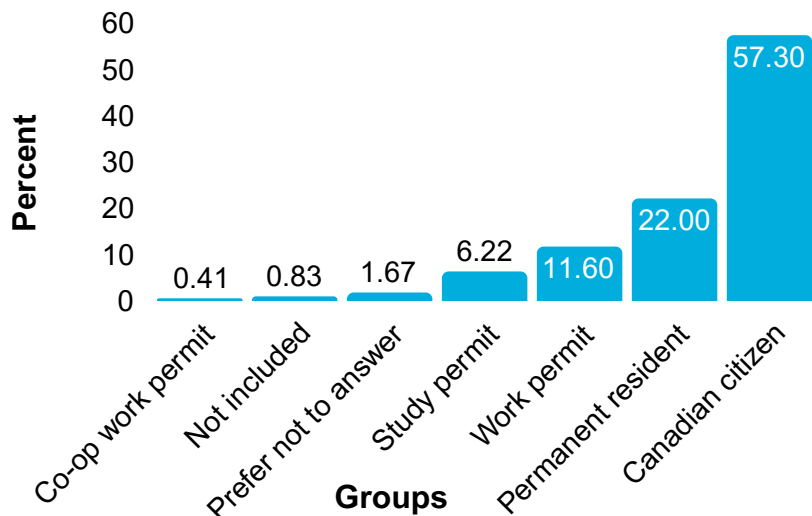
# RESULTS
## Section 1: Demographic Questionnaire in Context

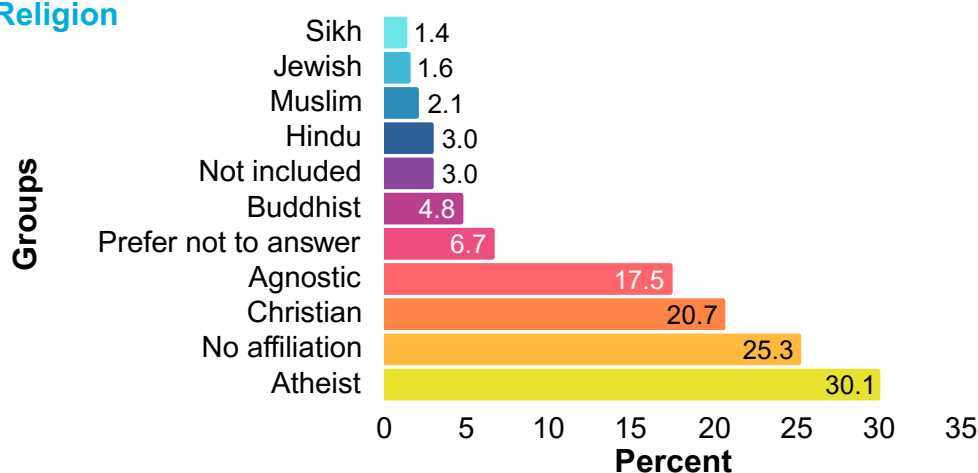**Language**. Consistent with the Canadian population (Statistics Canada, 2022d), the most common fluent languages reported by respondents at TRIUMF were English (96.6%), French (13.6%), and Mandarin (8.28%). French-speakers are underrepresented at TRIUMF as French is the first official language of 21.4% of the Canadian population. Other languages spoken by TRIUMF respondents are Spanish (6.67%), Cantonese (5.75%), German (5.50%), Hindi (3.68%), Punjabi (2.07%), Tagalog (1.84%), Japanese (1.84%), Portuguese, (1.80%) and Italian (1.60%). A small proportion speak Russian, Urdu, Arabic, and American Sign Language.

**Religion.** Fewer respondents at TRIUMF reported a religious affiliation compared to the Canadian population. Among respondents at TRIUMF, many reported being atheist (30.1%), Agnostic (17.5%), or having no religious affiliation (25.3%). Among the Canadian population, 34.6% report having no religious affiliation or a secular perspective (e.g., atheist; Statistics Canada, 2022c).
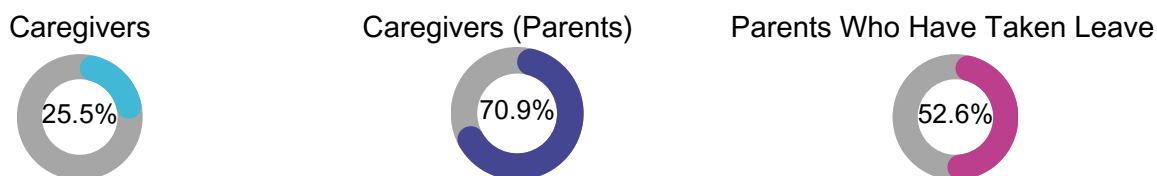
### Religion

| Group | Percent |
|-------|---------|
| Sikh | 1.4 |
| Jewish | 1.6 |
| Muslim | 2.1 |
| Hindu | 3.0 |
| Not included | 3.0 |
| Buddhist | 4.8 |
| Prefer not to answer | 6.7 |
| Agnostic | 17.5 |
| Christian | 20.7 |
| No affiliation | 25.3 |
| Atheist | 30.1 |

53.3% of the Canadian population (Statistics Canada, 2022c), and 20.7% of TRIUMF respondents are Christian. 4.9% of the Canadian population and 2.07% of TRUMF respondents are Muslim. 2.1% of the Canadian population and 1.38% of TRIUMF respondents are Sikh. 2.3% of the Canadian population and 2.99% of TRIUMF respondents are Hindu, and .9% of the Canadian population and 1.61% of TRUMF respondents are Jewish.

**Caregiving**. Fewer respondents at TRIUMF reported being caregivers (25.5%) compared to the Canadian population; 52% of women and 42% of men in Canada report being caregivers (Statistics Canada, 2023b). Among TRIUMF respondents, men and women were approximately equally likely to be caregivers; 25.4% of men and 27.1% of women reported being caregivers.

### Caregivers

| Caregivers | Caregivers (Parents) | Parents Who Have Taken Leave |
|------------|---------------------|------------------------------|
| 25.5% | 70.9% | 52.6% |

Past research shows that women in physics are more likely than men to report that their career impacted their personal life (delaying or avoiding getting married or having children). When women in physics do have children, they are more likely than men to report that having children significantly affected their careers, including slowed rates of promotion (Ivie & White, 2015). Although caregivers represented a small proportion of respondents, support is needed for all caregivers at TRIUMF, inclusive of gender identities. Of those who were caregivers, the majority (70.9%) were parents. Of all parents who responded, more than half had taken parental leave.
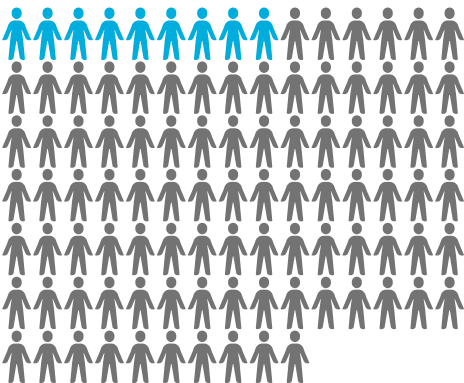
# RESULTS
## Section 1: Demographic Questionnaire in Context

**Disability**. Respondents at TRIUMF were less likely to report having a disability (9.20%) compared to the Canadian population (27.0%; Statistics Canada, 2023a). The most common disability reported was mental health disability (37.5%), consistent with statistics showing that mental health disabilities are increasing and are one of the most prevalent disabilities in Canada (Statistics Canada, 2023). Of those with disabilities, the majority (60.0%) indicated that TRIUMF does not provide accommodation.
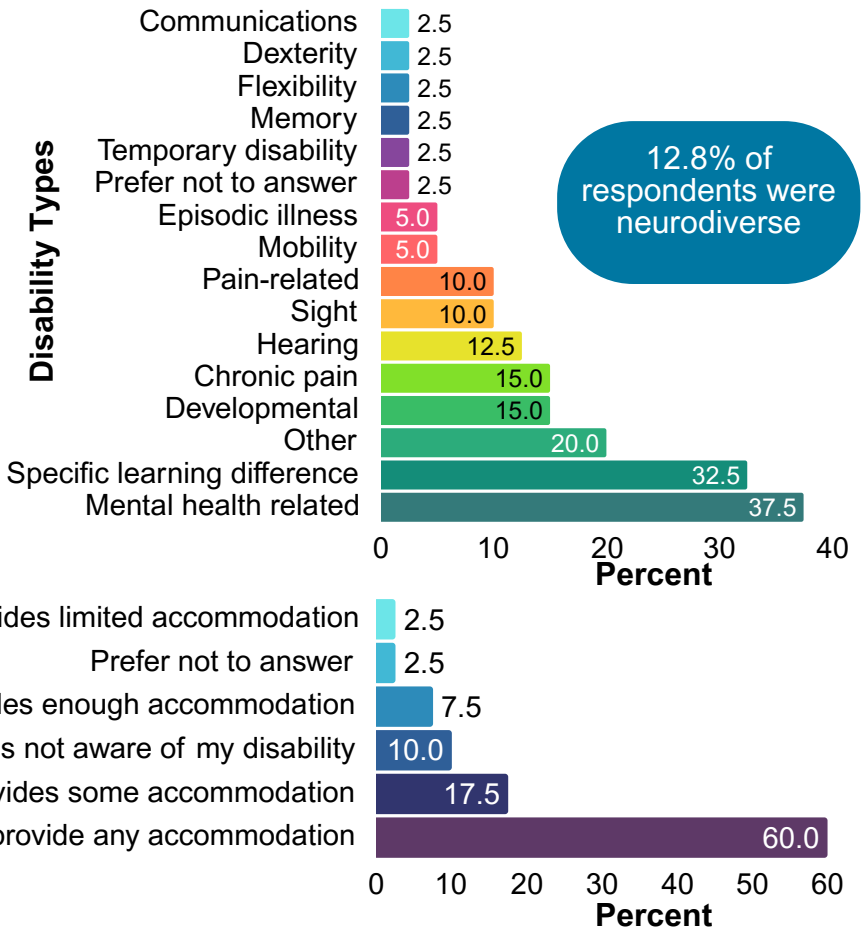
**Neurodiversity**. According to some estimates, approximately 15-20% of the global population has a form of neurodivergence, which may include those on the Autism Spectrum, or specific learning differences (e.g., Dyslexia; Doyle, 2020).

