ACKNOWLEDGEMENTS

We acknowledge this project took place on the traditional territories of the people of the Treaty 7 region in Southern Alberta, which includes the Blackfoot Confederacy (comprising the Siksika, Piikani, and Kainai First Nations), as well as the Tsuut’ina First Nation, and the Stoney Nakoda (including the Chiniki, Bearspaw, and Wesley First Nations). The City of Calgary is also home to Métis Nation of Alberta, Region 3. We would also like to note that the University of Calgary is situated on land adjacent to where the Bow River meets the Elbow River, and that the traditional Blackfoot name of this place is “Moh’kins’tsis,” which we now call the City of Calgary.

We want to express our gratitude to the following people who made this work possible:

**PURE Operations Team:** PURE is supported by a team in the Office of Experiential Learning (OEL). The PURE team includes the the CDCI/PURE Academic Lead (Dr. Kyla Flanagan, PURE Ops chair), Director of Experiential Learning (Dr. Lisa Stowe), the CDCI Program Coordinator (Joanne Fung), the Evaluation, Reporting and Support Specialist (Rachel Braun), EL and UGR Education Development Consultant (Kara Loy) and the Administrative Coordinator (Raegan Penkoff).

**Austin Ashbaugh:** Austin was hired as a student research assistant to implement the PURE equity, diversity, and inclusion (EDI) action plan. He led demographic analyses, organized consultations, attended the CUR conference on EDI in undergraduate research, reviewed institutional and national EDI action plans, wrote and structured this document, and researched and generated the recommendations.

**Office of Experiential Learning and CDCI Student Ambassadors:** Staff and students provided feedback on the EDI action plan and early versions of the proposed recommendations.

**Drs. Gabrielle Lindstrom and Fouzia Usman:** Educational Development Consultant (EDC) for Indigenous Ways of Knowing and EDI, respectively. Their expertise ensured the proposed recommendations were inclusive and meaningful in terms of achieving the intended goal of increasing accessibility. Drs. Usman and Lindstrom and also provided additional recommendations included in this report.

**PURE Faculty Coordinators:** Four PURE Faculty Coordinators provided in-depth feedback from a faculty-specific perspective regarding demographics and proposed recommendations.

**Consolidated Application System (CAS) Team:** The PURE team collaborates with other units on the Consolidated Application System to support undergraduate summer studentships on campus. The CAS team includes Dr. Kyla Flanagan (Academic Lead, CDCI), Dr. Ebba Kurz (Associate Dean, Undergraduate Health & Science Education, BHSc), Jennifer Logan (Program Coordinator, BHSc), Hector MacIntyre (Research Awards Specialist), Cameron Vanderwey (Senior Research Awards Officer), Joanne Fung (Program Coordinator, CDCI) and Kate McGillis (Operations Manager, BHSc). This group provided feedback on the recommendations and this report.

**Drs. Malinda Smith, Leslie Reid, and Rob Thompson:** The *UCalgary EDI in Research and Teaching awards report (draft)* greatly informed the structure of this report and the language used within.

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1 PURE: Program for Undergraduate Research Experience; CDCI: College of Discovery, Creativity and Innovation; EL: Experiential Learning; UR: Undergraduate Research; EDI: Equity, Diversity, and Inclusion
2 Research Services Office (Vice-president Research Office) and Cumming School of Medicine
EXECUTIVE SUMMARY

The Program for Undergraduate Research Experience (PURE) is a competitive student-led experiential research award for University of Calgary undergraduate students. PURE recipients are awarded up to $6,000 to undertake an 8, 12, or 16-week research project conducted between May and August.

UCalgary is committed to enhancing accessibility and inclusivity for internal awards and grants. These commitments recognize that equity, diversity, and inclusion (EDI) processes and practices in award and grant programs are critical to creating a culture where everyone can flourish in academia. Unfortunately, underrepresented identifying persons (such as women, visible/racialized minorities, Indigenous peoples, persons with disabilities, and 2S/LGBTQIA+) often experience barriers in accessing awards and research opportunities. Barriers can start early at the undergraduate level, including in research award programs such as PURE, and exist throughout a career.

During the spring and summer of 2021, the PURE Awards team developed and implemented an EDI Action Plan to identify and understand barriers to participation in PURE for equity-deserving students. Our objectives were to analyze PURE student demographics, consult widely with PURE stakeholders, and generate recommendations to increase the accessibility of the awards program. In this report, we show and discuss our analysis and findings and introduce 23 recommendations for PURE.

Goals

We had three overarching goals for this work. We aimed to:

I. Understand the current demographic and disciplinary diversity of the PURE student population to help us understand barriers to PURE;

II. Consult widely with PURE stakeholders, EDI experts, and the literature to place EDI best practices and principles in the context of PURE; and

III. Develop a set of recommendations for improving access and reducing barriers to PURE.

Methodology

We collected demographic data through the Consolidated Application System during the 2021 application cycle to understand obstacles, barriers, and biases. We compared the demographics of the 547 students who applied for a summer studentship and were eligible for PURE to the UCalgary undergraduate student population, as presented on the UCalgary EDI Dashboard. We also compared the disciplinary diversity of PURE students to the UCalgary undergraduate population based on data from the Office of Institutional Analysis (OIA).

Findings

1) The demographics of students applying to PURE are different from the UCalgary population. We see fewer self-identified Indigenous students and more women applying to PURE compared to the UCalgary undergraduate population.

2) The disciplinary diversity of students awarded PURE does not reflect the undergraduate student population. Students from the Faculty of Science and the Cummings School of Medicine are overrepresented in PURE. In contrast, students from the Faculty of Arts and the Haskayne School of Business are underrepresented in PURE.
Students are somewhat hesitant to answer demographic questions in the application form, particularly for indicating Indigenous identity, visible minority, and disability statuses.

The adjudication process for PURE appears to be unbiased. We observe little to no shift in the demographics of students who apply for PURE and those offered an award.

Recommendations

Based on our findings, consultations, literature review, conference discussions, and review of other EDI action plans, we generated recommendations to increase the accessibility and equity of PURE. We have structured the recommendations around five categories: inclusive messaging, gathering a diverse group of applicants, selection methods, inclusive programming, and collection and use of demographic data.

<table>
<thead>
<tr>
<th>Category</th>
<th>Recommendation</th>
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<tbody>
<tr>
<td>Inclusive messaging</td>
<td>1. Change the name of PURE</td>
</tr>
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<td></td>
<td>2. Develop an EDI Statement and an Indigenous Statement for PURE</td>
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<td></td>
<td>3. Incorporate EDI-focused learning goals into the PURE learning outcomes</td>
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<tr>
<td>Gathering a diverse group of applicants</td>
<td>4. Open PURE to part-time students</td>
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<td>5. Create part-time PURE awards</td>
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<td></td>
<td>6. Lower or remove GPA threshold</td>
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<td>7. Incorporate Universal Design for Learning (UDL) principles into the application process</td>
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<td></td>
<td>8. Allow students to apply for collaborative PURE awards</td>
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<td></td>
<td>9. Offer targeted recruitment sessions</td>
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<td>10. Encourage students seeking a research supervisor to consider the supervisor’s mentorship practices and research environment</td>
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<td></td>
<td>11. Include a Land Acknowledgement and relationship to the land for the proposed research</td>
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<td></td>
<td>12. Ask students to outline research milestones or objectives for proposed research</td>
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<td></td>
<td>13. Ask supervisors to include a statement on how they will create an inclusive research environment</td>
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<td></td>
<td>14. Allow students an opportunity on the application to provide further information</td>
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<tr>
<td>Selection methods</td>
<td>15. Support reviewers and coordinators in the adjudication process to ensure selection processes consider Indigenous principles and equity, diversity and inclusion principles</td>
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<td></td>
<td>16. Develop a set of targets linked to the disciplinary diversity of the entire campus</td>
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<td></td>
<td>17. Implement EDI-targeted awards</td>
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<tr>
<td>Inclusive programming</td>
<td>18. Develop and support a peer-mentorship network focused on undergraduate Research</td>
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<td></td>
<td>19. Develop an EDI-focused workshop for students</td>
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<tr>
<td></td>
<td>20. Support supervisors developing an inclusive and safe research environment for students</td>
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<tr>
<td></td>
<td>21. Incorporate Universal Design for Learning (UDL) principles into PURE programming</td>
</tr>
<tr>
<td>Collection and use of demographic data</td>
<td>22. Modify the EDI demographic questions in the application form</td>
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<td></td>
<td>23. Report on EDI demographics</td>
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</tbody>
</table>

Conclusions

These findings and the accompanying recommendations serve as a starting place for conversations about EDI in undergraduate research and PURE. We commit to continually improving our programming and processes in PURE concerning EDI. We hope to create an environment that fosters the innovative and creative minds of all future scholars that engage in PURE through ongoing conversations.
INTRODUCTION

The Program for Undergraduate Research Experience (PURE) provides student-led experiential research opportunities for University of Calgary undergraduate students. PURE is led by staff in the Office of Experiential Learning (OEL), with the support of the Vice-Provost, Teaching and Learning, the Provost and Vice-President Academic, and the Vice-President Research. Since 2004, the Vice-President Academic and Vice-President Research have provided matching funds for PURE as a unique program at the intersection of teaching and research. PURE recipients are awarded up to $6,000 to undertake an 8, 12, or 16-week research project conducted between May and August. Throughout, PURE supervisors provide essential mentorship on research and professional skills development. PURE contributes to the Academic and Research Plans’ priorities and exemplifies Research-Based Experiential Learning, as defined in the University of Calgary’s Experiential Learning (EL) Plan (2020-25).

In 2021, 547 PURE-eligible students applied for an undergraduate research award; of the applicants, 189 students were offered a PURE award, with 153 students accepting the award. PURE awards supported research in ten academic units, including the Cumming School of Medicine, Faculty of Arts, Faculty of Kinesiology, Faculty of Nursing, Faculty of Science, Faculty of Social Work, Faculty of Veterinary Medicine, Schulich School of Engineering, and Werklund School of Education.

The PURE team is committed to growth and continual learning concerning Equity, Diversity and Inclusion (EDI) in undergraduate research and our programming. Through our work with undergraduate researchers, we have become increasingly aware of barriers to research opportunities, including financial barriers and perceived biases about the types of research supported by PURE. The challenges and barriers faced by equity-deserving students prompted this work and inspired us to investigate how equity, diversity, and inclusion can be better incorporated within undergraduate research programs, including PURE (Hudley, 2018; Cooper et al., 2020; Estrada et al., 2016; Graham et al., 2013; O’Brien et al., 2020; Stockard et al., 2021).

In winter 2021, we developed a PURE EDI Action Plan (Appendix 1) to examine barriers and create recommendations to increase undergraduate students’ access to research experiences. Here are key definitions that will be used throughout this report to help facilitate our discussion of EDI:

**EQUITY** – “as a principle, condition, process, and outcome is rooted in human rights and the inviolability of human dignity” – UCalgary Office of Equity, Diversity and Inclusion. Equity involves equal access to resources, people, opportunities, and the ability to present opinions and thoughts by all. Regardless of background, people are welcome to engage, contribute, and collaborate in any given opportunity. Equity ensures that all people can pursue their goals and have the resources and accommodations readily available to do so.

**DIVERSITY** – “Diversity, difference, or variety is a characteristic of nature, human society, and the academic world.” – UCalgary Office of Equity, Diversity and Inclusion. Diversity includes the quantitative representation of persons, thoughts, ideas, and solutions in a population. Increased diversity supports the expression of diverse perspectives and the generation of novel ideas and solutions, which are essential for meaningful Research (Bruthers & Matyas, 2020; Estrada et al., 2016). In a research context, diversity can also refer to disciplinary diversity and diverse research methodologies and philosophies.

*Equity, Diversity, and Inclusion & the Program for Undergraduate Research Experience (PURE)*
INCLUSION – “Encompasses norms, practices, and intentional actions to promote participation, engagement, empowerment, and a sense of belonging for members of equity-deserving groups who are underrepresented and historically disadvantaged in university life.” – UCalgary Office of Equity, Diversity and Inclusion. Inclusion is the commitment to engaging and encouraging the persistence of diverse perspectives, persons, and backgrounds. Inclusion creates conditions for equity-deserving groups to feel that they are welcome and appreciated.

UNDER-REPRESENTED IDENTIFYING (URI) PERSONS: Under-represented identifying persons refers to people who identify with a group historically excluded from academia. We will use this term interchangeably with equity-deserving groups. URI persons include women, visible/racialized minorities, persons with disabilities, and 2SLGBTQIA+.

INDIGENOUS PEOPLES: Persons who are Indians, Inuit or Métis (this includes Status Indians, Non-Status Indians, Inuit or Métis). The term “Aboriginal peoples” is the legislative term that appears in the Employment Equity Act and the Employment Equity Regulations. “Indigenous peoples” aligns with international usage and is used throughout this plan where reference to Indigenous peoples is not associated with Canada’s legislative reporting requirements or employment equity representation rates (University of Calgary EDI Dashboard Definitions, 2021).

Goals
We had three overarching goals for this work. We aimed to:

I. Understand the current demographic and disciplinary diversity of the PURE student population to help us understand barriers to PURE;
II. Consult widely with PURE stakeholders, EDI experts, and the literature to place EDI best practices and principles in the context of PURE; and
III. Develop a set of recommendations for improving access and reducing barriers to PURE.

METHODOLOGY
To understand the current state of diversity in the PURE student population, we evaluated the demographics from data collected in PURE-eligible students’ award applications through the Consolidated Application System (CAS). We collected and analyzed demographic data for four equity-deserving groups: gender identity, Indigenous identity, persons with disabilities, and visible minorities.

