Student Partners Program Call for Student Partners Fall-Winter 2022-23

Position Descriptions

About this document:

This document contains 20 projects for which faculty and staff are looking to hire student partners for the Fall 2022-Winter 2023 terms (September 2022 to April 30, 2023). Each project is on its own page and is identified by its project number and project title. The name and link to the email of the person/people who proposed the project is listed for your reference. Each project also includes a short description about the project.

Hours & rate of pay:

Hours vary by project. Some projects list the anticipated number of hours. In general, the rate of pay for the student partners program is $16 per hour for undergraduate students and $20 for graduate students. If you would like to know more about a project, please email the contacts listed for the project.

Working arrangements:

Each project lists the preferred work arrangement, which may be in-person, virtual, or hybrid. Students can and should discuss their preferred work arrangements with hiring faculty and staff partners if selected for an interview.

Applying to the student partners program:

Any student enrolled at McMaster University is eligible to be a Student Partner.

- No prior experience in teaching and learning research or practice is required.
- We're interested in working with a wide variety of students with a range of backgrounds and experiences, including members of equity seeking groups.
- You do not need to have a certain grade point average.

Some projects do indicate preferences for students with particular experiences, skills, or educational levels, so be sure to read the project descriptions carefully and to make the case for why you would be a good fit.

You can apply to one, two, or three projects by filling out this form. Be sure to be signed into your McMaster account to be able to access the form. The call for applications closes July 22nd at midnight. When you apply to a project, you do NOT need a cover letter or CV/resumé. Rather, you will be asked to select the 1, 2, or 3 projects to which you are applying. For each project you will answer the following FOUR questions (please limit your responses to 100-500 words per question):

1. Why are you interested in working on this project?
2. What would you hope to contribute to the project? Be sure to highlight any contributions related to equity, diversity, inclusion, and your positionality in this section.
3. What are your goals for working on this project? In other words, what do you hope to gain by working on this project? Example goals might include, but are not limited to: 1) working with faculty or staff who can write a letter of reference for future education and/or work; 2) gaining educational/teaching/learning experience; 3) practicing/honing

research skills; 4) building up your CV (publishing and/or presenting opportunities); and so much more.

4. List up to 3 relevant items from your CV/resumé and explain why these experiences make you a good fit for this project.

Hiring process:

Student Partners staff will share your application with the hiring partners who may contact you for an interview. In general, all partners will be hired by the end of August.

To learn more:

You can read more about the Student Partners Program by visiting our website or reading the Student Partners Guidebook. We will also be hosting an open forum where you can ask questions to staff and current student partners, as well as some partners who are looking to hire students (please note not all hiring partners will be attending the forum), on Tuesday, July 19th from 11:00 am – 12:00 pm (EST) over Zoom. You can also email us with any questions.

Project 1: Authentic Assessment in a Programming Class for Linguists: The Creation of a Coding Portfolio

Contact: Gemma Repiso-Puigdelliura

Project Description:

There is an increasing number of professional jobs in the field of linguistics requiring candidates to possess coding skills and to show their coding abilities. With this in mind, this proposal seeks to develop a coding portfolio project for the course 4PL3 Programming for Linguists. The coding portfolio will be hosted in GitHub and will showcase the students' coding work during the term, which will provide tangible evidence of their coding experience as they approach the job market. I foresee that the following work will be involved in the project: design of the overall project timeline and activities (e.g., scaffolding activities, deliverables, final submission), elaboration of project descriptions (e.g., description of the scaffolding activities, description of the portfolio, creation of a sample portfolio), elaboration of rubrics and surveys (e.g., rubrics to evaluate each scaffolding activity, peer assessment rubrics, self-assessment surveys, project survey).

This project is still in planning stages and is set to begin in September 2022. Gemma Repiso-Puigdelliura will be the faculty partner involved in this study. Two graduate students are required for this project and will be employed for 42 hours each during the Fall and Winter terms 2022/2023.

The students participating in this project should possess knowledge of the programming language R, should have experience with coding, and basic statistical knowledge. The outcomes of this project will be presented in teaching conferences in collaboration with the student partners.