## Disability

9.2% people with disabilities



## Accommodations

Disability Types vs Percent:

| Disability Types | Percent |
|---|---|
| Communications | 2.5 |
| Dexterity | 2.5 |
| Flexibility | 2.5 |
| Memory | 2.5 |
| Temporary disability | 2.5 |
| Prefer not to answer | 2.5 |
| Episodic illness | 5.0 |
| Mobility | 5.0 |
| Pain-related | 10.0 |
| Sight | 10.0 |
| Hearing | 12.5 |
| Chronic pain | 15.0 |
| Developmental | 15.0 |
| Other | 20.0 |
| Specific learning difference | 32.5 |
| Mental health related | 37.5 |

12.8% of respondents were neurodiverse

Responses vs Percent:

| Responses | Percent |
|---|---|
| Not really, TRIUMF provides limited accommodation | 2.5 |
| Prefer not to answer | 2.5 |
| Yes, TRIUMF provides enough accommodation | 7.5 |
| No, TRIUMF is not aware of my disability | 10.0 |
| Somewhat, TRIUMF provides some accommodation | 17.5 |
| No, TRIUMF does not provide any accommodation | 60.0 |

**Respondents who indicated they had a disability were asked: 'Is there is anything you would like to describe about having a disability at TRIUMF?"**

45.0% of respondents provided comments that were coded into **four broader themes:**

1. Specific accommodations that would be beneficial (e.g., re. sensory needs; 50.0%)
2. Lack of safety to disclose disabilities (22.2%)
3. Positive experiences or perceptions of obtaining accommodations for disability (16.7%)
4. Lack of need for any disability accommodations (11.1%)

> *From systems and processes to physical locations on campus, people with neurosensory deficiencies can encounter challenges while at TRIUMF. ....TRIUMF's room audio/visual equipment has also gone through a number of changes, but unfortunately the sound quality remains sub-optimal for several meeting spaces. Tools to help....live closed captioning or sign language interpreters are not available or unused (participant 95).*

# RESULTS
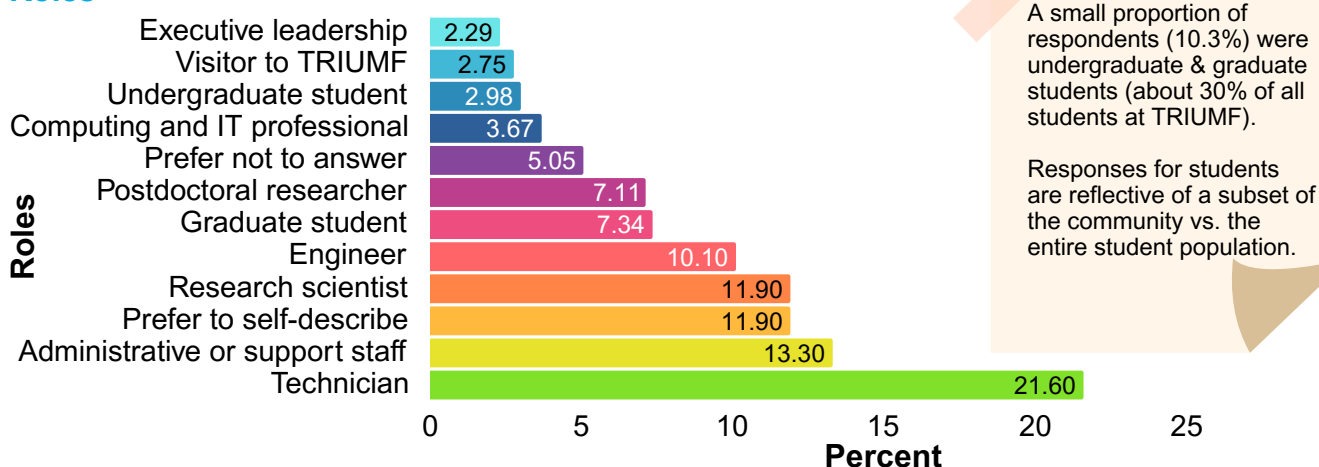## Section 1: Demographic Questionnaire in Context

**Education, Role, and Division.** Respondents at TRIUMF were highly educated, with 46.9% having completed graduate school.

### Education
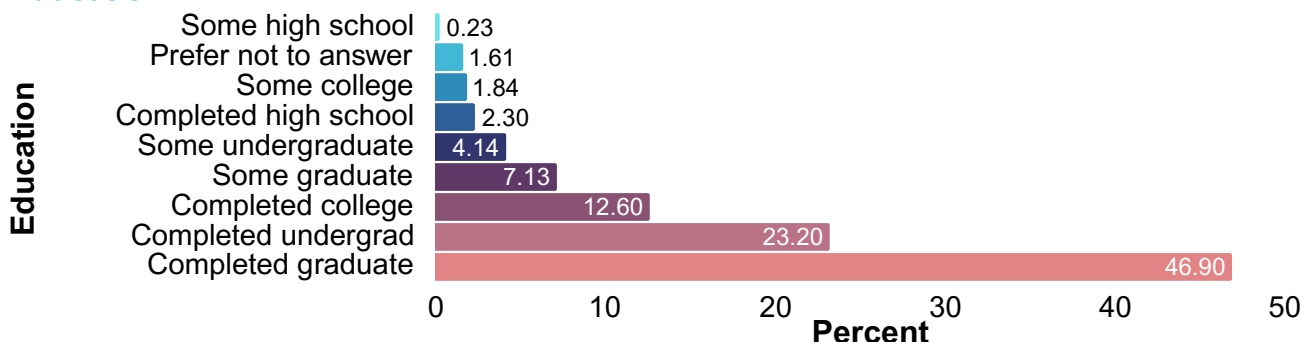


The largest proportions of respondents at TRUMF were Technicians (21.6%), Administrative and Support Staff (13.3%), and Research Scientists (11.9%). Most respondents were full-time employees (85.6%), had worked at TRIUMF for 1-5 years (42.56%), between 31- 40 hours per week (70.3%). Some respondents (16.3%) worked on the nightshift.

### Roles



A small proportion of respondents (10.3%) were undergraduate & graduate students (about 30% of all students at TRIUMF).

Responses for students are reflective of a subset of the community vs. the entire student population.

Respondents spanned all of TRIUMF's divisions, with the largest proportions of respondents representing Physical Sciences (28.4%), Accelerator (28.0%, and Core Services (12.2%). Sample sizes in each division ranged from < 5 to > 100. Notably, gender diverse respondents were only present in Science Divisions at TRIUMF, and men comprised the largest proportions of respondents in every division except two (i.e., Life Sciences and Finance and Supply Chain).

### Cross-Divisional Participation
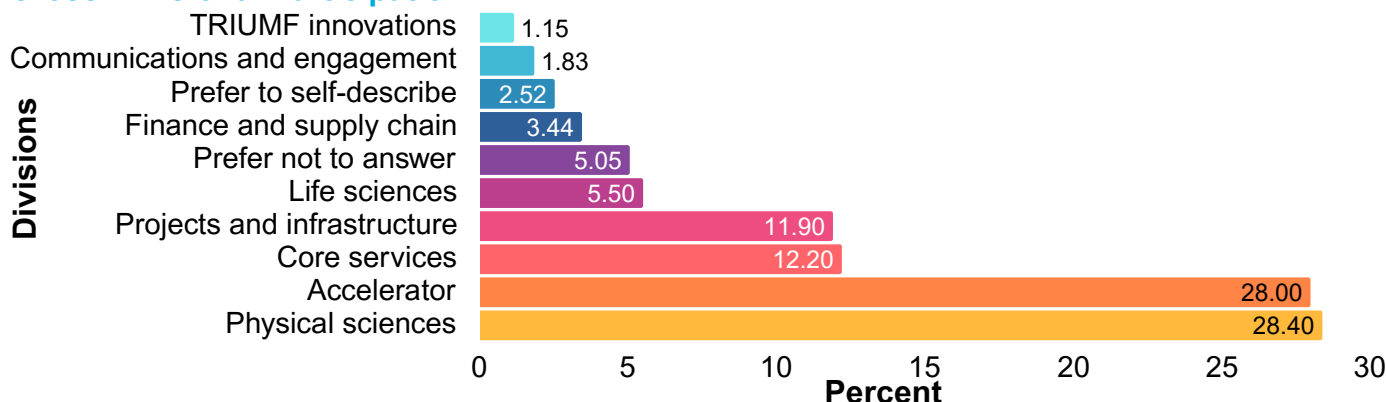
# RESULTS
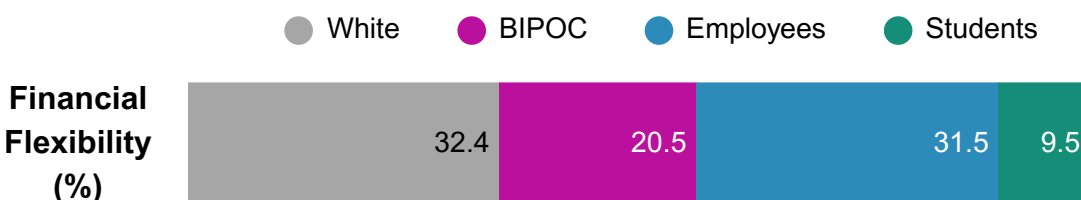## Section 1: Demographic Questionnaire in Context

**Income.** Respondents indicated annual household income by selecting the appropriate bracket from a list. Collapsing these brackets into three larger categories, just under half of respondents (47.90%) indicated earning between $50,001 and $100,000 per year. According to Statistics Canada, the average household income in Vancouver, BC is $114,900, and the average salary is $62,250 (14.3% higher average than the average Canadian salary). Vancouver is one of the most unaffordable places to live, underscoring the importance of competitive compensation.

**Income**

**Income Brackets**

**16.33%**
$0-50,000

**47.90%**
$50,001-
100,000

**27.16%**
$100,001+

If data are disaggregated further by binary gender, most women (41.75%) reported earning $50,001-$100,000, as did more than half of men (56.47%). About 1/3 of women (31.07%) reported earning 0-$50,000, whereas just 11.87% of men reported earnings in the lowest income bracket. Just over 1/4 (27.18%) of women reported earning $100,001+, whereas about 1/3 (31.65%) of men reported earnings in the highest income bracket. However, this analysis does not consider important variables such as education, length of employment, years of experience, etc. To fully understand potential pay discrepancies between demographic groups, a comprehensive, third-party led pay equity analysis that considers a multitude of factors is recommended.