Four questions guided our analyses:

1. How do PURE student demographics compare to the UCalgary student demographics? Does the program attract students who are representative of the UCalgary undergraduate population?
2. How does the disciplinary diversity of students in PURE compare to the disciplinary diversity of UCalgary undergraduates?
3. Are PURE students hesitant to answer EDI questions? Do students applying for PURE feel comfortable disclosing personal information on the application form; why or why not?
4. Is the PURE adjudication and allocation process fair and unbiased? Are the double-blinding processes effective in preventing biases for equity deserving groups?
To determine how the PURE student demographics compared to UCalgary student demographics, we used the self-identification data from PURE applications and compared this to the cross-campus demographic data collected by the University of Calgary’s Office of Equity, Diversity, and Inclusion (University of Calgary EDI Dashboard, 2020). No data were available on the EDI Dashboard regarding self-identified visible minorities or persons with disabilities for undergraduate students, so we only compared data on gender and Indigenous self-identification.

To understand whether students are hesitant to answer EDI questions, we examined the non-response rates for each demographic question. We assumed increased hesitancy to provide EDI information when a larger proportion of students selected “Prefer not to answer.”

To assess whether our adjudication and award allocation processes are fair and unbiased, we examined the student demographics of those who applied for PURE and compared those to the demographics of those who were awarded PURE. Any strong shift in our application pool compared to our awardee pool would suggest that there may be biases in our processes. Whereas, if the demographics of students in the application and awardee pools are very similar, we infer that the selection process is unbiased.

To examine the disciplinary diversity of students in PURE relative to the general UCalgary undergraduate population, we compared proportions of undergraduate students in each of the ten academic units based on data from the UCalgary Office of Institutional analysis to PURE students’ disciplinary backgrounds.

Based on conference discussions at the Conference on centering Diversity, Equity, and Inclusion in Undergraduate Research + Creative Activity (24-25 June, 2021) hosted by the Council for Undergraduate Research Programs Division and Committee on Diversity & Inclusion, a literature review, and research on other undergraduate research programs across Canada, we generated a list of 23 recommendations to increase the accessibility of PURE at UCalgary.

Recommendations were informed and reviewed by Educational Developmental Consultants, Dr. Gabrielle Lindstrom (Indigenous Ways of Knowing) and Dr. Fouzia Usman (Equity, Diversity, and Inclusion). Lastly, we reviewed the proposed changes with PURE Faculty Coordinators to gain a faculty-specific perspective on the recommendations. These proposed changes are an initial review of barriers to inclusion, equity, and diversity for URI students and potential strategies to address them.

**FINDINGS**

**PURE student demographics**

There is some evidence that PURE is not attracting a representative group of students to apply for the program. In comparing the PURE applicant pool to the UCalgary undergraduate population, we see fewer self-identified Indigenous students applying to PURE than would be expected based on the UCalgary population (3.1% of UCalgary students self-identified as Indigenous vs 1.3% of our PURE population). We also observed higher percentages of women applying to PURE than the UCalgary undergraduate population (46.1% of UCalgary students identify as Women; 62% of PURE applicants identify as Women) (Figure 1). The differences between the gender identity of students applying to
PURE, relative to the UCalgary population, can likely be attributed to differences in disciplinary backgrounds of students applying for PURE and known shifts in the gender ratios of faculties (Figure 2).3

PURE disciplinary diversity

The disciplinary diversity of students awarded PURE does not reflect the UCalgary undergraduate student population (Figure 2). There are several faculties where the proportion of students in PURE very closely aligns with the proportion of students in the UCalgary population, including:

- Faculty of Kinesiology
- Faculty of Social Work
- Faculty of Nursing
- Faculty of Veterinary Medicine
- Schulich School of Engineering
- Werklund School of Education

Students from the following faculties are overrepresented in PURE relative to the UCalgary population:

- Cumming School of Medicine
- Faculty of Science

Students from the following faculties are underrepresented in PURE relative to the UCalgary population:

- Faculty of Arts
- Haskayne School of Business

Hesitancy to answer demographic questions

The majority of students were willing to answer demographic questions, but there is some hesitancy in response rates, particularly regarding Indigenous identity, visible minority, and disability statuses. For some demographic questions, response rates were relatively high, but some had a lower response rate than others. Gender self-identification has the highest response rate (99.3%). In comparison, Indigenous (94.1%), persons with disability (97.2%), and visible minority (96.3%) self-identification all show lower rates of responses. The lower response rate for these questions suggests that some students actively choose not to complete these demographic portions of the survey and may not feel safe disclosing this information (Figure 1).

PURE adjudication and allocation processes

The existing adjudication and selection process for PURE appears to minimize bias. We observe little to no shift in the demographics of students who apply for PURE and those offered an award. Across all four underrepresented groups, we found high consistency in the demographic representation between the PURE applicants and students offered PURE awards (Figure 1).

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3 We recognize other factors may play a role in the gender differences between PURE applicants and the UCalgary student population. The higher percentage of women in PURE, a low-wage research experience, could reflect the wage gap that exists for women in many industries. Systemic barriers for women in higher-paid research experiences may also impact the gender ratio in PURE. While exploration of these factors is beyond the scope of this report, we acknowledge that the reasons for gender differences in PURE may extend beyond faculty-specific gender ratios.
Overall, these results indicate that the adjudication process minimizes bias for equity-deserving groups. However, further investigations to continue an analysis of potential biases and an identification of barriers in recruitment and creating an opportunity for students to feel comfortable disclosing self-identifying information are needed.

See Appendix 2\(^4\) for more detailed, Faculty-specific analyses of these four questions.

\(^4\) Excluding Haskayne School of Business and Interdisciplinary PURE students due to limited applicants.
# PURE Awards 2021

## EDI analysis summary

<table>
<thead>
<tr>
<th>Category</th>
<th>UCalgary Applicants</th>
<th>UCalgary Offers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female*</td>
<td>46.1%</td>
<td>62.0%</td>
</tr>
<tr>
<td>Male*</td>
<td>53.8%</td>
<td>36.7%</td>
</tr>
<tr>
<td>Other Gender*</td>
<td>0.0%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Prefer not to answer*</td>
<td>0.1%</td>
<td>0.7%</td>
</tr>
<tr>
<td>(Gender)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indigenous</td>
<td>3.1%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Did not answer</td>
<td>0.0%</td>
<td>5.9%</td>
</tr>
<tr>
<td>(Indigenous)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>2.8%</td>
<td>3.7%</td>
</tr>
<tr>
<td>(Disability)</td>
<td></td>
<td></td>
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<tr>
<td>Visible Minority</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>3.7%</td>
<td>4.8%</td>
</tr>
<tr>
<td>(Visible Minority)</td>
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### Objectives

1. Evaluate the response rates for all demographic questions in PURE applicants.
2. Compare EDI demographics of PURE applicants with UCalgary undergraduate student demographics.
3. Evaluate the PURE award adjudication process for biases.

### Conclusions

1. There is some hesitancy to answer demographic questions, especially Indigenous, disability, and visible minority self-identification questions.
2. The PURE gender and Indigenous self-identifying EDI demographics are different compared to the general UCalgary student population. Males and Indigenous identifying students are under-represented in PURE.
3. The adjudication process is unbiased. There is no difference in the demographics of students who apply for PURE and those who are awarded.

*Note that this survey question was administered with male, female, and prefer not to answer as options. We recognize that male and female are inappropriate terms to use when describing gender but did not want to misrepresent the collected data.

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*Equity, Diversity, and Inclusion & the Program for Undergraduate Research Experience (PURE)*
**Figure 2.** Percent representation of undergraduate students in each academic unit for the total UCalgary population (Left; Yellow) and PURE population (Right; Red). Grey shading indicates >5% discrepancy between the UCalgary data collected from the Office of Institutional Analysis (OIA) and PURE data collected from CAS application forms. Note that only faculties that were allocated PURE awards were included. Abbreviations; CSM, Cumming School of Medicine, Vet Med, Veterinary Medicine.
RECOMMENDATIONS

This section presents recommendations for increasing the accessibility and inclusivity of the PURE Awards and other UCalgary undergraduate research summer studentship programs. Here we adopt an inclusive-first approach where our recommendations are framed first by inclusive practices, then equitable approaches, and finally diversifying actions. This flipped approach intends to address concerns around the unintentionally harmful practice of recruiting diversity into a non-inclusive environment (Puritty et al., 2017).

Our recommendations result from literature reviews, consultations (see Appendix 3 for consultation notes), and facilitations that sought to understand how undergraduate research programs can reduce or eliminate barriers for underrepresented identifying students. The recommendations are categorized according to themes outlined in the UCalgary EDI in Research and Teaching Awards (Draft), including 1) inclusive messaging; 2) gathering a diverse pool of applicants; 3) selection methods; 4) inclusive programming; and 5) collection and use of demographic data.

Inclusive messaging

1. Change the name of PURE

   The acronym “PURE” was identified as a barrier to program accessibility due to its negative connotations of elitism, whiteness, and selectivism.

   “When I see the name PURE...It makes me think about how I am a dirty Indian...how unpure I am.... If I were to see this name for a research experience as an undergraduate student, I wouldn’t even look further into it at that point.” – Dr. Gabrielle Lindstrom

   We recommend changing to a more inclusive name and acronym, with an initial recommendation of: “Opportunities for Undergraduate Research and Creative Activities – OURCA.” OURCA incorporates the term “creative activities,” allowing for a broader definition of research and a more inclusive approach to research epistemologies.

2. Develop an EDI statement for PURE

   EDI statements are a way to identify EDI as a core value and priority. There have also been calls to include diversity statements in course syllabi as a way to help students feel as though they are in a “warmer” class climate (Fuentes et al., 2020). An EDI statement will provide a transparent statement to prospective students and faculty members on the PURE Awards team’s commitments towards upholding and implementing EDI best practices. Consultations with the PURE administration, students, faculty, and representatives from various campus units are ongoing to formulate an EDI statement for 2022.

3. Incorporate EDI-focused and Indigenous Ways of Knowing-focused learning goals into the PURE learning outcomes

   Recommendations to incorporate EDI-focused and Indigenous Ways of Knowing-focused learning goals into the PURE learning outcomes include acknowledging multiple ways of knowing and
promoting diverse and inclusive practices in research. We have updated the PURE learning outcomes to align with EDI learning outcomes stated in “Entering Research: A curriculum to support undergraduate research trainees” (Appendix 4; Butz & Branchaw, 2020). We will target these learning outcomes by implementing new workshops (Recommendations 18, 19; Appendix 5) and facilitating community-building activities (Recommendation 17).

Gathering a diverse pool of applicants

4. Open PURE to part-time students

The eligibility requirements for undergraduate research awards often promote or are barriers to participation for underrepresented identifying students (Eagan et al., 2013; Fuchs et al., 2016). One of the most reported barriers to PURE is the full-time student eligibility requirement. Underrepresented students are more often required to work additional jobs and/or have home life considerations that make the full-time requirement impossible without negative impacts on their social and mental well-being (Charity Hudley, 2018; Estrada et al., 2016; Puritty et al., 2017; Shanahan et al., 2015). By allowing part-time students to apply for PURE, we will reduce accessibility barriers to undergraduate research experiences.

5. Create part-time PURE awards

Currently, students who are awarded PURE are required to commit to full-time research. In alignment with Recommendation 4, allowing students to apply for part-time PURE awards will increase accessibility and reduce barriers to participation for students. We recommend allowing part-time PURE awards for only the 16-week research terms. By limiting the part-time awards to the 16-week terms, students will still be able to commit themselves to an immersive experiential learning research project.

6. Lower or remove GPA threshold

While GPA has historically been valued and used to measure academic integrity (Canning et al., 2019; Summers & Hrabowski, 2006), GPA is also one of the most prevalent barriers to research experiences for underrepresented students and often an inaccurate evaluation of research potential (Eagan et al., 2013; Fuchs et al., 2016; Gustafson, 2005; Meadows et al., 2019). During a research experience, students with low GPAs learn more skills and develop interests in a field they could not access before (Meadows et al., 2019). Research has also shown that lowering or removing the GPA threshold dramatically increases the number of applications and underrepresented student applications for undergraduate research opportunities.

7. Incorporate Universal Design for Learning (UDL) principles into the application

Universal Design for Learning (UDL) is a pedagogical practice that allows students to present their knowledge in different formats to capture the diversity in ways students learn (Hitchcock et al., 2002; Rose & Meyer, 2002). Expanding the ways students can apply for undergraduate research experiences, such as oral presentations or video submissions, can increase accessibility for students and encourage diverse learners. Indigenous applicants, in particular, may excel in oral submissions, as indicated by the implementation of UDL principles in other award programs at UCalgary (i.e. UCalgary Teaching Award: Indigenous Ways of Knowing).
8. Allow students to apply for collaborative PURE awards

Collaborative research awards encourage group work within and across disciplines, allowing for the development of communication research skills and a lower focus on individual metrics such as GPA (Eagan et al., 2013; Fuchs et al., 2016; Gustafson, 2005; Meadows et al., 2019). Implementing a PURE award stream that focuses on collaborative research could increase student accessibility and expand the kinds of research projects and creative activities students can pursue.

9. Offer targeted recruitment sessions

We aim to develop partnerships with groups that support equity-deserving groups across campus, such as the Writing Symbols Lodge and Q Centre, to offer targeted information and recruitment sessions to help gather a diverse pool of applicants.

10. Encourage students to consider their supervisor’s mentorship practices and research environment

Quality mentorship experiences need to be a priority for all students but are particularly important for underrepresented identifying students (Bradley et al., 2017; Shanahan et al., 2015). It is vital for students to build a positive, professional mentorship relationship with a supervisor who can recognize the injustices and inequities that exist for underrepresented identifying students and support an inclusive research environment (Bhopal, 2020; Malotky et al., 2020). Encouraging students to consider the mentorship approaches of potential supervisors and to evaluate the research environment when selecting a supervisor for their research project will be integrated into student information sessions hosted in November and will also be included on the PURE website (Appendix 6).