**Financial Flexibility**. Respondents were asked to indicate agreement to four items: 'My yearly income allows me to buy the food that I want to eat/save some money/afford housing/live comfortably' on a scale from (1) *Strongly disagree*, (2) *Somewhat disagree*, (3) *Neither agree nor disagree*, (4) *Somewhat agree* to (5) *Strongly agree*. Less than a third (29.4%) of respondents agreed with these statements. White respondents agreed (32.4%) more than BIPOC respondents (20.5%)* and employees agreed (31.5%) more than students (9.50%)*. *Statistically significant group differences at *p* < .05.

⬤ White  ⬤ BIPOC  ⬤ Employees  ⬤ Students

| Financial Flexibility (%) | White | BIPOC | Employees | Students |
|---|---|---|---|---|
| | 32.4 | 20.5 | 31.5 | 9.5 |

**Partner Hires.** A small proportion (5.28%) of respondents indicated that they had a significant other working at TRIUMF. Of these, 26.1% reported that they were part of a formal partner-hire process. These respondents indicated low satisfaction with the partner hire process (33.3% somewhat or strongly agreed that they were satisfied). Data on partner hires at research institutes was not available, but a survey of 9,000 faculty members at 13 research-intensive universities in the United States (Van Wart et al., 2021) found that 36% of men and 40% of women had academic partners, and 83% of women scientists were partnered with another scientist (vs. 54% of men scientists).

**Work life Balance.** Respondents indicated agreement to one statement: 'I can balance work and personal life' on a scale from (1) *Strongly disagree*, (2) *Somewhat disagree*, (3) *Neither agree nor disagree*, (4) *Somewhat agree* to (5) *Strongly agree*. 71.7% of respondents somewhat or strongly agreed with this statement. Men agreed (74.6%) more than women (63.0%)*, consistent with past research (Morgenroth et al., 2020; Pace & Sciotto, 2022).

# RESULTS
## Section 2: Administrative and Structural Processes

Respondents answered questions about their experiences with administrative processes and structures at TRIUMF, given the importance of many of these factors to employee satisfaction and retention. For example, high-quality on-boarding tailored to the organization and employee can reduce role ambiguity, welcome the employee into the organization and improve employee retention in organizations (Blount, 2022). *Statistically significant group differences at $p < .05$.

**Onboarding Experiences.** Respondents rated agreement with two statements: 'When I started to work for TRIUMF, I was clearly informed about the internal rules (policies, regulations, code of conduct, etc.) of the organization,' and 'I received adequate information to perform my duties.' 53.3% of respondents somewhat or strongly agreed with these statements. Men agreed (58.2%) more than women (39.6%)*.

**Visa and Work Permits.** 12.2% of respondents required a visa or work permit to work at TRIUMF. More support may be needed for process; only 20.8% of respondents who needed a visa or work permit agreed that the process was organized, that TRUMF was proactive, and that they were satisfied with the support they received from TRIUMF.

**Leave Flexibility.** Most respondents (79.2%) somewhat or strongly agreed that they could take sick leave when needed, could be flexible with their work schedule, and take vacations when desired. Men agreed (81.4%) more than women (74.3%)*. Sick leave, vacation time, and flexible work contribute to employee wellbeing and work-life balance (Bartel et al., 2022; Begum, 2024).

**Access to Resources.** 35.1% of respondents somewhat or strongly agreed that they had access to the resources they needed including space, budget, mental health resources, and administrative support, suggesting an opportunity to improve access, and improve work, engagement, and worker well-being (Lesener et al., 2019; McAllister et al., 2017). BIPOC respondents agreed (41.3%) more than White (30.3%) respondents*.
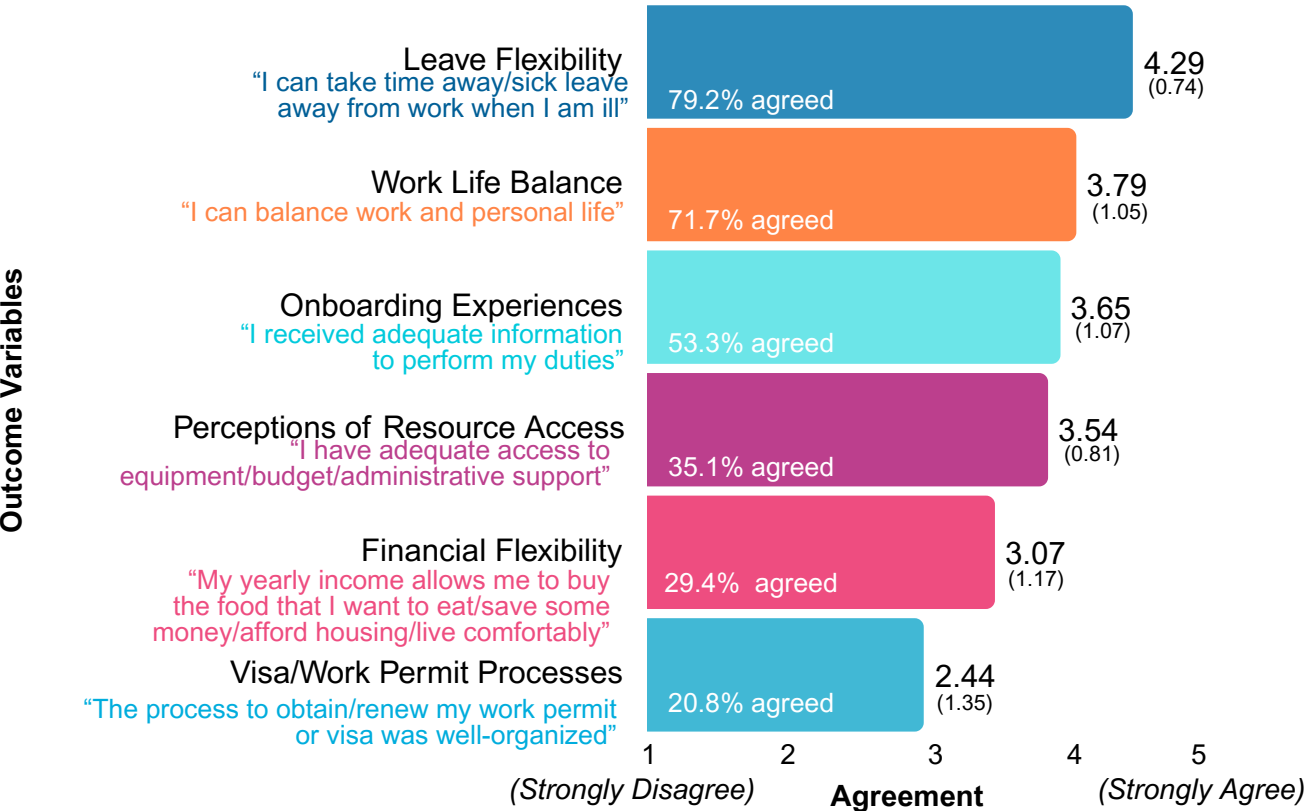


*Notes.* This figure displays example items for outcome variables. Means (average scores) are displayed at the end of each bar. Values in parentheses are standard deviations from the mean, representing the average spread of scores around the mean. 'Visa/Work Permit Processes' questions were rated by 12.2% of the sample who required this documentation for studying or working at TRIUMF.

# RESULTS
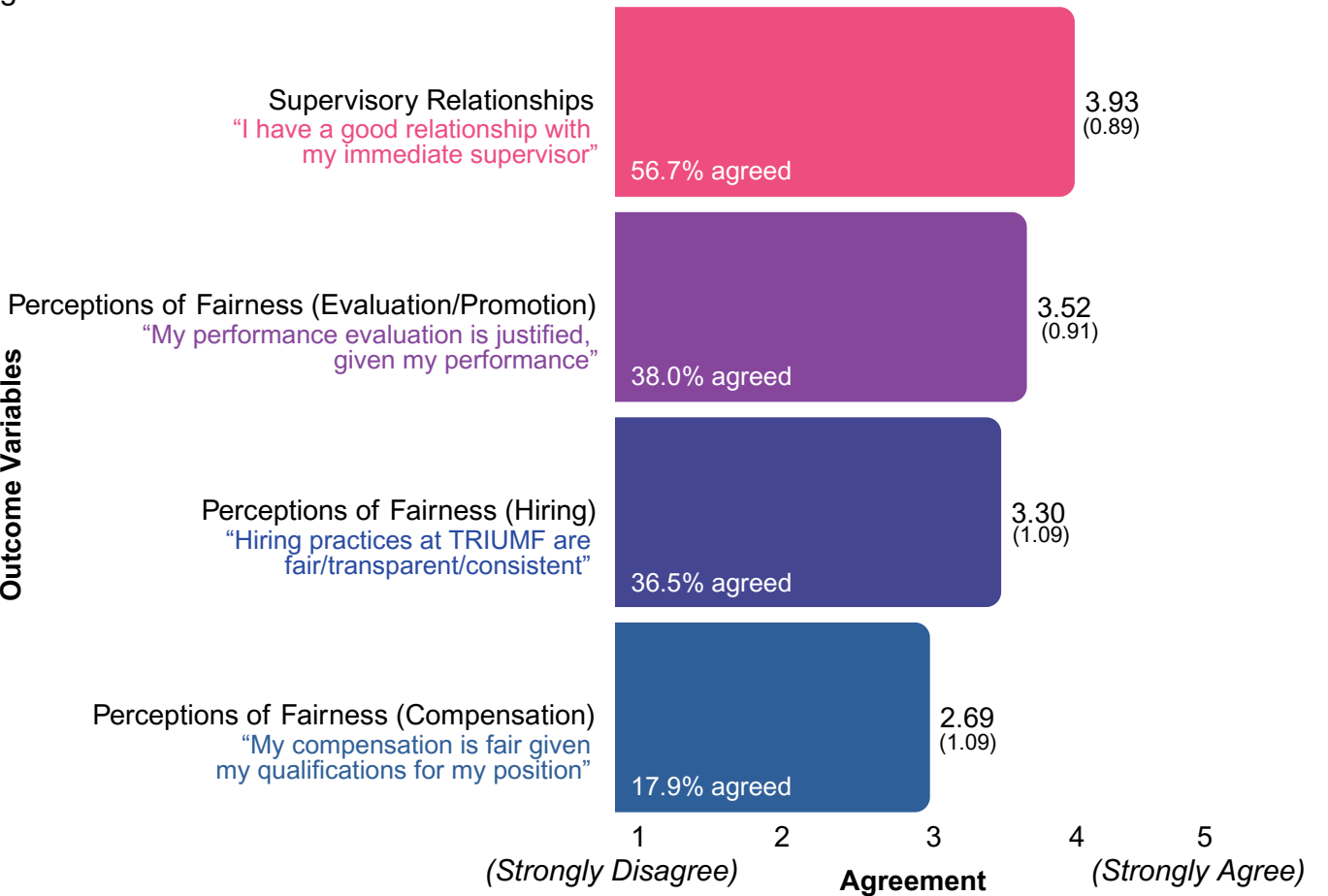## Section 2: Administrative and Structural Processes

**Perceptions of Fairness in Hiring, Compensation, Evaluation, and Promotion.** 36.5% of respondents somewhat or strongly agreed that hiring practices were fair, transparent, and consistent at TRIUMF. BIPOC respondents (45.9%) agreed more than White (30.6%) respondents*. *Statistically significant group differences at $p < .05$.

17.9% of respondents somewhat or strongly agreed that their compensation was fair considering their qualifications, and the pay of other employees at TRIUMF and in similar organizations. Students (28.6%) agreed more than employees (16%)*.

38.0% of respondents somewhat or strongly agreed that performance evaluations, promotions, and recognition were fair. Perceived fairness in promotion and performance appraisals is related to retention and organizational commitment (Rubel & Kee, 2015), and perceived fairness in compensation is related to employee motivation (Rasheed et al., 2020).

**Supervisory Relationships.** Just over half of respondents (56.7%) somewhat or strongly agreed that their supervisor supported them in professional development, getting recognition, and that their supervisor used their influence to benefit them. Students (83.7%) agreed more than employees (53.8%)*. Supervisory support and coaching are related to greater employee retention and engagement (Radey & Wilke, 2023; Schaufeli & Bakker, 2004).

Recall however, the small proportion of student respondents in the current survey, and, that students interviewed in Phase 1 indicated that improvements to supervisory relationships with graduate students should be actioned.



**Supervisory Relationships**
"I have a good relationship with my immediate supervisor"
56.7% agreed — 3.93 (0.89)

**Perceptions of Fairness (Evaluation/Promotion)**
"My performance evaluation is justified, given my performance"
38.0% agreed — 3.52 (0.91)

**Perceptions of Fairness (Hiring)**
"Hiring practices at TRIUMF are fair/transparent/consistent"
36.5% agreed — 3.30 (1.09)

**Perceptions of Fairness (Compensation)**
"My compensation is fair given my qualifications for my position"
17.9% agreed — 2.69 (1.09)

Outcome Variables / Agreement: 1 (Strongly Disagree) — 5 (Strongly Agree)

*Notes*. This figure displays example items for outcome variables. Means (average scores) are displayed at the end of each bar. Values in parentheses are standard deviations from the mean, representing the average spread of scores around the mean.

# RESULTS
## Section 3: Reporting Experiences

Respondents were first asked to gauge their knowledge of harassment and discrimination policies at TRIUMF. Then, they were asked questions about personally experienced harassment and discrimination or witnessed experiences. A 'prefer not to answer' option was embedded throughout. Respondents were shown definitions from past research and policy.
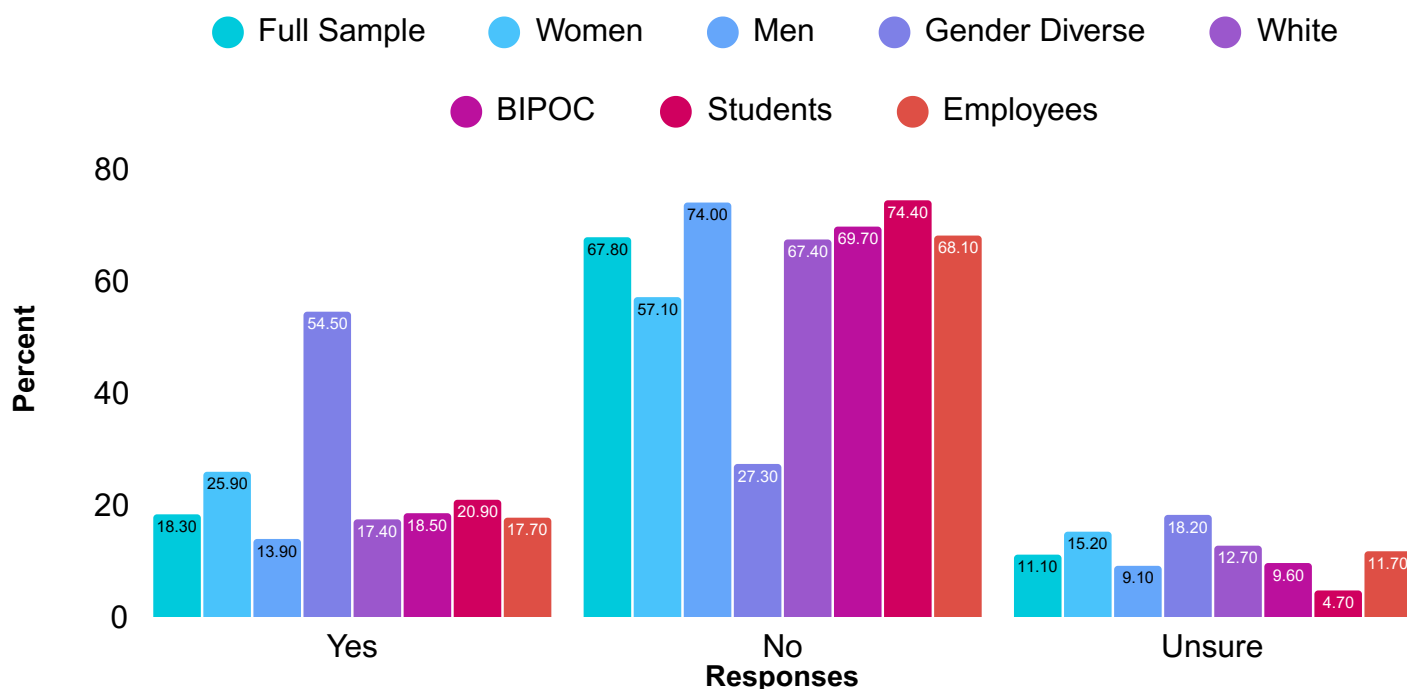
**Knowledge of Reporting Processes.** More than 3/4 of respondents were aware of the process for reporting harassment and discrimination, and over 90% had read the TRIUMF internal policy on bullying and harassment and the code of conduct. A smaller proportion of students (83.7%) indicated they had read this documentation compared to employees (96.2%)* underscoring an opportunity to ensure that students have access to this important information.

| 76.9% Know how to report | 93.8% Have read TRIUMF policy | 94.7% Have read TRIUMF code of conduct |
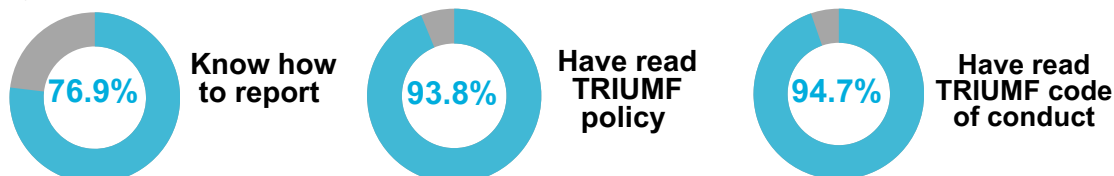
**Personal Experiences of Discrimination or Harassment.** 18.3% of respondents reported a personal experience of harassment or discrimination at TRIUMF. The most common experiences were microaggressions (22.3%), or offensive verbal behaviour (21.1%). Notably, the term 'microaggressions' can obscure serious implications of experiences. In other words, microaggressions are not 'micro' in their impact. Experiencing microaggressions is linked to negative physical and mental health outcomes (e.g., Bostwick et al., 2021; Erving et al., 2023).

Consistent with past research on harassment and discrimination in the sciences, women (26%) at TRIUMF indicated more personal experiences than men (14%)* (Clancy et al., 2017), and gender diverse people (55%) indicated the highest levels of harassment or discrimination. Of those who experienced harassment and discrimination, 31.0% experienced harassment or discrimination five or more times, 67.5% indicated the experience happened on-site at TRIUMF, and 39.6% indicated the experience occurred in 2024.

### Personal Experiences by Demographic Group

● Full Sample  ● Women  ● Men  ● Gender Diverse  ● White
● BIPOC  ● Students  ● Employees

| Responses | Full Sample | Women | Men | Gender Diverse | White | BIPOC | Students | Employees |
|-----------|-------------|-------|-----|----------------|-------|-------|----------|-----------|
| Yes | 18.30 | 25.90 | 13.90 | 54.50 | 17.40 | 18.50 | 20.90 | 17.70 |
| No | 67.80 | 57.10 | 74.00 | 27.30 | 67.40 | 69.70 | 74.40 | 68.10 |
| Unsure | 11.10 | 15.20 | 9.10 | 18.20 | 12.70 | 9.60 | 4.70 | 11.70 |

*Notes.* This figure displays percentages of those replying yes, no, or unsure. <3% preferred not to answer within each group. Groups ranged from *n* =11 (gender diverse) to *n* = 296 (men) so results should be interpreted with this in mind.

# RESULTS
## Section 3: Reporting Experiences

**Witnessed or Learned of Experiences of Discrimination or Harassment.** Compared to personal experiences, a larger proportion of respondents indicated that they had witnessed or learned of discrimination or harassment (35.0%), consistent with past research showing that discrimination is often more easily recognized when it happens to others than when it happens to the self (Taylor et al., 1996). Consistent with the findings on personal experiences, the most common form of witnessed harassment or discrimination was microaggressions (17.7%) and offensive verbal behaviour (15.6%).