11. Include a Land Acknowledgement and relationship to the land for proposed Research

Westernized research often fails to acknowledge Indigenous ways of knowing or Indigenous peoples’ lands upon which research has been conducted (Pers. Comm. Dr. Lindstrom). Land acknowledgements have started to appear in journal articles to provide a reflective opportunity about the land upon which the research is conducted (Trisos et al., 2021). We recommend adding an optional section to the student application form to acknowledge the land that the research will be conducted on and to identify the student’s relationship and associated privilege to having access to the land (as a settler, immigrant, or Indigenous persons; Pers. Comm. Dr. Usman). A resource for identifying Indigenous land will be given to students on the application form.

12. Ask students to outline research milestones or objectives for proposed research

Research shows that URI students require a more structured and mentor-involved research environment to succeed in their research because of inequities in academia (Bhopal, 2020; Graham et al., 2013; McGill et al., 2021). At the core of this structured relationship is constant and thoughtful communication. URI students in both graduate and undergraduate instances have reported that good communication ability is one of the most important components to successful mentoring (Bhopal, 2020; Bruthers & Matyas, 2020; Chan, 2018; Malotky et al., 2020; Shanahan et al., 2015). Incorporating research goals or milestones into the PURE application will spark communication
between students and supervisors to explicitly outline both parties’ expectations. The supervisor and student can use the milestones throughout the research term to reflect on and monitor progress.

13. Ask supervisors to include a statement on how they will create an inclusive research environment

On the application, where supervisors are asked to make a statement about the research environment, we propose making a stronger link to EDI. EDI statements support an inclusive and welcoming scholarly environment. EDI statements increasingly appear in grant applications to encourage investigators to consider EDI principles in Research (Schmaling et al., 2015). By including a section for supervisors on how they will support and create an inclusive environment, supervisors have an opportunity to reflect on their research practices and how they can support their students.

14. Allow students an opportunity on the application to provide further information

On the application, we propose offering an opportunity for students to provide further context, rationale, or information that relates to their proposal or academic background. This recommendation comes from previous PURE award recipients who advised on offering an optional space for students to expand on factors that influenced their academic background and research proposal.

Selection Methods

15. Support reviewers and coordinators in adjudication to ensure selection processes consider EDI

Our analysis indicates limited bias in the adjudication (Figure 2), but we continue to strive to improve our adjudication process. Below are recommendations modelled from the Research and Teaching Awards report that will be provided to faculty coordinators:

- Use the term “demonstrated excellence” and remove elitist messaging around the PURE Awards.
- Consider the composition of reviewers of the applications and ensure there is diverse representation in those reviewing applications.
- Review and clarify selection criteria with reviewers; ensure there are no ambiguities that could lead to reliance on characters that should not be part of the evaluation (Applications submitted by ESL students etc.).
- Ensure reviewers understand the value of locally relevant research and support diversity in scholarship methodologies
- Engage reviewers with continuous learning opportunities to explore their own positionality and strategies for mitigating bias
- Ensure reviewers are aware of biased language (i.e. gendered, racialized) in the supervisor portion of the application
16. Develop targets linked to the disciplinary diversity of the entire campus

The PURE Awards currently accepts applications from 10 faculties across campus and distributes awards based on the percentage of applicants per faculty. To equitably distribute awards across campus, we recommend shifting our award targets from the number of applicants to faculty enrollment percentages compared to the entire campus community. For example, if the Faculty of Science comprises 30% of the campus community’s undergraduate student enrolment, 30% of the PURE Awards would be distributed to Faculty of Science students.

17. Implement EDI-targeted awards

Consultations with faculty showed significant interest in distributing PURE Awards targeted specifically for underrepresented identifying students. Faculties recommended that faculty-funded PURE Awards – funds provided by the faculty instead of the centrally funded PURE Awards – could be allocated to underrepresented students in consultation with student associations and faculty members to ensure the PURE Awards are representative of the mosaic of student identities at UCalgary.

Inclusive Programming

18. Develop and support a peer mentorship network focused on undergraduate research

A strong sense of community and inclusivity can support students – especially underrepresented identifying students – in feeling comfortable in a research environment (Bruthers & Matyas, 2020; Fuchs et al., 2016; Malotky et al., 2020; Puritty et al., 2017; Shanahan et al., 2015). By facilitating a peer mentorship network between experienced undergraduate student researchers and new research students, students can participate in a peer-led community of researchers.

19. Develop an Indigenous Ways of Knowing in Research workshop for students

Dr. Gabrielle Lindstrom has offered to host and develop an “Acknowledging Multiple Ways of Knowing: The Indigenous Ways of Research Relative to Westernized Practices” workshop that introduces PURE award recipients to multiple ways of knowing in research. This workshop will educate students about the similarities and differences between Indigenous and westernized ways of knowing and intends to increase appreciation for Indigenous research methodologies. This activity will also serve as a helpful tool for students conducting research projects in collaboration with Indigenous people and communities.

20. Support supervisors developing an inclusive research environment for students

Studies report that an explicit demonstration of how a research environment is a safe space for all is necessary for underrepresented identifying students to work efficiently and comfortably (Canning et al., 2019; Charity Hudley, 2018). In addition to supporting supervisors through monthly newsletters and an orientation, a workshop supporting supervisors in developing an EDI statement to demonstrate how they offer a safe, inclusive research environment will be offered. These statements describe how a given research or creative activity program has and is integrating principles of EDI and can help reassure students that the research environment is a safe and positive...
space (Schmaling et al., 2015). The program description for this workshop can be found in Appendix 5. The workshop will be offered during the fall 2021 semester for supervisors interested in recruiting 2022 PURE students.

21. Incorporate Universal Design for Learning (UDL) principles into PURE programming

The PURE Awards already incorporates UDL principles in its Final Assignment, allowing students to choose whichever format they feel best represents their research. The PURE Awards is committed to reviewing the other resources and workshops available to incorporate UDL principles further and continue expanding the ways students can show their learning.

Collection and use of demographic data

22. Modify the EDI demographic questions in the application form

Continual collection of EDI demographic data is needed to assess and evaluate efforts. We recommend including a transparency statement to explicitly state why we collect this data. We hope that students and supervisors will be more comfortable disclosing this information (Appendix 7). We also recommend asking these questions on the application form, the student exit survey, and the supervisor entry and exit surveys. The demographic data collected will be used to:

- Establish benchmarks to measure the diversity of the PURE application pool
- Develop program and/or faculty level application targets to increase the diversity of the applicant pool
- Evaluate current practices and the implementation of recommendations to determine whether they do develop a more equitable and inclusive undergraduate research experience

23. Report on EDI demographics

In alignment with Recommendation 22, the demographic data collected will be reported on and evaluated annually to assess the impact of EDI-targeted activities. Annual reporting will reinforce our commitment to meet and exceed expectations for integrating equity, diversity, and inclusion in PURE.

Collaboration with campus units and groups is integral. We will continue to engage PURE stakeholders to uphold and incorporate EDI best practices through the following outlined actions:

- Students: Support, encourage, and recognize the unique identities and modes of scholarship used by students; engage students in conversations around EDI
- Supervisors: Provide a summary of demographic analyses that does not directly disclose the data we collect to protect the identities of students
- Faculty coordinators: Detailed communication of PURE Award equitable distributions for representation of equity-deserving groups. For example, conversations will be held on addressing underrepresentation in the Faculty of Arts and overrepresentation in the Faculty of Science and Cumming School of Medicine (Figure 1).
• Administration team: Incorporate equity, diversity, and inclusion into the regular PURE reporting protocol
• Other offices on campus: Develop procedures to grant access of PURE EDI data to Research Services Office, Leadership, and the TI/OEL; Work collaboratively with the Office of Equity, Diversity, and Inclusion to standardize data collection for demographics

CONCLUSION

PURE hosts a diverse student population, but actions can and should be taken to increase student accessibility. In consultations with experts and faculty coordinators, literature review, other institutions’ action plans, and conference discussions, we provide the 23 actionable recommendations to modify PURE as an undergraduate research program.

Now is the time to have courageous conversations about the inequities that persist in academia – many of which start at the undergraduate level. This report serves as a stepping stone into these discussions. It amplifies the need to have these conversations across all institutional levels. It is only through these ongoing conversations and actions that we will cultivate an inclusive and accessible undergraduate research program.
Literature Cited


Canning, E. A., Muenks, K., Green, D. J., & Murphy, M. C. (2019). STEM faculty who believe ability is fixed have larger racial achievement gaps and inspire less student motivation in their classes. *Science Advances, 5*(2). https://doi.org/10.1126/sciadv.aau4734


through an Interinstitutional, Community-Engaged, Course-Based Undergraduate Research Experience†. 


Appendices

Appendix 1 – PURE EDI action plan

Equity, Diversity, and Inclusion Action Plan for PURE and Undergraduate Research (April 2021)

PHASE 0: Action Plan approval by VPTL and PURE Ops [COMPLETED APRIL]

PHASE 1: Assessment, April 2021 – September 2021
Assess the current state of EDI within CDCI programming

1. Review and evaluate EDI demographic data collected from 2021 PURE applications, including an assessment of response rates.
2. Compare EDI data findings to UCalgary’s Office of Equity, Diversity and Inclusion’s representation findings.
3. Include EDI and demographic questions in the PURE student and supervisor exit point surveys for further data collection and assessment.
4. Review other programs and institutions’ action plans with similar goals in improving access and representation to inform our practices, for example, the Dimensions Pilot Program.
5. Develop a PURE 2021 EDI Summary Report based on Phase 1 assessment findings, including trends and observations, by August 30, 2021.

PHASE 2: 2021 PURE Programming, May 2021 – August 2021
Integrate EDI and Indigenous perspectives into our CDCI programming

1. Connect with diverse researchers to participate in a community-building panel on their research experiences for PURE students in June.
2. Explore inviting a speaker or developing a workshop on EDI in Research.
3. Explore hosting a “lunch and learn” to connect and build community among student researchers and check in on mental health; consider asking students to be involved in this event’s development.
4. Explore reinvigorating the CDCI Student Ambassador program to contribute student perspectives and voices throughout the Fall and Winter after their PURE term.

PHASE 3: Consultation, April 2021 – September 2021
Collaborate on the development and ideation of strategies to intentionally integrate EDI into our programs’ practices and processes for the 2022 PURE Award cycle

1. Consult with PURE Faculty Coordinators on how the PURE program can include EDI considerations with their specific faculty.
   i. Consider offering EDI-specific and/or thematic research PURE awards.
2. Consult with HR and the dimensions office to develop more inclusive language on the PURE website, Terms of Reference, and application form.
3. Consult with TI Educational Development Consultants and TI specialists on incorporating EDI strategies.

4. Collaborate with the Consolidated Application Team on a unified approach towards assessing and advancing EDI in summer undergraduate research studentships.

5. Review the PURE Terms of Reference for EDI considerations.
   i. Consider opening applications to part-time students.
   ii. Open applications to Qatar nursing students.
   iii. Consider offering part-time PURE awards.
   iv. Consider offering group PURE awards


**PHASE 4: Implementation, September 2021 – April 2022**

Present Phase 1 and 3 findings and implement strategies developed in Phase 3 of the Action Plan

1. Present the *PURE 2021 EDI Summary Report* for feedback from PURE Faculty Coordinators, the Office of Equity, Diversity and Inclusion, and Educational Development Consultants.

2. Present the *PURE 2021 EDI Summary Report* to Vice-Provost Teaching and Learning for approval by October 15, 2021.

3. Implement strategies in collaboration with all program stakeholders for the 2022 PURE Award cycle.

**PHASE 5: Evaluation, April 2022 – May 2022**

Assess and evaluate actions implemented from Phases 1-4 of the action plan

1. Review and evaluate EDI demographic data collected from 2022 PURE applications, including an assessment of response rates, compared to the previous year’s applications

2. Compare EDI data findings to UCalgary’s Office of Equity, Diversity and Inclusion’s representation findings.
Appendix 2 – Detailed, Faculty-specific Infographics

**PURE Awards 2021**
**Equity, Diversity, and Inclusion**

**2021 PURE**

**Introduction**
The Program for Undergraduate Research Experience (PURE) provides up to $6,000 of financial support to UCalgary undergraduates to conduct research for 8, 12 or 16 weeks between May and August.

Equity, diversity, and inclusion (EDI) is a top priority for the PURE awards team, as we aim to ensure equitable pathways to research for all UCalgary undergraduates, including those who identify with an underrepresented identity. This infographic highlights EDI demographics for the 2021 PURE awards. We analyzed PURE demographics with three objectives, which will direct future efforts of integrating principles of EDI in PURE.

**Objectives**

1. Evaluate the response rates for all demographic questions in PURE applicants.
2. Compare EDI demographics of PURE applicants with UCalgary undergraduate student demographics.
3. Evaluate the PURE award adjudication process for biases.

**Analysis description**
This analysis uses self-reported data on gender, Indigenous, disability, and visible minority identities gathered from PURE-eligible applications in the Consolidated Application System (CAS). The PURE data is presented in two groups:
- **PURE applicants**: Student applications that met the requirements for a PURE award
- **PURE offered applicants**: All students who were offered a PURE award from all PURE eligible applicants, including students who declined the PURE award offer

For gender and Indigenous identity, we compared the PURE demographic data to the UCalgary student population demographic data provided by the Office of Equity, Diversity, and Inclusion. Data for students who identify as visible minorities and/or those with disabilities are not currently available for the UCalgary student population.