**Witnessed Experiences by Demographic Group**
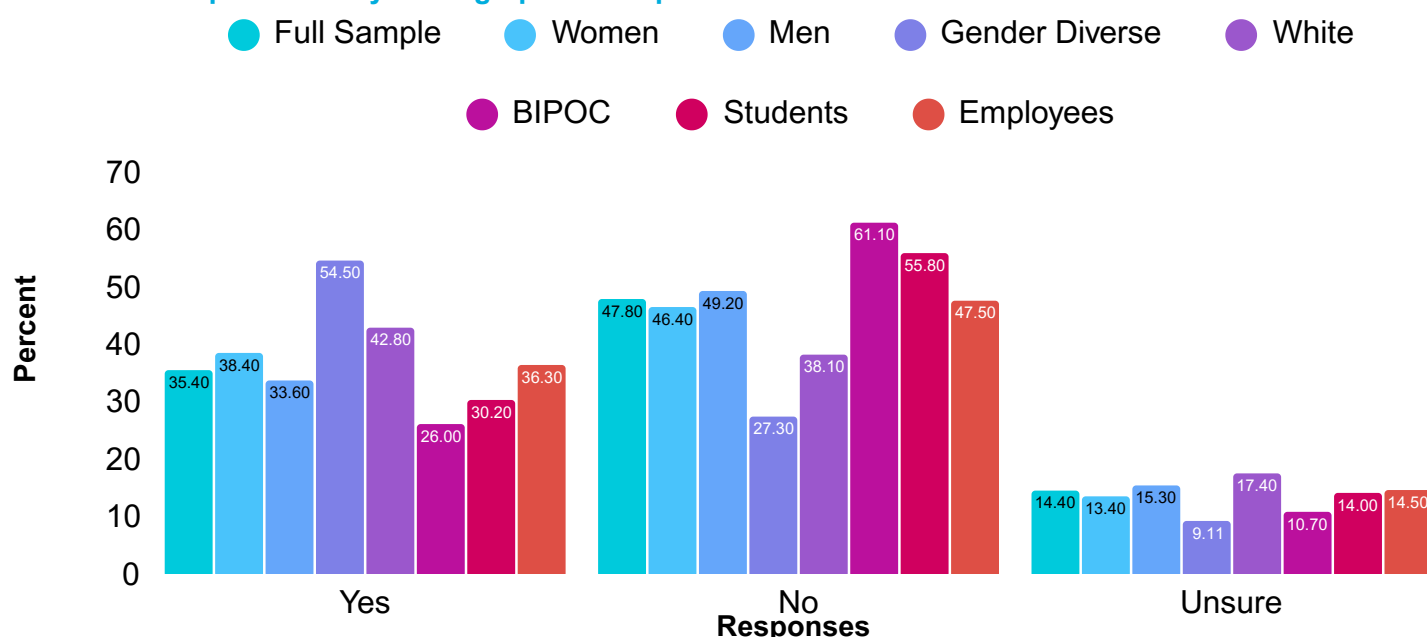


Respondents most commonly indicated that personal experiences of harassment or discrimination were based on sex (15.7%), were unrelated to identity (15.3%), were on the basis of another characteristic (e.g., weight; 10.6%), or age (8.51%). Respondents most commonly indicated that witnessed experiences of harassment or discrimination was based on sex (29.1%), were unrelated to identity (12.9%), were based on race (9.70%), or age (9.20%).
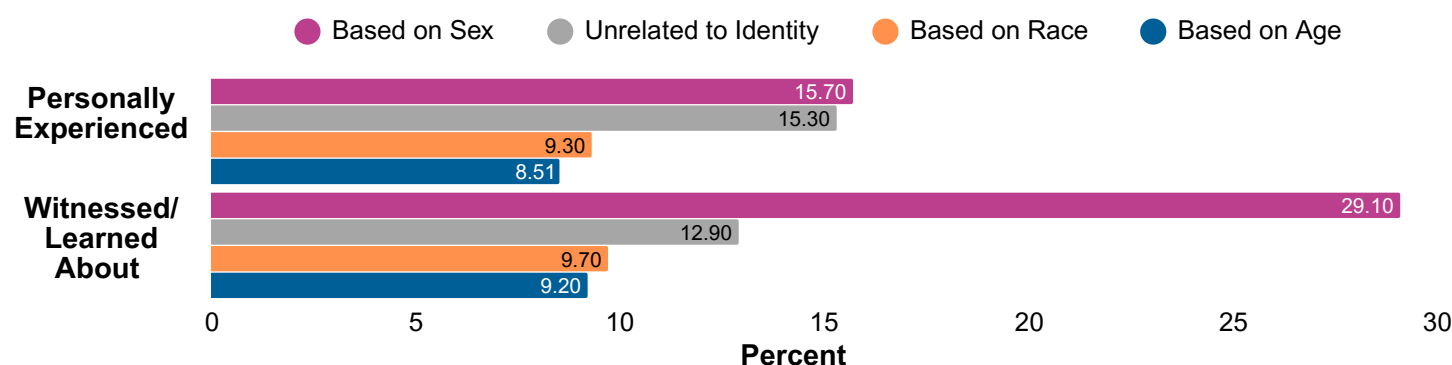


**Reporting**. 35.4% of respondents reported harassment or discrimination to someone at TRIUMF. Consistent with past research on low reporting rates (Kirkner et al., 2020), 23.5% of respondents reported personal experiences, and 46.0% reported witnessed harassment or discrimination. Of those who reported either personal or witnessed experiences, the largest proportion indicated telling supervisors (38.1%), Human Resources (29.5%), and colleagues (14.3%). Among those who reported discrimination or harassment, satisfaction was low; 36.7% somewhat or strongly agreed the reporting process was completed to their satisfaction and in a timely manner.

*Notes*. Figures display percentages of those replying yes, no, or unsure. <3% preferred not to answer within each group. Groups ranged from *n* = 11 (gender diverse) to *n* = 296 (men) so results should be interpreted with this in mind.

# RESULTS
## Section 4: Belonging, Safety, and Inclusion.

Respondents rated agreement to items gauging perceptions of trust, belonging, safety, and the organizational climate. *Statistically significant group differences at $p < .05$.

**Trust**. Respondents rated agreement with three items gauging perceptions of trust. On average, respondents indicated some agreement with these items (54.6% somewhat or strongly agreed). Men (60.1%) agreed more than women (44.5%)*. Gender diverse respondents indicated the lowest trust; 36.4% somewhat or strongly agreed). BIPOC respondents agreed more (63.8%) than White respondents (48.7%)*.

**Belonging**. Respondents rated agreement with three items gauging perceptions of belonging. On average, respondents indicated some agreement with these items (59.7% somewhat or strongly agreed). Members of underrepresented groups in science (i.e., women, people with disabilities, gender and sexual minorities, racialized people) agreed less (54.3%) than other respondents (69.1%)*.
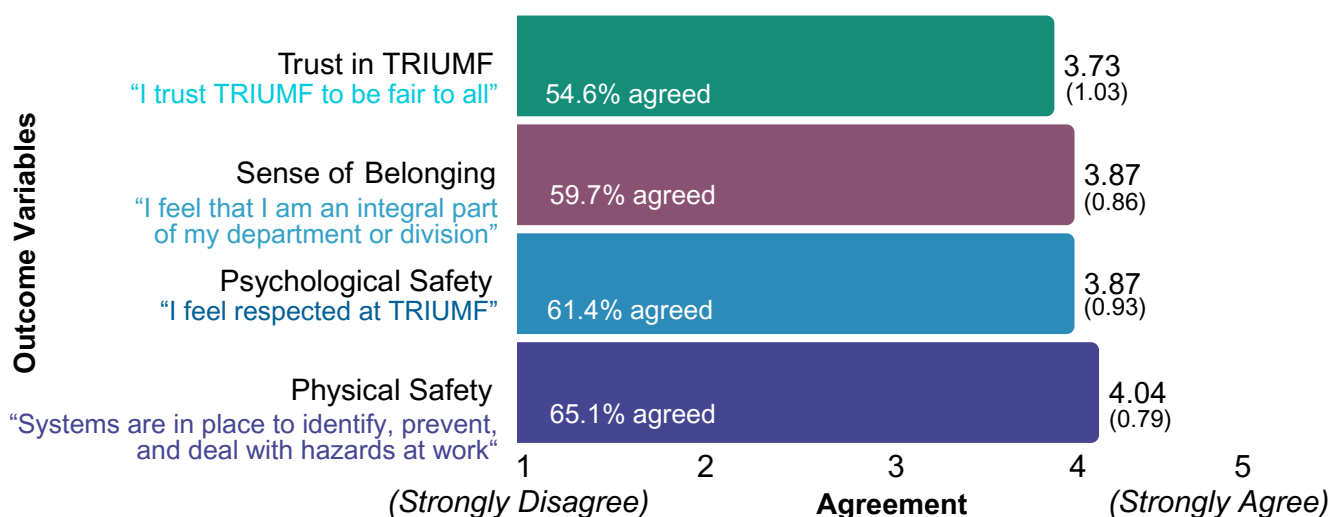


**Psychological and Physical Safety.** Respondents rated agreement with questions gauging perceptions of psychological and physical safety. Many respondents agreed with psychological safety items (61.4% somewhat or strongly agreed). Men (64.3%) agreed more than women (57.3%)* and gender diverse respondents indicated the lowest agreement (45.5%). Members of underrepresented groups in science (58.2%) agreed less than those who were not (67.0%)*. Many respondents agreed with items gauging physical safety (65.1% somewhat or strongly agreed).

**Organizational Climate.** Respondents reviewed a definition of organizational climate, and then indicated agreement to one statement gauging climate. Respondents indicated a more positive climate among their immediate co-workers (71.6% agreed), than among their departments or divisions (60.5% agreed), or the entire organization as a whole (38.9% agreed).
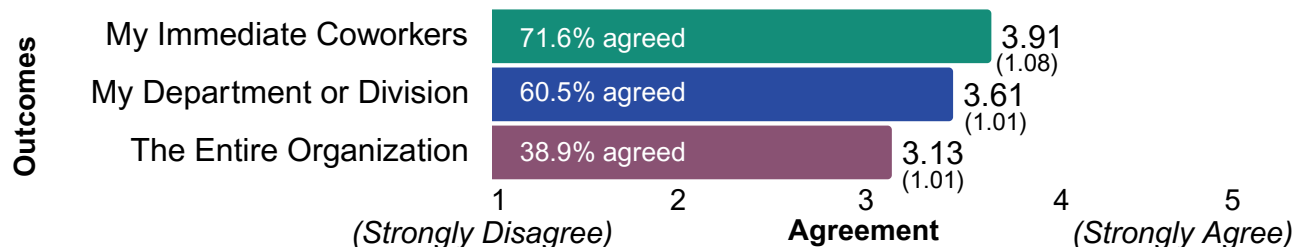


*Notes*. Figures display example items for outcome variables. Means (average scores) are displayed at the end of each bar. Values in parentheses are standard deviations from the mean, representing the average spread of scores around the mean.
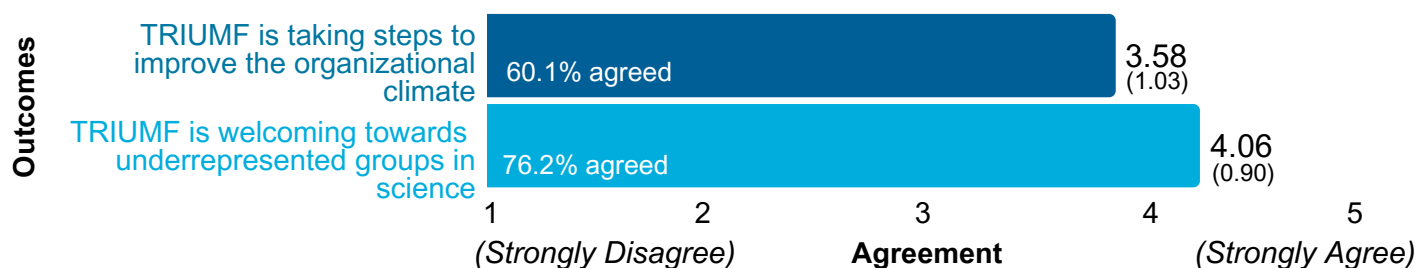
# RESULTS
## Section 4: Belonging, Safety, and Inclusion.

Respondents rated agreement to items gauging perceptions of efforts to improve inclusion at TRIUMF. The survey asked people at TRIUMF about their personal knowledge and beliefs about equity, diversity, and inclusion, and, about the beliefs of other people in the community. *Statistically significant group differences at $p < .05$.

**Climate Improvement.** Respondents rated agreement with two items designed to gauge present-moment perceptions of the organizational climate at TRIUMF. Respondents indicated some agreement that TRIUMF is taking steps to improve the organizational climate (60.1% somewhat or strongly agreed).
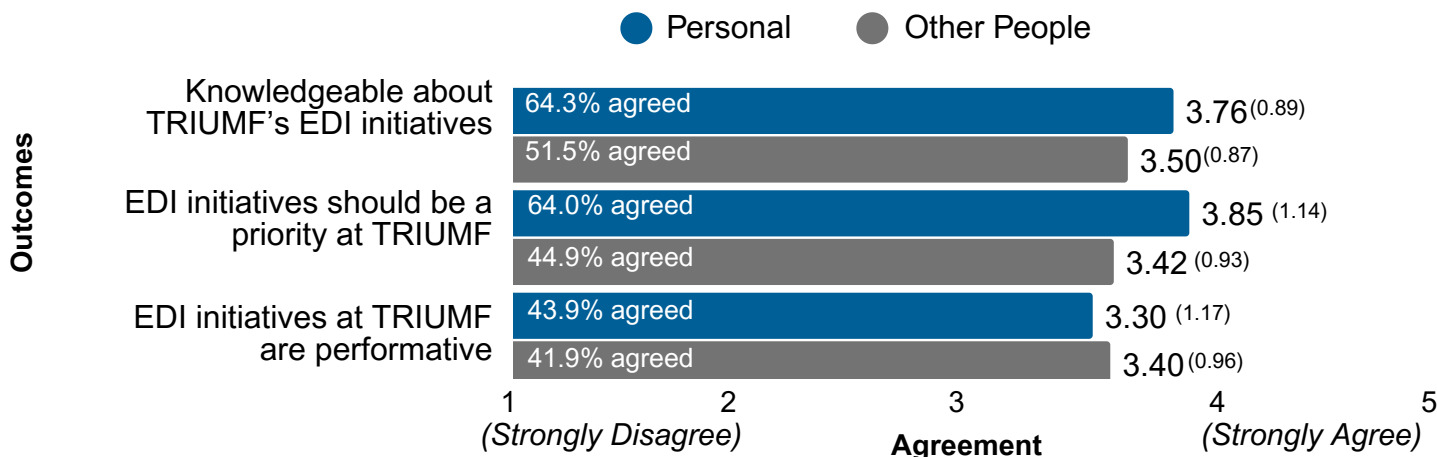
More than 3/4 of respondents agreed that TRIUMF is welcoming towards underrepresented groups (e.g., women, BIPOC, people with disabilities) in sciences in Canada (76.2% somewhat or strongly agreed). However, members of underrepresented groups in science indicated lower agreement (69.5%) than other respondents (87%)*.

**Outcomes**

| TRIUMF is taking steps to improve the organizational climate | 60.1% agreed | 3.58 (1.03) |
| TRIUMF is welcoming towards underrepresented groups in science | 76.2% agreed | 4.06 (0.90) |

1 (Strongly Disagree) — 2 — 3 — Agreement — 4 — 5 (Strongly Agree)

**Knowledge and Beliefs about EDI.** Respondents rated agreement with three statements gauging their own personal knowledge of EDI efforts at TRIUMF and beliefs about EDI (e.g., I'm knowledgeable). They also provided ratings for what they thought other people at TRIUMF knew (e.g., others are knowledgeable) or believed. Most respondents agreed they were personally knowledgeable about TRIUMF's EDI initiatives (64.3%), significantly more so than other people (51.5%).*

Most respondents also agreed that they personally believed EDI should be prioritized at TRIUMF (64.0%), but believed other people agreed less (44.9%)*. Women (72.3%), gender diverse respondents (100%) agreed more than men (60.6%*). Students (73.4%) agreed more than employees (65.1%*).

On average, 40% of respondents perceived TRIUMF's EDI efforts as performative (i.e., inauthentic), and there was no difference between personal beliefs (43.9%) and the perceived beliefs of others about performativity (41.9%). Members of underrepresented groups in science (i.e., women, people with disabilities, gender and sexual minorities, racialized people) agreed more that EDI efforts were performative (49.6%) than other respondents (40.7%)*.

● Personal    ● Other People

**Outcomes**

| Knowledgeable about TRIUMF's EDI initiatives | 64.3% agreed | 3.76 (0.89) |
| | 51.5% agreed | 3.50 (0.87) |
| EDI initiatives should be a priority at TRIUMF | 64.0% agreed | 3.85 (1.14) |
| | 44.9% agreed | 3.42 (0.93) |
| EDI initiatives at TRIUMF are performative | 43.9% agreed | 3.30 (1.17) |
| | 41.9% agreed | 3.40 (0.96) |

1 (Strongly Disagree) — 2 — 3 — Agreement — 4 — 5 (Strongly Agree)

*Notes.* This figure displays example items for outcome variables. Means (average scores) are displayed at the end of each bar. Values in parentheses are standard deviations from the mean, representing the average spread of scores around the mean.
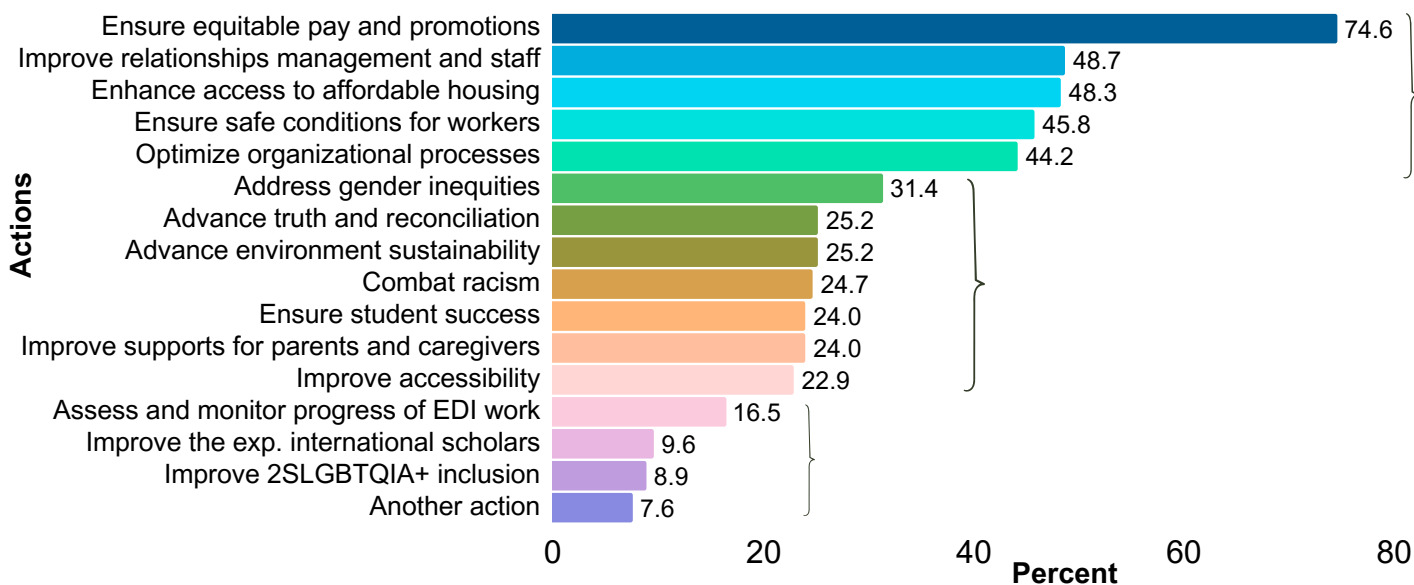
# RESULTS
## Section 4: Belonging, Safety, and Inclusion.