*Note: The adjudication process was double-blinded. Adjudicators were not able to view the demographic data in PURE-eligible applications.*

**Gender* Self-identification**

<table>
<thead>
<tr>
<th></th>
<th>UCALGARY Student Population (2020)</th>
<th>PURE applicants</th>
<th>Applicants offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>46.1%</td>
<td>36.7%</td>
<td>42.9%</td>
</tr>
<tr>
<td>Male</td>
<td>53.8%</td>
<td>62%</td>
<td>56%</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>0.1%</td>
<td>0.7%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Figure 1. Self-reported gender identity for the general UCalgary student population, PURE applicants, and students offered a PURE award. "Other" indicates responses such as male and female; no option existed for non-binary on the application form.

1. The **Gender** response rate for PURE applicants was 99.3% (543 responses), with 0.7% of students selecting "prefer not to answer."

   a) The proportion of female PURE applicants is higher than the UCalgary population. This difference may be attributed in part to Faculty-specific gender ratios and the number of students applying from each Faculty.

   b) The proportion of students who identify as gender non-conforming is similar between the PURE applicants and the UCalgary population.

2. There was no difference in the representation of females, males, and gender non-conforming students when comparing those who applied for PURE and those who were offered an award

   *Note that this survey question was administered with male, female, and prefer not to answer as options. We recognize that male and female are inappropriate terms to use when describing gender but did not want to misrepresent the collected data.*
Indigenous Self-identification

<table>
<thead>
<tr>
<th></th>
<th>UCalgary Student Population (2020)</th>
<th>PURE applicants</th>
<th>Applicants offered PURE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.1%</td>
<td>1.3%</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

- 96.9%  
- 92.8%  
- 92.1%

1. The Indigenous self-identification response rate for PURE applicants was 94.1% (515 responses), with 5.9% of students selecting “prefer not to answer.”

2. Students who identify as Indigenous make up a smaller proportion of the PURE applicants when compared to the UCalgary student population.

3. There is no difference in the proportion of students who self-identified as Indigenous when comparing those who applied for PURE and those who were offered an award.

Disability Self-identification

<table>
<thead>
<tr>
<th></th>
<th>PURE applicants</th>
<th>Applicants offered PURE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4%</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

- 93.2%  
- 92.1%

1. The disability self-identification response rate for PURE applicants was 97.2% (532 responses), with 2.8% of students selecting “prefer not to answer.”

3. There is no difference in the proportion of students who self-identified as having a disability when comparing those who applied for PURE and those who were offered an award.

Visible Minority Self-identification

<table>
<thead>
<tr>
<th></th>
<th>PURE applicants</th>
<th>Applicants offered PURE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>48.6%</td>
<td>48.1%</td>
</tr>
</tbody>
</table>

- 47.7%  
- 47.1%

1. The visible minority self-identification response rate for PURE applicants was 96.3% (527 applications), with 3.7% selecting “prefer not to answer”.

3. There is no difference in the proportion of students who self-identified as a visible minority when comparing those who applied for PURE and those who were offered an award.

Conclusions

1. There is some hesitancy to answer demographic questions, especially Indigenous, disability, and visible minority self-identification questions.

2. The PURE gender and Indigenous self-identifying EDI demographics are different compared to the general UCalgary student population. Males and Indigenous identifying students are under-represented in PURE.

3. The adjudication process is unbiased. There was no difference in the demographics of students who apply for PURE and those who are awarded.
2021 PURE

Introduction

The Program for Undergraduate Research Experience (PURE) provides up to $6,000 of financial support to UCalgary undergraduates to conduct research for 8, 12 or 16 weeks between May and August.

Equity, diversity, and inclusion (EDI) is a top priority for the PURE awards team, as we aim to ensure equitable pathways to research for all UCalgary undergraduates, including those who identify with an underrepresented identity. This infographic highlights EDI demographics for Arts 2021 PURE awards. We analyzed PURE demographics with three objectives, which will direct future efforts of integrating principles of EDI in PURE.

Analysis description

This analysis uses self-reported data on gender, Indigenous, disability, and visible minority identities gathered from PURE-eligible applications in the Consolidated Application System (CAS). The PURE data is presented in two groups:
- **PURE applicants**: Student applications that met the requirements for a PURE award
- **PURE offered applicants**: All students who were offered a PURE award from all PURE eligible applicants, including students who declined the PURE award offer

For gender and Indigenous identity, we compared the PURE demographic data to the UCalgary student population demographic data provided by the Office of Equity, Diversity, and Inclusion. Data for students who identify as visible minorities and/or those with disabilities are not currently available for the UCalgary student population.

*Note: The adjudication process was double-blinded. Adjudicators were not able to view the demographic data in PURE-eligible applications.

Objectives

1. Evaluate the response rates for all demographic questions in PURE applicants.
2. Compare EDI demographics of PURE applicants with UCalgary undergraduate student demographics.
3. Evaluate the PURE award adjudication process for biases.

Gender* Self-identification

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Prefer not to answer</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCalgary Student Population (2020)</td>
<td>46.1%</td>
<td>53.8%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>PURE applicants</td>
<td>0%</td>
<td>75%</td>
<td>21.2%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Applicants offered</td>
<td>0%</td>
<td>30%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Figure 1. Self-reported gender identity for the general UCalgary student population, PURE applicants, and students offered a PURE award. “Other” indicates responses such as male and female, no option existed for non-binary on the application form.

1. The Gender response rate for PURE applicants was 100% (52 responses).
2. a) The proportion of female PURE applicants is higher than the UCalgary population.
   b) The proportion of students who identify as gender non-conforming is greater in the PURE applicant population compared to the UCalgary population.
3. There is a slight increase in male representation when comparing those who applied for PURE and those who were offered an award.

*Note that this survey question was administered with male, female, and prefer not to answer as options. We recognize that male and female are inappropriate terms to use when describing gender but did not want to misrepresent the collected data.
### Indigenous Self-identification

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Did not answer (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCalgary Student Population (2020)</td>
<td>3.1%</td>
<td>0%</td>
<td>96.9%</td>
</tr>
<tr>
<td>PURE applicants</td>
<td>5.8%</td>
<td>9.6%</td>
<td>84.6%</td>
</tr>
<tr>
<td>Applicants offered PURE</td>
<td>10%</td>
<td>10%</td>
<td>80%</td>
</tr>
</tbody>
</table>

Figure 2. Self-reported Indigenous identity for the UCalgary student population, PURE applicants, and students offered a PURE award.

1. The indigenous self-identification response rate for PURE applicants was 90.4% (47 responses), with 9.6% of students selecting “prefer not to answer.”

2. Students who identify as Indigenous make up a larger proportion of the PURE applicants when compared to the UCalgary student population.

3. There is a slight increase in the proportion of students who self-identified as Indigenous when comparing those who applied for PURE and those who were offered an award.

### Disability Self-identification

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Prefer not to answer (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURE applicants</td>
<td>7.7%</td>
<td>1.9%</td>
<td>90.4%</td>
</tr>
<tr>
<td>Applicants offered PURE</td>
<td>5%</td>
<td>0%</td>
<td>95%</td>
</tr>
</tbody>
</table>

Figure 3. Self-identification of a disability for PURE applicants and students offered a PURE award.

1. The disability self-identification response rate for PURE applicants was 98.1% (51 responses), with 1.9% of students selecting “prefer not to answer.”

2. There is no difference in the proportion of students who self-identified as having a disability when comparing those who applied for PURE and those who were offered an award.

### Visible Minority Self-identification

<table>
<thead>
<tr>
<th>Group</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Prefer not to answer (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURE applicants</td>
<td>32.7%</td>
<td>3.8%</td>
<td>63.5%</td>
</tr>
<tr>
<td>Applicants offered PURE</td>
<td>40%</td>
<td>0%</td>
<td>60%</td>
</tr>
</tbody>
</table>

Figure 4. Self-reported visible minority identity for PURE applicants and students offered a PURE award.

1. The visible minority self-identification response rate for PURE applicants was 96.2% (50 applications), with 3.8% selecting “prefer not to answer”

2. There is a slight increase in the proportion of students who self-identified as a visible minority when comparing those who applied for PURE and those who were offered an award.

### Conclusions

1. There is some hesitancy to answer demographic questions, especially Indigenous and visible minority self-identification questions.

2. The PURE gender and Indigenous self-identifying EDI demographics are different compared to the general UCalgary student population. Male identifying students are under-represented and Indigenous students are over-represented in PURE.

3. The adjudication process is overall unbiased. There are limited differences in the demographics of students who apply for PURE and those who are awarded.
Introduction

The Program for Undergraduate Research Experience (PURE) provides up to $6,000 of financial support to UCalgary undergraduates to conduct research for 8, 12 or 16 weeks between May and August.

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Analysis description

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For gender and Indigenous identity, we compared the PURE demographic data to the UCalgary student population demographic data provided by the Office of Equity, Diversity, and Inclusion. Data for students who identify as visible minorities and/or those with disabilities are not currently available for the UCalgary student population.

*Note: The adjudication process was double-blinded. Adjudicators were not able to view the demographic data in PURE-eligible applications.

Objectives

1. Evaluate the response rates for all demographic questions in PURE applicants.
2. Compare EDI demographics of PURE applicants with UCalgary undergraduate student demographics.
3. Evaluate the PURE award adjudication process for biases.

Gender* Self-identification

<table>
<thead>
<tr>
<th>Category</th>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Prefer not to answer</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCalgary Student</td>
<td>0.1%</td>
<td>53.6%</td>
<td>46.1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Population (2020)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PURE applicants</td>
<td>0%</td>
<td>20%</td>
<td>80%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Applicants offered</td>
<td>0%</td>
<td>25%</td>
<td>75%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>PURE</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Figure 1. Self-reported gender identity for the general UCalgary student population, PURE applicants, and students offered a PURE award. “Other” indicates responses such as male and female; no option existed for non-binary on the application form.

1. The Gender response rate for PURE applicants was 100% (20 responses).

   a) The proportion of female PURE applicants is higher than the UCalgary population.

   2. The proportion of students who identify as gender non-conforming is similar between the PURE applicants and the UCalgary population.

   3. There is no difference in the representation of females, males, and gender non-conforming students when comparing those who applied for PURE and those who were offered an award.

*Note that this survey question was administered with male, female, and prefer not to answer as options. We recognize that male and female are inappropriate terms to use when describing gender but did not want to misrepresent the collected data.
Equity, Diversity, and Inclusion & the Program for Undergraduate Research Experience (PURE)

Indigenous Self-identification

<table>
<thead>
<tr>
<th></th>
<th>UCalgary Student Population (2020)</th>
<th>PURE applicants</th>
<th>Applicants offered PURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>3.1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>No</td>
<td>96.9%</td>
<td>95%</td>
<td>87.5%</td>
</tr>
<tr>
<td>Did not answer</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Figure 2. Self-reported Indigenous identity for the UCalgary student population, PURE applicants, and students offered a PURE award.

1. The Indigenous self-identification response rate for PURE applicants was **100% (20 responses)**, with 5.9% of students selecting “prefer not to answer.”

2. Students who identify as Indigenous make up a larger proportion of the PURE applicants when compared to the UCalgary student population.

3. There is a slight increase in the proportion of students who self-identified as Indigenous when comparing those who applied for PURE and those who were offered an award.

Disability Self-identification

<table>
<thead>
<tr>
<th></th>
<th>PURE applicants</th>
<th>Applicants offered PURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>No</td>
<td>90%</td>
<td>100%</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>5%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Figure 3. Self-identification of a disability for PURE applicants and students offered a PURE award.

1. The disability self-identification response rate for PURE applicants was **95% (19 responses)**, with 5% of students selecting “prefer not to answer.”

2. There is a slight decrease in the proportion of students who self-identified as having a disability when comparing those who applied for PURE and those who were offered an award.

Visible Minority Self-identification

<table>
<thead>
<tr>
<th></th>
<th>PURE applicants</th>
<th>Applicants offered PURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>20%</td>
<td>12.5%</td>
</tr>
<tr>
<td>No</td>
<td>75%</td>
<td>87.5%</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>5%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Figure 4. Self-reported visible minority identity for PURE applicants and students offered a PURE award.

1. The visible minority self-identification response rate for PURE applicants was **95% (20 applications)**, with 5% selecting “prefer not to answer”.

2. There is a slight decrease in the proportion of students who self-identified as a visible minority when comparing those who applied for PURE and those who were offered an award.

Conclusions

1. There is some hesitancy to answer demographic questions, especially disability and visible minority self-identification questions.

2. The PURE gender and Indigenous self-identifying EDI demographics are different compared to the general UCalgary student population. Males identifying students are under-represented while Indigenous students are over-represented in PURE.

3. The adjudication process is unbiased. There are limited differences in the demographics of students who apply for PURE and those who are awarded. However, there is a decrease in visible minority representation that should be monitored.
Introduction

The Program for Undergraduate Research Experience (PURE) provides up to $6,000 of financial support to UCalgary undergraduates to conduct research for 8, 12 or 16 weeks between May and August.

Equity, diversity, and inclusion (EDI) is a top priority for the PURE awards team, as we aim to ensure equitable pathways to research for all UCalgary undergraduates, including those who identify with an underrepresented identity. This infographic highlights EDI demographics for Kinesiology 2021 PURE awards. We analyzed PURE demographics with three objectives, which will direct future efforts of integrating principles of EDI in PURE.

Analysis description

This analysis uses self-reported data on gender, Indigenous, disability, and visible minority identities gathered from PURE-eligible applications in the Consolidated Application System (CAS). The PURE data is presented in two groups:

- **PURE applicants**: Student applications that met the requirements for a PURE award.
- **PURE offered applicants**: All students who were offered a PURE award from all PURE eligible applicants, including students who declined the PURE award offer.