Respondents rated agreement to items gauging EDI priority actions, retention intentions, and job satisfaction. *Statistically significant group differences at $p < .05$.

**EDI Priorities.** Respondents were asked to indicate what EDI actions TRIUMF should prioritize in the coming year, selecting up to five responses from a list. The top five priorities were identified as actions to ensure equitable pay and promotions (74.6%), actions to improve relationship-building between management and staff (48.7%), enhancing access to affordable housing (48.3%), ensuring safe conditions for workers (45.8%), and optimizing organizational structures and processes (44.2%). These priorities were consistent across demographic groups.

Results show **three distinct clusters of priorities:**
1. Actions that impact material conditions (e.g., renumeration, safety, and housing), optimizing organizational processes and improving relationships between management and staff.
2. Actions that focus on inclusion, social and environmental justice (e.g., gender inequities, Indigenous communities, combatting racism, caregivers, and accessibility)
3. Actions that monitor progress and focus on particular groups (e.g., international scholars, 2S+ inclusion, and miscellaneous other actions)

Ensure equitable pay and promotions — 74.6
Improve relationships management and staff — 48.7
Enhance access to affordable housing — 48.3
Ensure safe conditions for workers — 45.8
Optimize organizational processes — 44.2
Address gender inequities — 31.4
Advance truth and reconciliation — 25.2
Advance environment sustainability — 25.2
Combat racism — 24.7
Ensure student success — 24.0
Improve supports for parents and caregivers — 24.0
Improve accessibility — 22.9
Assess and monitor progress of EDI work — 16.5
Improve the exp. international scholars — 9.6
Improve 2SLGBTQIA+ inclusion — 8.9
Another action — 7.6

*(Vertical axis: Actions. Horizontal axis: Percent, scale 0 to 80.)*

### Retention Intentions and Job Satisfaction.
Respondents indicated agreement with two statements about recommending and staying at TRIUMF. On average, respondents indicated some agreement that they plan on staying at TRIUMF (65.9%) and that they would recommend TRIUMF as a good place to study or work (65.9%).

Respondents were asked a single question (Hills et al., 2011) to gauge job satisfaction: 'Taking everything into consideration, how satisfied do you feel about your experience studying or working at TRIUMF?'

More than 3/4 of respondents (76.0%) indicated that they were somewhat or extremely satisfied. However, members of underrepresented groups were less satisfied (75.4% were somewhat or extremely satisfied) compared to other respondents (86.5% somewhat or extremely satisfied)*, underscoring the importance of assessing perceptions and experiences across groups. There were no other statistically significant group differences on job satisfaction (e.g., between students employees etc.).

# APPENDIX A

## RECOMMENDATIONS

## Section 1: Demographic Questionnaire Recommendations & Actions

**PRIORITY RECOMMENDATION**
To attract and retain a diverse community, review hiring and promotion practices and implement procedures that prioritize equitable access, transparency and communication.

**Example Actions:**
a. Keep employees impacted by the hiring process updated and involved in the process.
b. Review job ads for inclusive and non-gendered language (access software, such as 'gender decoder' https://capd.mit.edu/resources/gender-decoder/). Include information on the institution's commitment to EDI, processes to avoid bias in the hiring process, and inclusive policies and practices at TRIUMF if offered (e.g., childcare programs).
c. Promote job opportunities widely and promote on job boards that are specific to groups that are underrepresented at TRIUMF and in the sciences in Canada (e.g., women in science job boards, Canadian Black Scientists Network).
d. Review job ads for unnecessary requirements (e.g., skills that can be learned on the job).
e. Utilize committee structures to make hiring decisions instead of one or two people. Educate committees about common biases in hiring (e.g., affinity bias, bias in letters of reference, etc.).
f. Pre-determine criteria and rubrics for scoring candidates and apply these consistently with all candidates.
g. Recruit and compensate an EDI representative without voting power to help oversee hiring processes on the committee (e.g., reminding committee members about potential biases in reference letters when deliberation starts leaning heavily on them).
h. Make efforts in hiring to consider 'non-traditional' career paths (e.g., gaps in work experience for leaves or other life circumstances).
i. Ensure that all applicants have information about the hiring and interview process in advance. Hiring practices should be done in a timely manner to respect the time and engagement of potential candidates.
j. Apply similar principles in hiring on other relevant committees with decision-making power at TRIUMF (e.g., promotion and award committees).
k. Communicate processes for obtaining promotions and opportunities (such as awards) clearly to everyone at TRIUMF to ensure that the community has access to the same information.
l. Provide mentorship programs and networking opportunities to help the TRIUMF community to navigate promotions processes.

# RECOMMENDATIONS

## Section 1: Demographic Questionnaire Recommendations & Actions

**Recommendation 1.2. Improve experience and retention of underrepresented groups by continuing to work towards an inclusive climate.**

**Example Actions:**
a. Embed EDI content into education/workshops, professional development, and onboarding processes. This education should include content on racism (e.g., Anti-Black, Anti-Indigenous, and Anti-Asian racism) in general, and in the science context. Make it clear that all members of the community can benefit from engaging in education, to avoid perceptions that EDI knowledge is only 'for' certain groups. Cover topics such as allyship and experiences of groups that commonly face harassment, discrimination, and microaggressions including members of the 2SLGBTQIA+ community, women, and people with disabilities, and neurodiversity in the workplace.
b. Hire educators to provide cultural safety education for anyone acting in a supervisory or mentorship role so they are informed as supervisors/mentors.
c. Hire educators to provide workshops on accessible workplaces, acknowledging awareness of episodic and 'invisible' disabilities.
d. Embed accessibility wherever possible (e.g., flexible working hours, captions on virtual meetings, accessible washrooms, clear signage, accessible documents).
e. Provide supervisors (of staff and students) with resources on how to create an inclusive team (e.g., holding inclusive meetings and conferences, distributing resources equitably, how to manage conflict when demographic characteristics play a significant role). Ensure that conferences, events, guest speaker events etc., have sufficient representation of underrepresented group members as speakers, panelists, etc. Bias can prevent their work from being recognized (e.g., Eaton et al., 2020).
f. Conduct reviews to ensure that there are sufficient and up-to-date policies in place to support inclusion.

Examples include:
i. Complaints management processes
ii. Anti-retaliation policies
iii. Codes of conduct
iv. Policies on accommodation and accessibility

# RECOMMENDATIONS
## Section 1: Demographic Questionnaire
## Recommendations & Actions

**Recommendation 1.3. Ensure policies and practices support a diverse workforce.**

**Example Actions:**
a. Offer gender inclusive washrooms in many locations. Research shows that this practice can have positive impacts for gender diverse people, such as increased perceptions of safety (see Harwood-Jones et al., 2023).
b. Include optional fields for pronouns on emails, records, nametags at events, etc.
c. Consider healthcare plans that cover gender-affirming care, fertility treatments such as IVF, and mental health care.
d. Develop parental leave policies that consider 2SLGBTQIA+ families and individuals, and adoption.
e. Include resources relevant to diverse groups in onboarding materials. These can be resources offered by TRIUMF, and the local community (e.g., mental health resources).
f. Create a space for faith-based practices.
g. Create a space for lactation, nursing, and changing tables.
h. Create a calendar of religious and culturally significant days and have dates easily accessible so that anyone planning events can avoid over-scheduling and important meetings on those days. Educate the community on the importance of this practice.
i. Create a policy for flexible work. Flexible work can be useful to everyone, and particularly individuals engaging in spiritual practices that might influence their ability to work during certain times (e.g., prayer times, fasting), who have dependents, or who have health conditions, disabilities, or are neurodivergent.
j. Expand daycare programs.
k. Provide funding for caregivers when people travel for work (e.g., conferences). This should be flexible to accommodate different types of dependents (e.g., young children, older children or adults with disabilities, elderly people) and needs (e.g., money for a family member to care for a dependent).
l. Create mentorship and networking opportunities open to all employees and students. Such opportunities can also facilitate community-building and knowledge transfer between cohorts.

# RECOMMENDATIONS
## Section 1: Demographic Questionnaire
## Recommendations & Actions

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**FURTHER RECOMMENDATIONS**

</div>

**Recommendation 1.4. Review and update partner hire policies and practices to improve satisfaction.**

A small number of respondents reported being part of a partner hiring process. Among those who were part of a formal partner hire process at TRIUMF, satisfaction with the process was low.

Findings from this survey and from qualitative research conducted by McNaughtan et al., (2024) on experiences with partner hires suggest that partner hire processes can be stressful and disrespectful. Partner hires report disrespect and stigma such as being told that they are 'just a partner hire,' resentment from and towards their colleagues, lack of clarity on the process, and career sacrifices. Some TRIUMF survey respondents described that partner hires are important for recruiting women and supporting gender equity in science.

**Example Actions**:
a. Enact transparency in partner hiring processes, ensuring all parties are kept informed about actions and negotiations.
b. Respond to unfair treatment in partner hire processes with appropriate action in accordance with TRIUMF code of conduct and complaint management processes. Candidates and hires should be informed of codes and complaints processes.
c. Once a candidate is hired, provide them with the same information and onboarding resources accessible to all students and employees.

Interested in reading more?

o Monahan, T., Waltz, M., Parker, A., & Fisher, J. A. (2024). A review of the institutional landscape for dual-career hiring in higher education. *Discover Education, 3*(1), 34. https://doi.org/10.1007/s44217-024-00118-6

Based on this same National Science Foundation funded research study, a score card system has been developed. Read more about the scorecard here: https://partnerhirescorecard.org/

# RECOMMENDATIONS

## Section 2: Structural and Administrative Processes Recommendations & Actions

**PRIORITY RECOMMENDATION**
Work with a qualified third-party to review compensation practices and conduct pay equity analyses periodically, in line with provincial legislation.

**Example Actions:**
a. Conduct analyses that consider several variables in addition to gender identity or race, such as education, years of experience, qualifications, roles, and divisions. Analyses should be conducted by those with expertise in complex statistical procedures, in collaboration with Human Resources and TRIUMF stakeholders.