For gender and Indigenous identity, we compared the PURE demographic data to the UCalgary student population demographic data provided by the Office of Equity, Diversity, and Inclusion. Data for students who identify as visible minorities and/or those with disabilities are not currently available for the UCalgary student population.

*Note: The adjudication process was double-blinded. Adjudicators were not able to view the demographic data in PURE-eligible applications.

Objective 1

Evaluate the response rates for all demographic questions in PURE applicants.

Objective 2

Compare EDI demographics of PURE applicants with UCalgary undergraduate student demographics.

Objective 3

Evaluate the PURE award adjudication process for biases.

Gender Self-identification

<table>
<thead>
<tr>
<th>Category</th>
<th>UCalgary Student Population (2020)</th>
<th>PURE applicants</th>
<th>Applicants offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>UC</td>
<td>0.1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Female</td>
<td>46.1%</td>
<td>57.1%</td>
<td>57.1%</td>
</tr>
<tr>
<td>Male</td>
<td>53.8%</td>
<td>42.9%</td>
<td>42.9%</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Figure 1. Self-reported gender identity for the general UCalgary student population, PURE applicants, and students offered a PURE award. “Other” indicates responses such as male and female; no option existed for non-binary on the application form.

The Gender response rate for PURE applicants was 100% (35 responses).

a) The proportion of female PURE applicants is higher than the UCalgary population.

b) The proportion of students who identify as gender non-conforming are similar between the PURE applicants and the UCalgary population.

There is no difference in the representation of females, males, and gender non-conforming students when comparing those who applied for PURE and those who were offered an award.

*Note that this survey question was administered with male, female, and prefer not to answer as options. We recognize that male and female are inappropriate terms to use when describing gender but did not want to misrepresent the collected data.
Indigenous Self-identification

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes</th>
<th>No</th>
<th>Did not answer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCalgary Student Population</td>
<td>3.1%</td>
<td>0%</td>
<td>96.9%</td>
<td></td>
</tr>
<tr>
<td>PURE applicants</td>
<td>2.9%</td>
<td>0%</td>
<td>97.1%</td>
<td></td>
</tr>
<tr>
<td>Applicants offered PURE</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. Self-reported Indigenous identity for the UCalgary student population, PURE applicants, and students offered a PURE award.

Disability Self-identification

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes</th>
<th>No</th>
<th>Prefer not to answer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURE applicants</td>
<td>0%</td>
<td>2.9%</td>
<td>97.1%</td>
<td></td>
</tr>
<tr>
<td>Applicants offered PURE</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3. Self-identification of a disability for PURE applicants and students offered a PURE award.

Visible Minority Self-identification

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes</th>
<th>No</th>
<th>Prefer not to answer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURE applicants</td>
<td>0%</td>
<td>40%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Applicants offered PURE</td>
<td>0%</td>
<td>42.9%</td>
<td>57.1%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4. Self-reported visible minority identity for PURE applicants and students offered a PURE award.

Conclusions

1. There is limited hesitancy to answer demographic questions, especially Indigenous and disability self-identification questions.

2. The PURE gender and Indigenous self-identifying EDI demographics are different compared to the general UCalgary student population. Males and Indigenous identifying students are under-represented in PURE.

3. The adjudication process is overall unbiased. There were limited differences in the demographics of students who apply for PURE and those who are awarded.

The visible minority self-identification response rate for PURE applicants was 100% (35 applications).

The Indigenous self-identification response rate for PURE applicants was 97.1% (34 responses), with 2.9% of students selecting “prefer not to answer.”

Students who identify as Indigenous are not represented in the PURE applicants when compared to the UCalgary student population.

There is no difference in the proportion of students who self-identified as Indigenous when comparing those who applied for PURE and those who were offered an award.

There is an increase in the proportion of students who self-identified as a visible minority when comparing those who applied for PURE and those who were offered an award.
**PURE Awards 2021**  
**Equity, Diversity, and Inclusion** & **the Program for Undergraduate Research Experience (PURE)**

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**2021 PURE**

### PURE 2021 - CSM

<table>
<thead>
<tr>
<th>PURE applicants</th>
<th>PURE awards offered</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>126</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

---

**Introduction**

The Program for Undergraduate Research Experience (PURE) provides up to $6,000 of financial support to UCalgary undergraduates to conduct research for 8, 12 or 16 weeks between May and August.

Equity, diversity, and inclusion (EDI) is a top priority for the PURE awards team, as we aim to ensure equitable pathways to research for all UCalgary undergraduates, including those who identify with an underrepresented identity. This infographic highlights EDI demographics for CSM 2021 PURE awards. We analyzed PURE demographics with three objectives, which will direct future efforts of integrating principles of EDI in PURE.

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**Analysis description**

This analysis uses self-reported data on gender, Indigenous, disability, and visible minority identities gathered from PURE-eligible applications in the Consolidated Application System (CAS). The PURE data is presented in two groups:

- **PURE applicants:** Student applications that met the requirements for a PURE award
- **PURE offered applicants:** All students who were offered a PURE award from all PURE eligible applicants, including students who declined the PURE award offer

For gender and Indigenous identity, we compared the PURE demographic data to the UCalgary student population demographic data provided by the Office of Equity, Diversity, and Inclusion. Data for students who identify as visible minorities and/or those with disabilities are not currently available for the UCalgary student population.

*Note: The adjudication process was double-blinded. Adjudicators were not able to view the demographic data in PURE-eligible applications.

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**Objectives**

1. Evaluate the response rates for all demographic questions in PURE applicants.
2. Compare EDI demographics of PURE applicants with UCalgary undergraduate student demographics.
3. Evaluate the PURE award adjudication process for biases.

---

**Gender* Self-identification**

<table>
<thead>
<tr>
<th></th>
<th>UCalgary Student Population (2020)</th>
<th>PURE applicants</th>
<th>Applicants offered PURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>0.1%</td>
<td>0.8%</td>
<td>0%</td>
</tr>
<tr>
<td>Female</td>
<td>53.8%</td>
<td>23%</td>
<td>78.9%</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>0%</td>
<td>0.8%</td>
<td>21.1%</td>
</tr>
<tr>
<td>Other</td>
<td>46.1%</td>
<td>75.4%</td>
<td></td>
</tr>
</tbody>
</table>

---

- **The Gender response rate for PURE applicants was 99.2% (125 responses), with 0.8% of students selecting “prefer not to answer.”**
  
  a) **The proportion of female PURE applicants is higher than the UCalgary population.**
  
  b) **The proportion of students who identify as gender non-conforming is similar between the PURE applicants and the UCalgary population.**

- **There is no difference in the representation of females, males, and gender non-conforming students when comparing those who applied for PURE and those who were offered an award**

*Note that this survey question was administered with male, female, and prefer not to answer as options. We recognize that male and female are inappropriate terms to use when describing gender but did not want to misrepresent the collected data.

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* Equity, Diversity, and Inclusion & the Program for Undergraduate Research Experience (PURE)
Equity, Diversity, and Inclusion & the Program for Undergraduate Research Experience (PURE)
Introduction

The Program for Undergraduate Research Experience (PURE) provides up to $6,000 of financial support to UCalgary undergraduates to conduct research for 8, 12 or 16 weeks between May and August.

Equity, diversity, and inclusion (EDI) is a top priority for the PURE awards team, as we aim to ensure equitable pathways to research for all UCalgary undergraduates, including those who identify with an underrepresented identity. This infographic highlights EDI demographics for Nursing 2021 PURE awards. We analyzed PURE demographics with three objectives, which will direct future efforts of integrating principles of EDI in PURE.

Analysis description

This analysis uses self-reported data on gender, Indigenous, disability, and visible minority identities gathered from PURE-eligible applications in the Consolidated Application System (CAS). The PURE data is presented in two groups:

- PURE applicants: Student applications that met the requirements for a PURE award
- PURE offered applicants: All students who were offered a PURE award from all PURE eligible applicants, including students who declined the PURE award offer

For gender and Indigenous identity, we compared the PURE demographic data to the UCalgary student population demographic data provided by the Office of Equity, Diversity, and Inclusion. Data for students who identify as visible minorities and/or those with disabilities are not currently available for the UCalgary student population.

*Note: The adjudication process was double-blinded. Adjudicators were not able to view the demographic data in PURE-eligible applications.

Objectives

1. Evaluate the response rates for all demographic questions in PURE applicants.
2. Compare EDI demographics of PURE applicants with UCalgary undergraduate student demographics.
3. Evaluate the PURE award adjudication process for biases.

Figure 1. Self-reported gender identity for the general UCalgary student population, PURE applicants, and students offered a PURE award. "Other" indicates responses such as male and female, no option existed for non-binary on the application form.

*Note that this survey question was administered with male, female, and prefer not to answer as options. We recognize that male and female are inappropriate terms to use when describing gender but did not want to misrepresent the collected data.
Indigenous Self-identification

UCalgary Student Population (2020)
- Yes: 3.1%
- No: 0%
- Did not answer: 96.9%

PURE applicants
- Yes: 0%
- No: 10.5%
- Did not answer: 89.5%

Applicants offered PURE
- Yes: 0%
- No: 18.2%
- Did not answer: 81.8%

Figure 2. Self-reported Indigenous identity for the UCalgary student population, PURE applicants, and students offered a PURE award.

1. The Indigenous self-identification response rate for PURE applicants was 89.5% (17 responses), with 10.5% of students selecting “prefer not to answer.”

2. Students who identify as Indigenous are not represented in the PURE applicant population when compared to the UCalgary student population.

3. There is no difference in the proportion of students who self-identified as Indigenous when comparing those who applied for PURE and those who were offered an award.

Disability Self-identification

PURE applicants
- Yes: 5.3%
- No: 0%
- Prefer not to answer: 94.7%

Applicants offered PURE
- Yes: 9.1%
- No: 0%
- Prefer not to answer: 90.9%

Figure 3. Self-identification of a disability for PURE applicants and students offered a PURE award.

1. The disability self-identification response rate for PURE applicants was 100% (19 responses).

2. There is a slight increase in the proportion of students who self-identified as having a disability when comparing those who applied for PURE and those who were offered an award.

Visible Minority Self-identification

PURE applicants
- Yes: 0%
- No: 42.1%
- Prefer not to answer: 57.9%

Applicants offered PURE
- Yes: 0%
- No: 45.5%
- Prefer not to answer: 54.5%

Figure 4. Self-reported visible minority identity for PURE applicants and students offered a PURE award.

1. The visible minority self-identification response rate for PURE applicants was 100% (19 applications).

2. There is a slight decrease in the proportion of students who self-identified as a visible minority when comparing those who applied for PURE and those who were offered an award.

Conclusions

1. There is some hesitancy to answer demographic questions, particularly the Indigenous self-identification question.

2. The PURE gender and Indigenous self-identifying EDI demographics are different compared to the general UCalgary student population. Males and Indigenous identifying students are under-represented in PURE.

3. The adjudication process is unbiased. There are limited differences in the demographics of students who apply for PURE and those who are awarded.
Introduction

The Program for Undergraduate Research Experience (PURE) provides up to $6,000 of financial support to UCalgary undergraduates to conduct research for 8, 12 or 16 weeks between May and August.

Equity, diversity, and inclusion (EDI) is a top priority for the PURE awards team, as we aim to ensure equitable pathways to research for all UCalgary undergraduates, including those who identify with an underrepresented identity. This infographic highlights EDI demographics for Science 2021 PURE awards. We analyzed PURE demographics with three objectives, which will direct future efforts of integrating principles of EDI in PURE.

Analysis description

This analysis uses self-reported data on gender, Indigenous, disability, and visible minority identities gathered from PURE-eligible applications in the Consolidated Application System (CAS). The PURE data is presented in two groups:

- **PURE applicants**: Student applications that met the requirements for a PURE award.
- **PURE offered applicants**: All students who were offered a PURE award from all PURE eligible applicants, including students who declined the PURE award offer.

For gender and Indigenous identity, we compared the PURE demographic data to the UCalgary student population demographic data provided by the Office of Equity, Diversity, and Inclusion. Data for students who identify as visible minorities and/or those with disabilities are not currently available for the UCalgary student population.

*Note: The adjudication process was double-blinded. Adjudicators were not able to view the demographic data in PURE-eligible applications.*

<table>
<thead>
<tr>
<th>Gender* Self-identification</th>
<th>UCalgary Student Population (2020)</th>
<th>PURE applicants</th>
<th>Applicants offered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.1%</td>
<td>0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Female</td>
<td>46.1%</td>
<td>53.1%</td>
<td>45.8%</td>
</tr>
<tr>
<td>Male</td>
<td>53.8%</td>
<td>46.9%</td>
<td>46.2%</td>
</tr>
</tbody>
</table>

Figure 1. Self-reported gender identity for the general UCalgary student population, PURE applicants, and students offered a PURE award. “Other” indicates responses such as male and female; no option existed for non-binary on the application form.

Objectives

1. Evaluate the response rates for all demographic questions in PURE applicants.
2. Compare EDI demographics of PURE applicants with UCalgary undergraduate student demographics.
3. Evaluate the PURE award adjudication process for biases.

The Gender response rate for PURE applicants was 99% (188 responses), with 1% of students selecting "prefer not to answer."

- a) The proportion of female PURE applicants is higher than the UCalgary population.
- b) The proportion of students who identify as gender non-conforming is similar between the PURE applicants and the UCalgary population.

There is no difference in the representation of females, males, and gender non-conforming students when comparing those who applied for PURE and those who were offered an award.

*Note that this survey question was administered with male, female, and prefer not to answer as options. We recognize that male and female are inappropriate terms to use when describing gender but did not want to misrepresent the collected data.*
Equity, Diversity, and Inclusion & the Program for Undergraduate Research Experience (PURE)

### Indigenous Self-identification

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes</th>
<th>No</th>
<th>Did not answer</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCalgary Student Population (2020)</td>
<td>3.1%</td>
<td>0%</td>
<td>96.9%</td>
<td></td>
</tr>
<tr>
<td>PURE applicants</td>
<td>1.6%</td>
<td>5.8%</td>
<td>92.6%</td>
<td></td>
</tr>
<tr>
<td>Applicants offered PURE</td>
<td>2.5%</td>
<td>6.2%</td>
<td>91.3%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. Self-reported Indigenous identity for the UCalgary student population, PURE applicants, and students offered a PURE award.

1. The Indigenous self-identification response rate for PURE applicants was **94.2% (179 responses)**, with 5.8% of students selecting "prefer not to answer."

2. Students who identify as Indigenous make up a smaller proportion of the PURE applicants when compared to the UCalgary student population.

3. There is no difference in the proportion of students who self-identified as Indigenous when comparing those who applied for PURE and those who were offered an award.

### Disability Self-identification

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes</th>
<th>No</th>
<th>Prefer not to answer</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURE applicants</td>
<td>3.7%</td>
<td>2.1%</td>
<td>94.2%</td>
<td></td>
</tr>
<tr>
<td>Applicants offered PURE</td>
<td>4.2%</td>
<td>3.7%</td>
<td>92.1%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3. Self-identification of a disability for PURE applicants and students offered a PURE award.

1. The disability self-identification response rate for PURE applicants was **97.9% (186 responses)**, with 2.1% of students selecting "prefer not to answer."

3. There is no difference in the proportion of students who self-identified as having a disability when comparing those who applied for PURE and those who were offered an award.

### Visible Minority Self-identification

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes</th>
<th>No</th>
<th>Prefer not to answer</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURE applicants</td>
<td>5.8%</td>
<td>51.6%</td>
<td>42.6%</td>
<td></td>
</tr>
<tr>
<td>Applicants offered PURE</td>
<td>8.6%</td>
<td>39.5%</td>
<td>51.9%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4. Self-reported visible minority identity for PURE applicants and students offered a PURE award.

1. The visible minority self-identification response rate for PURE applicants was **94.2 % (179 applications)**, with 5.8% selecting “prefer not to answer”

3. There is a decrease in the proportion of students who self-identified as visible minority when comparing those who applied for PURE and those who were offered an award.

### Conclusions

1. There is some hesitancy to answer demographic questions, especially Indigenous, disability, and visible minority self-identification questions.

2. The PURE gender and Indigenous self-identifying EDI demographics are different compared to the general UCalgary student population. Males and Indigenous identifying students are under-represented in PURE.

3. The adjudication process is overall unbiased. There are limited differences in the demographics of students who apply for PURE and those who were offered an award. However, there is a decrease in visible minority representation that should be monitored.
PURE Awards 2021
Equity, Diversity, and Inclusion analysis

2021 PURE

PURE 2021 - Social Work

PURE applicants
7

PURE awards offered
5

Introduction
The Program for Undergraduate Research Experience (PURE) provides up to $6,000 of financial support to UCalgary undergraduates to conduct research for 8, 12 or 16 weeks between May and August.

Equity, diversity, and inclusion (EDI) is a top priority for the PURE awards team, as we aim to ensure equitable pathways to research for all UCalgary undergraduates, including those who identify with an underrepresented identity. This infographic highlights EDI demographics for Social Work 2021 PURE awards. We analyzed PURE demographics with three objectives, which will direct future efforts of integrating principles of EDI in PURE.

Analysis description
This analysis uses self-reported data on gender, Indigenous, disability, and visible minority identities gathered from PURE-eligible applications in the Consolidated Application System (CAS). The PURE data is presented in two groups:
- PURE applicants: Student applications that met the requirements for a PURE award
- PURE offered applicants: All students who were offered a PURE award from all PURE eligible applicants, including students who declined the PURE award offer

For gender and Indigenous identity, we compared the PURE demographic data to the UCalgary student population demographic data provided by the Office of Equity, Diversity, and Inclusion. Data for students who identify as visible minorities and/or those with disabilities are not currently available for the UCalgary student population.

*Note: The adjudication process was double-blinded. Adjudicators were not able to view the demographic data in PURE-eligible applications.

Objectives

1. Evaluate the response rates for all demographic questions in PURE applicants.
2. Compare EDI demographics of PURE applicants with UCalgary undergraduate student demographics.
3. Evaluate the PURE award adjudication process for biases.

Gender* Self-identification

<table>
<thead>
<tr>
<th></th>
<th>UCalgary Student Population (2020)</th>
<th>PURE applicants</th>
<th>Applicants offered</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.1% 0%</td>
<td>28.6%</td>
<td>60%</td>
</tr>
<tr>
<td>Female</td>
<td>46.1% 53.8%</td>
<td>71.4%</td>
<td>40%</td>
</tr>
<tr>
<td>Male</td>
<td>0% 0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>0% 0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>0% 0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Figure 1. Self-reported gender identity for the general UCalgary student population, PURE applicants, and students offered a PURE award. “Other” indicates responses such as male and female; no option existed for non-binary on the application form.

The Gender response rate for PURE applicants was 100% (7 responses).

a) The proportion of female PURE applicants is higher than the UCalgary population.

b) The proportion of students who identify as gender non-conforming is similar between the PURE applicants and the UCalgary population.

There is a decrease in Female and increase in Male representation when comparing those who applied for PURE and those who were offered an award.

*Note that this survey question was administered with male, female, and prefer not to answer as options. We recognize that male and female are inappropriate terms to use when describing gender but did not want to misrepresent the collected data.
Equity, Diversity, and Inclusion & the Program for Undergraduate Research Experience (PURE)

### Indigenous Self-Identification

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Did not answer (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCalgary Student Population (2020)</td>
<td>3.1%</td>
<td>0%</td>
<td>96.9%</td>
<td></td>
</tr>
<tr>
<td>PURE applicants</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Applicants offered PURE</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. Self-reported Indigenous identity for the UCalgary student population, PURE applicants, and students offered a PURE award.

1. The Indigenous self-identification response rate for PURE applicants was 100% (7 responses).

2. Students who identify as Indigenous are not represented in the PURE applicant population when compared to the UCalgary student population.

3. There was no difference in the proportion of students who self-identified as Indigenous when comparing those who applied for PURE and those who were offered an award.

### Disability Self-Identification

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Prefer not to answer (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURE applicants</td>
<td>28.6%</td>
<td>0%</td>
<td>71.4%</td>
<td></td>
</tr>
<tr>
<td>Applicants offered PURE</td>
<td>40%</td>
<td>0%</td>
<td>60%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3. Self-identification of a disability for PURE applicants and students offered a PURE award.

1. The disability self-identification response rate for PURE applicants was 100% (7 responses).

3. There was an increase in the proportion of students who self-identified as having a disability when comparing those who applied for PURE and those who were offered an award.

### Visible Minority Self-Identification

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Prefer not to answer (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURE applicants</td>
<td>57.1%</td>
<td>0%</td>
<td>42.9%</td>
<td></td>
</tr>
<tr>
<td>Applicants offered PURE</td>
<td>20%</td>
<td>0%</td>
<td>80%</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4. Self-reported visible minority identity for PURE applicants and students offered a PURE award.

The visible minority self-identification response rate for PURE applicants was 100% (7 applications).

1. There is no hesitancy to answer demographic questions.

2. The PURE gender and Indigenous self-identifying EDI demographics are different compared to the general UCalgary student population. Males and Indigenous identifying students are under-represented in PURE.

3. The adjudication process is likely unbiased. There were differences in the demographics of students who apply for PURE and those who are awarded. Visible minority, disability, and gender self-identification show these changes.
Introduction

The Program for Undergraduate Research Experience (PURE) provides up to $6,000 of financial support to UCalgary undergraduates to conduct research for 8, 12, or 16 weeks between May and August.

Equity, diversity, and inclusion (EDI) is a top priority for the PURE awards team, as we aim to ensure equitable pathways to research for all UCalgary undergraduates, including those who identify with an underrepresented identity. This infographic highlights EDI demographics for the Vet Med 2021 PURE awards. We analyzed PURE demographics with three objectives, which will direct future efforts of integrating principles of EDI in PURE.

Analysis description

This analysis uses self-reported data on gender, Indigenous, disability, and visible minority identities gathered from PURE-eligible applications in the Consolidated Application System (CAS). The PURE data is presented in two groups:

- **PURE applicants**: Student applications that met the requirements for a PURE award
- **PURE offered applicants**: All students who were offered a PURE award from all PURE eligible applicants, including students who declined the PURE award offer

For gender and Indigenous identity, we compared the PURE demographic data to the UCalgary student population demographic data provided by the Office of Equity, Diversity, and Inclusion. Data for students who identify as visible minorities and/or those with disabilities are not currently available for the UCalgary student population.

*Note: The adjudication process was double-blinded. Adjudicators were not able to view the demographic data in PURE-eligible applications.

Objectives

1. **Evaluate the response rates for all demographic questions in PURE applicants.**
2. **Compare EDI demographics of PURE applicants with UCalgary undergraduate student demographics.**
3. **Evaluate the PURE award adjudication process for biases.**

### Gender* Self-identification

<table>
<thead>
<tr>
<th>Category</th>
<th>Female</th>
<th>Male</th>
<th>Prefer not to answer</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCalgary Student Population (2020)</td>
<td>0.1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>PURE applicants</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>15.4%</td>
</tr>
<tr>
<td>Applicants offered</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Figure 1. Self-reported gender identity for the general UCalgary student population, PURE applicants, and students offered a PURE award. "Other" indicates responses such as male and female; no option existed for non-binary on the application form.

1. The **Gender** response rate for PURE applicants was 100% (13 responses).

   a) The proportion of female PURE applicants is higher than the UCalgary population.

   b) The proportion of students who identify as gender non-conforming is similar between the PURE applicants and the UCalgary population.

3. **N/A - See conclusions**

   *Note that this survey question was administered with male, female, and prefer not to answer as options. We recognize that male and female are inappropriate terms to use when describing gender but did not want to misrepresent the collected data.*
Indigenous Self-identification

1. The Indigenous self-identification response rate for PURE applicants was 100% (13 responses).

2. There is no Indigenous representation in PURE applicants when compared to the UCalgary student population.

3. N/A - See conclusions

Disability Self-identification

1. The disability self-identification response rate for PURE applicants was 100% (13 responses).

3. N/A - See conclusions

Visible Minority Self-identification

1. The visible minority self-identification response rate for PURE applicants was 100% (13 applications).

Conclusions

1. There was no hesitancy to answer demographic questions.

2. The PURE gender and Indigenous self-identifying EDI demographics are different compared to the general UCalgary student population. Males and Indigenous identifying students are under-represented in the PURE applicant pool.

3. The adjudication process is not able to be evaluated. Only two out of thirteen students were offered PURE awards, thus interpretation of trends was not possible between applicant and offered populations.
Appendix 3 – Notes from consultations

Consultation with Dr. Gabrielle Lindstrom – Educational developmental consultant for Indigenous ways of Knowing:

Questions to ask Dr. Lindstrom about integrating Indigenous ways of knowing into the PURE programme:

- What are the barriers that currently exist that limit Indigenous perspectives in Research in general?
  - a. Nature of Research itself, typically Research driven by empiricism – Nature of methodologies and the assumptions that dirve those
  - b. Nature of knowledge – If Research is about exploring something you are interested in,
  - c. Knowledge means different things in different situations
  - d. Unexamined assumptions of knowledge
  - e. Indigenous system of research à Collective, not independent
  - f. Knowledge is sacred, certain types of knowledge for certain contexts
  - g. No meaningful exploration to the western paradigm
  - h. Myth of objectivity, indigenous Research focuses on the researcher intrinsically
  - i. Indigenous Research is relational, done for the collective
    - i. We are accountable to all stakeholders in the Research, including non-humans
    - ii. Example of frog in dissection indigenous
  - j. “Indigenous research takes longer because it takes time to build relationships and define personally what is driving your research, What is your relationship to your knowledge”

SUMMARY: The nature of commonplace westernized definitions of Research is the most prevalent barrier to incorporating the indigenous ways of knowing into Research. It is the nature of empiricism and western research methodologies with the underlying assumptions of objectivity that supress the inclusion of indigenous ways of Research. Indigenous ways are often supressed because they are thought of as being simple, but in reality there are parallels between westernized and indigenous ways of conducting Research.

- Indigenous way of knowing is focused on the collective, not the individual, where the collective involves the study system and ecosystem involved
- Indigenous ways of Research are relational and are
- “Indigenous research takes longer because it takes time to build relationships and define personally what is driving your research...what is your relationship to your knowledge”

- How do you think these barriers would apply to undergraduate Research where indigenous students are provided with this opportunity?
  - a. PURE acronym is not inclusive
    - i. Level of aesthetics, and cleanliness
b. Is there explicit support for indigenous modes of Research, how is Research being described

Summary: There needs to be explicit support for conducting indigenous ways of Research within the PURE programme material descriptions. This starts with the name of the programme
- Intrinsically, the PURE acronym has implications that are a barrier in and of itself
- Implies a certain aesthetic and high class – Dr. Lindstrom said she wouldn’t apply as a student herself just at face value because of that

• What can an undergraduate researcher supervisor do to increase inclusivity in their mentorship?
  a. Research site, Site for knowledge generation
  b. Starts with how things are described
  c. Knowledge is about becoming a better person in relation to other things, not better people independently
  d. Explicit say “What does indigenous research mean and what does that look like”
  e. WE are committed to building relationships with indigenous research methodologies and this is how we are doing it“
  f. Difference between acknowledging and recognition and including in a meaningful way

Summary: Emphasized that anywhere Research is mentioned (TOR or program guide), there needs to be support for all types of Research, not just those conducted in the traditional “laboratory”

• How do you think we can integrate the indigenous ways of knowing into undergraduate Research?
  a. Refer to previous
  b. Look critically at how western research paradigm and how it has marginalized indigenous Research
  c. Indigenous ways of knowing formalized for only 20 some years
  d. Exploring the assumptions underlying everything we are doing
  e. Iterative and self-reflective, thinking about thinking
  f. Paraleling between western and indigenous practices.