**FURTHER RECOMMENDATIONS**

**Recommendation 2.1. Review and enhance onboarding procedures.**

**Example Actions:**
a. Review onboarding procedures to improve equity in access to important information including policies, and practices, how to access resources, building facilities, organizational structure, and the channels to access when concerns arise (e.g., safety concerns, equity, diversity, inclusion, and accessibility concerns). Provide all new hires with an organizational information package upon arrival. Onboarding materials could also include information about the surrounding community (e.g., recreation, health care, transportation and social services) to assist those who are new to the area.
b. Review onboarding procedures by department to ensure that new hires have adequate training, and access to supervisors to respond to questions and concerns. Maintain records of ongoing education and professional development to ensure new hires have access to updated information.
c. Create onboarding materials specific to students who may be at TRIUMF for a short period of time and associated with a post-secondary institution. Developing student-supervisor checklists and mechanisms to ensure students receive adequate support can improve the experiences of students who may encounter barriers such as absentee advisors as well as financial and administrative burdens (e.g., contracts, agreements with post-secondary institutions and departments, government funding).

**Recommendation 2.2. Support international students and employees.**

**Example Actions:**
a. Although some aspects of visa and international scholar-related processes are beyond the control of TRIUMF, support could be offered by TRIUMF to connect students and employees to external services (e.g., immigration lawyers in the area).
b. Implement procedures to ensure that important paperwork needed for visas is returned and or processed in a timely manner. In doing so, TRIUMF can promote trust in administrative structures and processes.

# RECOMMENDATIONS

## Section 2: Structural and Administrative Processes Recommendations & Actions

**Recommendation 2.3. Review and clearly communicate leave policies.**

**Example Actions:**

a. The policies on leaves should be reviewed to ensure equity among different roles and departments. Make policies on paid time off and leaves clearly communicated (including in onboarding materials) and accessible to everyone at TRIUMF. TRIUMF can increase comfort with taking time off by encouraging employees to use their allotted time. Procedures for covering workload during employee absences are critical; some people may avoid time off so that they do not overburden coworkers, or to avoid being overwhelmed with work when they return. Supporting time away from work can instill greater cohesion among teams, while ensuring people have time for rest.

**Recommendation 2.4. Clearly communicate and make accessible all professional development, mentorship, and promotion opportunities to all eligible individuals.**

**Example Actions:**

a. Professional development, mentorship opportunities, promotion opportunities, and the process for accessing these should be clearly communicated and offered to all eligible individuals. This type of investment helps prevent opportunities being distributed at the sole discretion of supervisors and communicates that TRIUMF is committed to supporting professional development.

# RECOMMENDATIONS

## Section 3: Reporting Experiences
## Recommendations & Actions

**PRIORITY RECOMMENDATION**
Equip anyone in a supervisory capacity to recognize and respond effectively to witnessed, experienced, or disclosed harassment, bullying, and/or discrimination.

**Example Actions:**
a. When disclosures of discrimination or harassment are made at TRIUMF, they are most often made to supervisors (but also commonly to Human Resources, and co-workers). Offer education about how to respond to disclosures of harm with care, and the proper procedures to follow once a disclosure is made, prioritizing the attendance of supervisors and those with direct reports.
b. Hire external contractors with speciality in responding to identity-based harm, so that the TRIUMF community has access to experts beyond the organization.
c. Run promotional campaigns regularly to ensure that the processes for responding to disclosures of harm are widely understood throughout all divisions.

**FURTHER RECOMMENDATIONS**

**Recommendation 3.1. Provide education for all students and employees to help them recognize and address unacceptable behaviours, with a focus on microaggressions, the most commonly reported issue at TRIUMF.**

**Example Actions:**
a. Offer education on discrimination and harassment (and reporting processes) regularly so that all students and employees have the tools and confidence to recognize and address unacceptable behaviours when they encounter them. Include information on microaggressions, given that this was the most common experience reported at TRIUMF.
b. Include scholarship and research on discrimination on the basis of sex, gender, age, and race in the sciences in educational materials to provide the community with an understanding of identity-based harm and the subsequent impact on student and employee retention.

**Recommendation 3.2. Ensure that employees and students are well-informed about how to report harassment, bullying, and discrimination.**

**Example Actions:**
a. Ensure that policies on harassment, bullying, and discrimination, and the procedures for reporting these experiences are incorporated into onboarding practices so that all new employees are aware of and understand these policies.
b. Publicly post policies and procedures so that students and employees have easy access to information when needed. Ensure that visitors and community members can also access this information. Consider using visual markers (i.e., stickers, signage) to indicate particular offices or personnel who are prepared to receive disclosures.
c. Regularly communicate the policies and procedures through other channels for employees who have already gone through the onboarding process. Include a code of conduct that outlines acceptable and expected behaviour.

# RECOMMENDATIONS

## Section 3: Reporting Experiences
## Recommendations & Actions

**Recommendation 3.3. Ensure harassment and discrimination policies and processes are reviewed by individuals with relevant experiences, to ensure a trauma-centred approach (i.e., an approach that acknowledges how past harmful experiences impact the person's current thoughts, feelings, and behaviours).**

**Example Actions:**

a. Ensure that people most impacted by reporting policies and processes are consulted in the development and revision of documentation and procedures. This could include those with lived experiences as sexual violence survivors or those negatively impacted by racial discrimination. Offer compensation and discretion to those willing to consult.

**Recommendation 3.4. Monitor experiences of harassment, discrimination and bullying and associated reporting processes through surveys, interviews, listening sessions with leadership, and an anonymous disclosure option.**

**Example Actions:**

a. Invest in resources to gather information about how people perceive the environment, including in response to disclosures of harassment and discrimination. Collecting this type of data regularly can provide the organization with knowledge of changes in the community and feedback on implemented strategies.

# RECOMMENDATIONS

## Section 4: Belonging, Safety, and Inclusion Recommendations & Actions

**PRIORITY RECOMMENDATION**
Act on the EDI priorities identified by the community, and provide regular updates on progress, embedding mechanisms for regular feedback.

**Example Actions:**
a. Enact priority actions at TRIUMF, focused on ensuring equitable pay and promotions, optimizing administrative structures and processes, improving relationship-building between management and staff, and ensuring safe conditions for workers. Four of the five priority actions identified by respondents are within the direct scope of TRIUMF.
b. Work with community resources and post-secondary institutions to advance access to affordable housing in the Vancouver area, a priority identified by respondents that is beyond the scope of the organization, but nevertheless important to attracting and retaining talent.
c. Recognize that addressing basic needs (e.g., compensation, safety) first can promote trust in the TRIUMF community, while permitting the community to focus on EDI-related priorities, such as addressing gender inequities, combatting racism, and advancing truth and reconciliation with Indigenous communities. While antiquated, research shows that Maslow's theory of hierarchical needs may still apply, such that basic needs must be met in order for higher-level needs to take priority.
d. Create opportunities for all community members to engage in EDI initiatives that are tied to concrete actions. It is important to reduce perceptions of performativity by ensuring that work is grounded in authenticity and is well-resourced. Provide compensation to those doing EDI work for unseen and often psychologically-taxing labour.

**FURTHER RECOMMENDATIONS**

**Recommendation 4.1. Transform culture through inclusive leadership.**

**Example Actions:**
a. Communicate the value of and support for EDI initiatives, based on high-quality evidence from quantitative and qualitative research.
i. Most TRIUMF respondents agreed that equity, diversity, and inclusion should be a priority at TRIUMF. This prioritization can be included in EDI communications to help reinforce this perception, and establish EDI as a norm at TRIUMF, encouraging participation in initiatives and practices that promote EDI (Isenberg & Brauer, 2024).
ii. It is common for people to think others do not support EDI, while they personally do (see https://www.nature.com/articles/s41598-024-76761-8). The gap between personal beliefs and the perceived beliefs of others can be narrowed by countering misperceptions with social norms messaging (i.e., communications about statistics from national opinion polls highlighting pro-diversity).
b. Demonstrate the actions and attitudes towards EDI that TRIUMF values.
c. Be aware of personal bias and systemic bias in the institution, and how bias can impact individuals.
d. Listen and respond to EDI concerns brought forth by community members with empathy.

# Section 4: Belonging, Safety, and Inclusion Recommendations & Actions

## FURTHER RECOMMENDATIONS

**Recommendation 4.2. Work toward improving the organizational climate at all levels (i.e., immediate co-workers to the whole organization) to foster cohesion and positively impact retention.**

**Example Actions:**

a. Measure and replicate the positive aspects of smaller groups among the broader organization. Inclusive environments, psychological safety, and positive workplace climate are all interrelated (Javed et al., 2017; O'Donovan & McAuliffe, 2020; Roberge et al., 2021).

b. Promote cross-divisional contact through collaborative projects or recreational activities to provide opportunities for 'pockets' of the organization to interact. Highlighting superordinate goals can reduce intergroup conflict, so providing overarching objectives throughout TRIUMF can encourage a sense of connection among teams.

**Recommendation 4.3. Acknowledge how perceptions of trust, belonging, affect, and safety differ between demographic groups and conduct a comprehensive review of psychological and physical safety policies and procedures.**

**Example Actions:**

a. Depending on demographic group membership, the TRIUMF community may experience varying perceptions of trust, belonging and safety. Encourage opportunities for people to provide feedback about feelings of safety, centering the most marginalized community members, and disaggregating data between groups whenever possible.

b. Promote trust by communicating often and transparently about administrative changes to material working conditions. Institutional trust is positively linked to interpersonal trust – both of which can impact organizational well-being.

c. Ensure adherence to safety regulations and guidelines by governing bodies (i.e., the Canadian Nuclear Safety Commission). Focusing on safety can promote a positive relationship between management and staff by communicating that leadership care about staff wellness.

**Recommendation 4.4. Create opportunities to learn about the factors that increase retention of talented people at TRIUMF, prioritizing job satisfaction among all community members.**

**Example Actions:**

a. Understanding what is going well at TRIUMF is important to promoting greater retention and increasing job satisfaction. Many respondents indicated intentions to stay at TRIUMF or that they would recommend TRIUMF to others, and more than ¾ of respondents agreed they were satisfied at TRIUMF. Future initiatives should therefore focus on learning more about positive practices to incorporate these practices throughout the entire organization. Data-based communications about progress can provide the community with an evidence-based reflection of broader attitudes, perceptions, and experiences.

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The WinS team works In Kitchener, Waterloo, Cambridge and Brantford, Ontario, on the traditional territory of the Neutral, Anishinaabe, and Haudenosaunee Peoples.

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