Summary: This is a very complex topic, to incorporate the indigenous ways of knowing into the program as a whole, we would have to have students critically evaluate how western Research has supressed indigenous Research and then start to think about the underlying assumptions in their own research à Might be a lot for students just starting Research to do, so might be best to put this into the workshop that Dr. Lindstrom said she would love to give the students in the next cycle.

• What can we do to try and explain to undergrad students interested in Research that objectivity is not the only way to conduct Research?
  a. Requires shift in research paradigm
b. Value in indigenous paradigm have been oppressed, we need to understand the oppression of indigenous research methodologies

c. Introduce very detailed definitions of indigenous of knowing
   i. Margaret Covatch
   ii. Shawn Wilson
   iii. Joanne Archibald

d. People are only attending a surface level
   i. Enter into deeper levels of relationships
   ii. Ideologies and discourses

e. Betty Bastien Blackfoot Ways of Knowing

f. Indigenous ways of knowing are simplified rather than

Summary: If we are to introduce the indigenous ways of Research to the program, students need to have a crystal-clear definition on what indigenous ways of Research are and how they are employed. Dr. Lindstrom provided a few authors that have provided information on describing indigenous ways of Research. But this might be best to leave to Dr. Lindstrom in the potential workshop to prevent students from getting confused.

• What do you think of the following recommendations I am thinking about proposing to the PURE programme to better the inclusivity?
  a. Check-ins led by previous students who held the award
     i. Yes would be good
  b. Making a timeline of proposed Research a mandatory component for application
     i. Often time Research is planned w elders
     ii. Time does not drive Indigenous Research
     iii. Able to make goals, objectives, and milestones of the Research, but not a timeline
  c. Developing a workshop for supervisors to be better mentors (Including how to make accessible EDI statements for students to view)
     i. Agreed that this would be very beneficial
     ii. The way mentorship is conceptualized is different to indigenous peoples
     iii. Mentor – more knowledge experience, power
     iv. Making transparent the power relationship and creating more of a collab is important

Summary: In agreeance that check ins lead by previous students who got the award and mentoring workshops would be beneficial. Timeline would not accommodate Indigenous ways of Research, so instead maybe recommending submission of research objectives/milestones instead?

• In terms of survey development, is the following format an acceptable way to ask whether a student identifies as Indigenous? If not, how should we change the wording?
  a. “Do you self-identify as an Aboriginal person in Canada such as First Nation, Métis or Inuit?”
  b. Do not use aboriginal
c. Do you identify as a status first nation, non-status first nation, 
d. Really liked the idea of an information paragraph above the survey explaining 
the data and how it will be analyzed and who will analyze it 
e. Recommended adding “building our capacity for research using different ways of 
knowing” to the brief paragraph about survey results

Summary: Loved the idea of the demographic survey explanation paragraph. Also explained 
that it depends on the resolution we want for asking if a student is indigenous or not. Also 
recommended that we add “we are collecting this data to build our capacity for being inclusive 
to all forms of research using different ways of knowing” to not single out indigenous 
methodologies.

- Would you be interested in giving a brief workshop to undergraduate students on what 
the indigenous way of knowing is and how it can inform Research? This would 
potentially occur in the next PURE cycle (Summer of 2022) 
  a. Yes she would like to !!

Recommendations to make in PURE report consultation section :
- PURE name needs to be replaced 
- All references to Research and the research environment need to be evaluated to 
  ensure they are inclusive to all forms of knowledge acquisition. 
  o Go through TOR and Program guide again 
- Instead of a required timeline of proposed Research, require a few research milestones 
  and objectives to be accomplished instead. This way the pre-planning phase of the URE 
  is not limited to non-indigenous ways of Research. 
  o Recommended milestones and objectives as part of application, but not timeline 
- Description of who is analyzing the data and what the data will be used for in the 
  demographics section is very necessary for transparency reasons. 
  o Modified slightly to add making room for multiple different ways of knowing 
- Incorporating Indigenous ways of knowing to the program itself would require a 
  detailed evaluation of the influences of western Research on each student’s Research, 
  therefore this may cause some students to get confused. Especially if this is their first- 
  time conducting Research. 
  o Therefore, I think we can recommend them being exposed to it through the 
  workshop Dr. Lindstrom offered to give rather than try to get students to think 
  about indigenous ways of knowing by themselves.

Consultation with Dr. Fouzia Usman – Educational developmental consultant for EDI:

Questions to ask Dr. Usman about integrating principles of EDI into the PURE programme: 
Agenda / Questions for meeting:

- Review of TOR, Program guide, and PURE website 
  a. Do the TOR seem accessible to all under-represented identities (URI)?
RESPONSE:
- People that are reviewing applications identify with the applicants à barriers
- No specifics, so overall good!
- Emphasize engaging with different ways of knowing and EDI values (Under purpose)
  o Multiple ways of knowing and being acknowledgement
- Upload video instead of written and other ways to submit?
- Makes a big difference on who sits on these committees that review students applications
- Emphasize that students needs need to be accommodating and there are resources available to them
- Embedding EDI in learning outcomes (Being open to other ways of knowing)
- Will continue to review and send notes of her own (ran out of time)

Summary:
- Add in the acknowledgement of multiple ways of knowing and research in Purpose section
- Allow different formats of application (video submissions?)
- Emphasize that students needs can be and should be accommodated for and access to resources to do so
- Embed EDI principles in learning outcomes
- **Additional notes will be provided, Fouzia just didn’t have the time to look over TOR before the meeting.

b. Is the PURE website accessible to all URI?

RESPONSE:
- Statement on the PURE programs commitment to EDI (Very visible)
- Consult EDI website for language
- Otherwise good!

Summary: Write a statement on PURE’s commitment to EDI that is visible on the home page

- What are some of the major barriers that limit URI from participating in Research?

RESPONSE:
- Stereotype threat – Predominately white in conservative in position of power, negative image of certain groups of people
- Lack of representation in field – Social identities URI feel lost in a system that does not have enough representation
- Power dynamics – Lack of acknowledging power dynamics
- How do you think these barriers could apply to undergraduate Research?

RESPONSE:
- Lack of representation specifically in the supervisor and student relationship
- Supervisor/PI holds more power in making aware of the power dynamics

- Are there any recommendations you would make to PURE supervisors to be more inclusive in their mentoring practice?

RESPONSE:
- Paulo Freire in Moving away from the banking model
- Communicative dialogue in Distribute that power in the relationship
- Opening the floor for the student to engage in the meaningful discussion
- Amplifying their voice
- Asking what is working for them
- Not a one-way process
- Critically reflect on their own biases in Actively working towards implicit bias removal

Summary: Two recommendations
1) Open the floor for the student to engage in discussion – Should be two-way discussion
2) Critically reflect on their own biases and actively work towards minimizing those biases

- What do you think of the following recommendations I am thinking about proposing to the PURE programme to better the inclusivity?
  a. The application processes
     i. Part-time awards available for students, but only for students considering the 16. Week option
  RESPONSE:
     - Good – Really accommodating to different students
     - More accessible to certain groups
     ii. Milestones / Research objectives required as a part of the application
  RESPONSE:
     - Yes – From the beginning build the positive relationship
     - Make part of the reflection, midway point check-in for supervisor and students
     iii. Required land acknowledgement for the traditional territories the Research is taking place on
  RESPONSE:
     - Yes – very good way to engage with history
     - But really understanding that we are not on our land, but acknowledging
     - Explain in blurb that students can explain themselves as settlers of this land
  b. Resources for students
     i. PURE alumni led check-ins through summer
RESPONSE:
- Yes – Peer mentoring framework, student has structured support good
  
  c. Resources for supervisors
  i. Proposed workshop on developing an inclusive research environment including EDI statement for PURE supervisors

RESPONSE:
- Yes – Syllabus bolded and explicitly stating any demonstration of hate
- Start to include an inclusive and safe space
- Good for supervisors to maintain the environment
- Important and generates a mindset for students and supervisors

Summary: Really liked all the recommendations, a few add ons:
- Midway check in using the objectives required in the application
- Encouraging students to not only acknowledge the land they are conducting their work on, but identifying their relationship to the land (Settlers, immigrants, Indigenous peoples)

  d. Entry and exit survey demographic questions
  i. Providing pre-amble to demographics explaining the intent and explanation for the collection of the data in the demographic section

RESPONSE:
- Survey response limitation because students
- Explain term BIPOC à Problematic (grouping under is not acknowledging different experiences)
- Put the data collected in this section of the survey first (last section first)
- Disabled à people/persons of/with disabilities
- BIPOC à instead Racialized minorities

Summary: Few suggestions here:
1) Instead of BIPOC, use racialized minorities
2) Move the blurb about how the data will be analyzed and by who to the first part of the survey introduction
3) Instead of disabled, use people/persons of/with disabillities

  ii. Asking the survey questions (See next page) to BOTH supervisors and students to get more resolved data on PURE student demographics. But there is also an emphasis on representation in faculty members, so I think we need data on this as well.

RESPONSE:
- Emphasize that survey responses will not be traced back to them
e. Overall program changes
   i. Changing the name of the program from PURE to something else
      (Opportunities for undergraduate research experiences)
      1. OUR (opportunities for undergraduate Research)**
      2. OURCA (opportunities for undergraduate Research and creative activities)

RESPONSE:
   • Prefer OUR

Summary: Preferred OUR, but that does not include creative activities

ii. Consider the reduction of emphasis on GPA for application – Students
    must have $3.2$ GPA to even apply for PURE

RESPONSE:
   • $3.2$ may be filtering out several URM
   • Lowering with a reference letter option instead (professor, instructor, TA)
   • Should not rely solely on GPA
   • After what we have talked about today, do you think we should talk to the dimension’s
     office on their perspective of these proposed changes?

RESPONSE:
   • Consulting with dimensions committee
   • Melinda Smith – Dimensions committee à Contact her office to review the proposed
     changes
   • Are there any critical references or resources you would recommend on EDI focused on
     undergraduates?

RESPONSE:

Consultation with four Faculty coordinators – Arts, Social Work, Science, and Education:
*Note that these are anonymized

Notes from infographic discussion:
   o No large concerns - brief mention of exceeding expectations for visible
     minorities and disproportionality in persons with disabilities; But the numbers
     are too small to make any larger conclusions
   o Noted that Faculty of Social Work is mostly Women; interested in pursuing an
     Indigenous specific award for students
   o Interested that Women are in larger proportion than men; Curious as to why
     there would be hesitancy, but there is no explanation as to why we were
     collecting the data at the time - Only concern was visible minority self-
identification, but likely to change consider this is the first time we have collected data for this

- No general concerns - Some worry about visible minority question wording and how it was phrased; More women than men in education so the data are representative

Notes from 10 recommendations:

1. Name change
   a. Agree – There shouldn’t be a barrier to access in the program name
   b. Agree – The name should change in the spirit of reconciliation
   c. Agree – Full support of the name change
   d. Some concerns – Making the name change may be difficult given how ingrained PURE is, might make it difficult to keep recognition of the program.

2. EDI statement
   a. Agree – The more front and center it is the better, but language should be reviewed and edited by stakeholders
   b. Agree – Full support, but important to highlight what exactly we will do that goes beyond a statement
   c. Agree – Full support
   d. Agree – Emphasize continuity through everything we do is important

3. Integrating EDI within learning outcomes/purpose
   a. Agree – Consider adding the language diverse perspectives and contributions; may want to consider being more explicit in forms of Research
   b. Agree – Not sure about the word appreciate, but also interested in working with the office of EDI to ensure we are as inclusive as possible with language
   c. Agree – Brought up what PURE could do to ensure there are systems in place to support students who encounter a research or creative activity environment that is non-inclusive
   d. Agree – Already somewhat implemented within Education

4. Development of workshops
   a. Agree – Both workshops are supported
      i. EDI workshop – Suggestion to incorporate supervisor EDI statement into the adjudication process
      ii. Dr. Lindstrom’s workshop – Need to frame the workshop as an introduction to an alternative way of knowing that is part of the “constellation” of knowledge
   b. Agree with both; But some talk about whether we should make these mandatory or not – otherwise could be considered performative
   c. No comments at this time
   d. Agree – Both workshops are well supported
      i. Particularly emphasized the EDI workshop and discussed the student selection process for education in PURE
      ii. Put information about PURE out to students and supervisors (independently) à Advertisement to meet with faculty coordinator à
Faculty coordinator contacts supervisor with interests of students à Pairs students with faculty member

5. Encouraging emotional attributes
   a. Agree – formalization of what most supervisors mentoring undergraduates should be thinking about anyway
   b. Agree – No concerns about implementation
   c. Agree – Should also discuss the power dynamic as part of this; Also encouraging supervisors to be vulnerable themselves and be aware of the power dynamic
   d. Agree - Would prefer if the term psychosocial was not used, focus on mentorship instead

6. Peer mentoring in PURE
   a. Agree – Should not make this feel like a heavy obligation for students though
   b. Agree – Faculty had staff do Research on mentorship that has shown great benefits
   c. Agree – Peer mentors should be prepared to deal with personal as well as professional issues that get brought up in these meetings (Uncomfortable relationship with supervisor etc.)
   d. Agree – Quite likes the idea of peer mentorship check ins

7. Incorporation of UDL
   a. Some concerns – Will be difficult to implement from an adjudication perspective; Could exacerbate inequities that are already present
   b. Some concerns – The CAS system is rigid and inflexible and needs to change, but also all adjudicators would need to be on the same page if they are to evaluate the applications – further reference to mandatory training
   c. Agree – Would need to have clear guidance for adjudicators – different rubrics for different applications; Need for lots of additional training and support
   d. Agree – Education already does this in their courses, so it makes sense to apply in Research as well

8. Modify terms of reference
   a. Allowing part-time students to apply
      i. Agree – No further comments
      ii. Agree - would be important to emphasize that a part-time experience would be different from a full-time
      iii. Fully agree; No further comments
      iv. Agree - not really a problem consider those considered for a Bed have to be full time but supports the notion
   b. Offering part-time award
      i. Agree - also agrees this should be for the 16 week period instead of the shorter awards
      ii. Agree - See above
      iii. Fully agree - No further comments
      iv. Agree - But worried that part-time will still be used as full-time à Look into a pilot program to test this
   c. Lowering GPA
i. Agree - some risk of supervisors becoming unofficial gatekeepers of Research if they don’t have some metric to base student performance on; but the system would be able to accommodate this change and if we need to find more adjudicators to handle the workload increase we should

ii. Some Concerns – What would we do to replace GPA? Would need to generate a rigorous system to replace GPA

iii. Fully Agree - Believe that quality will still be there if GPA dropped, GPA requirement might prevent recruiting a student that has research potential

iv. Fully disagree - We have to have some sort of benchmark, otherwise it would be time consuming to scale down to an acceptable sized applicant pool

d. Collaborative awards

i. Agree - A lot of good Research is done in teams – small concern with teams of students scooping up a large portion of awards

ii. Agree - Some students wanted to apply as teams, but couldn’t so they did not apply

iii. Agree - Larger projects often need teams so this could help

iv. Agree - Collaboration is important in teaching; Some of the best work comes out of collaboration

9. Modify application process

a. Land acknowledgement

i. Agree with modification - Instead of requiring the land acknowledgement it should be suggested – requiring one may not generate the positive dialogue you think

ii. Some concerns - Unless there is a connection of the Research to the land then this comes off as performative – defer to Dr. Lindstrom

iii. No comment

iv. No comment

b. Milestones/objectives of Research

i. Agree - Most adjudicators are looking for this implicitly, but making it explicit will make it more clear to reviewers

ii. Agree - Will take thinking especially for part time awards

iii. Not discussed with this coordinator

iv. Fully agree - excellent idea to work with the supervisor to home in on the research questions wanted to be asked by students

c. Required supervisor statement

i. Agree - See previous comments on EDI workshop

ii. Not discussed with this coordinator

iii. Agree - No further comments

iv. Agree - but expect pushback from supervisors on this

10. Modify demographic collection

a. Wording is clear and could have potential use of this data to generate EDI specific awards
b. Not discussed with this coordinator

c. No recommendations at this time; Hope that the statement will encourage students to feel more comfortable in answering demographic questions

d. No comments

Notes from general questions, comments, concerns:
- Would like to see targeted opportunities that allocate awards to students from diverse backgrounds; thinking around 3 awards per year just for this from the faculty-funded award perspective
- Consider drop down menus for ethics consideration in application; Discussion of more support for students to apply in the fall; Connection to peer mentorship programs already existing; Connecting supervisors and students through an online website of some sort
- Worried about terminology of visible minorities versus invisible minorities
Appendix 4 – Updated purpose and learning outcomes

Purpose:

The Program for Undergraduate Research Experience (PURE) Award program offers funded opportunities for UCalgary undergraduate students to conduct Research with a faculty supervisor over the spring and summer terms. Award recipients learn how research projects are developed and conducted, and how research results can contribute new knowledge and insights in their field of study and in the wider community.

Each PURE studentship is a unique opportunity to develop research skills through experiential learning. Students explore personal research interests, develop the abilities to collaborate, think critically and creatively, acknowledge multiple ways of knowing, appreciate diverse perspectives, and communicate with the research community. PURE Award experiences enrich and extend undergraduate learning at the University of Calgary.

Learning objectives:

- **Develop** a research plan, **identify** a specific area of inquiry, **assess** the viability and suitability of research practices, **carry-out** the research plan and **communicate** research findings.
- **Collaborate** with other researchers in the design, planning, and implementation of a research project.
- **Appreciate** the value of diverse perspectives throughout all aspects of a research project.
- **Describe** the importance of your Research to communities on- and off-campus; effectively **communicate** the value and impact of your Research and conclusions to a variety of audiences.
- **Reflect** on and **articulate** the impact of the PURE research experience on research skill development and researcher identity.
- **Reflect** on and **articulate** the impact of the PURE research experience on academic and professional growth and career goals.
- **Establish and participate** in a community of scholars, **developing** a network of undergraduate, graduate, and faculty researchers across campus and beyond.
- **Feel welcomed** into a community of scholars that actively recognizes stereotype threat, bias, microaggressions, and acknowledges intersecting identities – both professional and personal.
Appendix 5 – EDI statement workshop description

COURSE/WORKSHOP DESCRIPTION

Equity, Diversity, and Inclusion in Undergraduate Research Experiences and Creative Activities

Date: Wednesday, November 3, 2021  
Time: 12:00pm-1:00pm

Facilitators: Austin Ashbaugh, Dr. Kyla Flanagan, Joanne Fung

Course description (detailed and descriptive, approximately 250 words):
Who has access to undergraduate Research and creative experiences at our institution? Who is missing? Barriers to student participation in Research and creative activity experiences continue to persist. Commonly reported barriers include unfavourable power dynamics, microaggressions, non-flexible work times, low-pay, as well as work and care-giving responsibilities. How can you as a supervisor build undergraduate research opportunities to provide more equal access for students with underrepresented identities, including racialized minorities; 2SLGBTQIA+; disabled (visible or invisible) and neurodiverse students. How can we contribute to an inclusive academic environment so that individual students are not expected to advocate for their own inclusion or to opt out?

EDI statements are an increasingly popular strategy for academics to show potential students that a research or creative activity opportunity is welcoming and inclusive. In this workshop, we will provide the basic structure to develop your own EDI statement to showcase your commitment to increasing equity, diversity, and inclusion in academia. We will also explore the current approach to EDI in academia and why this approach may need to change.

Learning Objectives (minimum 3):
By the end of this workshop, participants will....
1. Understand how to signal a welcoming and accessible opportunity for students with underrepresented identities.
2. Understand how to take action to appeal to and recruit diverse students to their research and/or creative activity program.
3. Generate or articulate personal EDI principles & values for their research program.
4. Start an initial draft that addresses the four key components of an effective EDI statement.

Delivery Method: Online/Synchronous
Planning Notes:
- Presentation slides have all notes than need to be discussed during the workshop
- Copy of specified slides should be available to participants to review during the workshop
- Outline of workshop:
  - 0:00 – 10:00 – Introductions, welcomes, what is EDI, what are institutions currently doing?
  - 10:00 – 20:00 – 5 min brainstorm task, 5 minute report back.
  - 20:00 – 30:00 – Why did we ask you to do this & Why an EDI statement is a first step towards inclusivity.
  - 30:00 – 45:00 – Time for workshop attendees to generate their own concept map regarding their EDI statement.
    - 5 minutes free writing at first, then free discussion
  - 45:00 – 50:00 – Closing remarks.
Appendix 6 – Slides for emphasizing emotional support in supervisors

**Psychosocial benefits of Potential Supervisors**

- Research and career-based skills are important to consider when selecting a supervisor.
- However, there is also a psychosocial (emotional) component to supervisors that is just as important as the other two.
- Some things to investigate before contacting your supervisor:
  - Lab website – look for lab environment description
  - Contacting current and past graduate students

Figure 1. Slide emphasizing psychosocial support in mentoring for student information session.

**Importance of psychosocial support as a supervisor**

- Research and career-based skills are important to consider when supervising a student
- However, there is also a psychosocial (emotional) component to mentoring that is just as important as the other two.
- Some ways to communicate you acknowledge the emotional aspect of mentoring:
  - Vulnerability
  - EDI statement

Figure 2. Slide emphasizing psychosocial support in mentoring for supervisor welcome session.
Appendix 7 – EDI demographic survey prompt + questions

STUDENTS:

The data collected in this section of the application form/survey will be analyzed by allies and/or members of racialized and gender minorities, 2S/LGBTQIA+, persons with disabilities, and other underrepresented identities in academia. The following information will be de-identified and presented in aggregate to better inform the CAS/PURE program.

The goal of the following section is to better understand equity, diversity, and inclusion in undergraduate Research at the University of Calgary. We are also collecting this data to build PURE’s capacity for being inclusive to all forms of Research using different ways of knowing. Before answering the demographics portion of this application form/survey, please consider the following definitions:

**Sex** – Set of biological attributes comprising physical and physiological features in humans and animals. Typically referred to as male or female, but there is variation in traits that typically determine sex such as chromosomes, gene expression, hormone level and function, and reproductive/sexual anatomy.

**Gender** – Socially constructed roles, behaviours, expressions, and identities in human beings. Gender identity is NOT confined to a binary nor is it static.

**Racialized minorities** – Persons who are non-Caucasian in race or non-white in colour, other than Indigenous persons, that have been historically minoritized in both societal and academic spaces. South Asian, Chinese, Black, Filipino, Latin American, Arab, Southeast Asian, West Asian, Korean and Japanese persons are the most common Canadian racialized minorities.

**Neurodiverse** – Persons that are known to have different brain functionality from most people. Includes people that have been diagnosed with ADHD, ADD, Autism, Dyscalculia, Dyslexia, Dyspraxia, Dysgraphia, and other learning disabilities.

**Physical impairment** – Persons that have difficulty in completing any of the following tasks without personal or mechanical assistance due to physical limitations: bathing, dressing, eating, toileting, transferring, and getting around inside the home.

**Visual impairment** – Persons that have and/or experience any form of vision loss.

**Hearing impairment** – Persons that have and/or experience any form of hearing loss.

Q1. Do you identify with a/several racialized minority/minorities in academia?
   - Yes
   - No
   - Prefer not to say
Q2. If yes, please specify which racialized minority / minorities you identify as
- South Asian
- Chinese
- Black
- Filipino
- Latin American
- Arab
- Southeast Asian
- West Asian
- Korean
- Japanese
- Other, please describe
- Prefer not to say

Q3. Do you identify as an indigenous persons in Canada?
- Yes
- No
- Prefer not to say

Q4. What is the gender you currently identify as?
- Woman
- Man
- Non-binary, Gender-fluid, and/or two-spirit
- I don’t know
- Other, please describe ___
- Prefer not to say

Q5. Do you identify as a member of the 2SLGBTQIA+ community?
- Yes
- No
- Questioning
- Prefer not to say

Q6. Do you identify as a person with a physical impairment?
- Yes
- No
- Prefer not to say

Q7. Do you identify as a person with a visual impairment?
- Yes
- No
- Prefer not to say

Q8. Do you identify as a person with a hearing impairment?
- Yes
- No
- Prefer not to say

Q9. Do you identify as neurodiverse?
- Yes
- No
- Prefer not to say
Q10. What are your work plans during your PURE award?
- Only PURE work
- PURE work and one other job
- PURE work and two other jobs
- PURE work and 3+ other jobs
- Prefer not to say

Q11. Are you a transfer student?
- Yes
- No
- Prefer not to say

Q12. If you are a transfer student, what institution did you transfer from?
- Open ended answer

SUPERVISORS:

The data collected in this section of the application form/survey will be analyzed by allies and/or members of racialized and gender minorities, 2SLGBTQIA+, persons with disabilities, and other underrepresented identities in academia. The following information will be de-identified and presented in aggregate to better inform the CAS/PURE program.

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Gender – Socially constructed roles, behaviours, expressions, and identities in human beings. Gender identity is NOT confined to a binary nor is it static¹.

Racialized minorities – Persons who are non-Caucasian in race or non-white in colour, other than Indigenous persons, that have been historically minoritized in both societal and academic spaces. South Asian, Chinese, Black, Filipino, Latin American, Arab, Southeast Asian, West Asian, Korean and Japanese persons are the most common Canadian racialized minorities²³.

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Physical impairment – Persons that have difficulty in completing any of the following tasks without personal or mechanical assistance due to physical limitations: bathing, dressing, eating, toileting, transferring, and getting around inside the home.

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   - Yes
   - No
   - Prefer not to say

Q2. If yes, please specify all racialized minorities you identify as
   - South Asian
   - Chinese
   - Black
   - Filipino
   - Latin American
   - Arab
   - Southeast Asian
   - West Asian
   - Korean
   - Japanese
   - Other, please describe
   - Prefer not to say

Q3. Do you identify as an indigenous persons in Canada?
   - Yes
   - No
   - Prefer not to say

Q4. What is the gender you currently identify as?
   - Woman
   - Man
   - Non-binary, Gender-fluid, and/or two-spirit
   - I don’t know
   - Other, please describe ___
   - Prefer not to say

Q5. Do you identify as a member of the 2SLGBTQIA+ community?
   - Yes
   - No
   - Questioning
   - Prefer not to say

Q6. Do you identify as a person with a physical impairment?
   - Yes
   - No
   - Prefer not to say
Q7. Do you identify as a person with a visual impairment?
   - Yes
   - No
   - Prefer not to say

Q8. Do you identify as a person with a hearing impairment?
   - Yes
   - No
   - Prefer not to say

Q9. Do you identify as neurodiverse?
   - Yes
   - No
   - Prefer not to say

Citations:

Question formatting based on: https://www.ic.gc.ca/eic/site/063.nsf/eng/h_97737.html#11
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