Most suitable work arrangement for this project:

Hybrid

Project 2: Spark Podcast: Digital Transformation of Faculty Development

Contact: Ruth Chen & Teresa Chan

Project Description:

The learner experience in higher education and post-graduate education has rapidly evolved with the development and implementation of technology-enhanced learning approaches. This has been described as ""digital transformation"" in academic and business contexts. In the Faculty of Health Science's (FHS's) Continuing Professional Development office, we provide education and program delivery for all health professionals (physicians, researchers, nurses, allied health) to develop in their faculty roles, to build professional competencies, and to access the knowledge and skills they need across health care practice and academic environments.

We are looking for a Student Partner who is interested in digital transformation of our faculty development, with a focus on our Spark Podcast. Skills with audio and video content creation (e.g. editing audio files, creating videos), online learning module development, and creating digital resources that prioritize accessibility and inclusion for all learners will be valuable assets. The student partner will join a team of faculty and staff who are committed to providing professional learning opportunities for members within and outside of the FHS through the accessible, inclusive, and effective use of digital platforms and delivery methods."

Most suitable work arrangement for this project:

Virtual

Project 4: Social Media Digital Content Creation and Engagement for Introductory Chemistry (CHEM 1A03/1E03/1AA3)

Contact: Anthony Chibba & Linda Davis

Project Description:

Social Media has become a common and ever-evolving method of communication and expression among many parts of society, with a larger popularity and impact among younger generations. Many post-secondary students are large consumers and creators of social media content. As of 2019, It has been estimated that 90% of adults aged 18-29 in the United States are active social media users, on platforms including Facebook, Instagram, Tiktok, Snapchat and others.

The central goal of this project would be to develop fun and engaging content for companion social media accounts (Instagram, Tiktok) that would align with large enrollment courses offered in the department of chemistry, including Introductory Chemistry (CHEM 1A03, 1AA3, 1E03) and Introductory Organic Chemistry (CHEM 2OA3, 2OB3, 2E03). These companion accounts would be utilized as an alternative avenue for extracurricular content delivery and student engagement. Content delivered would include introductions of the TAs and teaching team, study tips, factoids ("fun facts") and real-world applications of course content learned, and memes and encouragement for students as they progress through the courses.

The project is currently in development in a trial run capacity for the current S2022 offerings of CHEM 2OA3/2OB3 being run by Anthony Chibba. The incoming student partners would work with Anthony Chibba (Faculty member) and Linda Davis (Course Coordinator), and would be responsible for building engaging social media posts that align with the course content in the formats listed above from September 2022 to April 2023 (1-3 hours/week). The student should have a strong familiarity with chemistry content taught in each course, a strong familiarity with social media platforms and an imagination to bring the two fields together.

The content generated by the student partner in this project could be utilized in future iterations of the courses and would improve student engagement in the large enrollment chemistry courses.

Most suitable work arrangement for this project:

Hybrid, Virtual, or In-person

Project 5: Social Media Digital Content Creation and Engagement for Large Enrollment Organic Chemistry Courses (CHEM 20A3/2E03/2OB3)

Contact: Anthony Chibba & Kylie Luska

Project Description:

Social Media has become a common and ever-evolving method of communication and expression among many parts of society, with a larger popularity and impact among younger generations. Many post-secondary students are large consumers and creators of social media content. As of 2019, It has been estimated that 90% of adults aged 18-29 in the United States are active social media users, on platforms including Facebook, Instagram, Tiktok, Snapchat and others.

The central goal of this project would be to develop fun and engaging content for companion social media accounts (Instagram, Tiktok) that would align with the large enrollment Introductory Organic Chemistry courses (CHEM 2OA3, 2OB3, 2E03). These companion accounts would be utilized as an alternative avenue for extracurricular content delivery and student engagement. Content delivered would include introductions of the TAs and teaching team, study tips, factoids ("fun facts") and real-world applications of course content learned, and memes and encouragement for students as they progress through the courses.

The project is currently in development in a trial run capacity for the current S2022 offerings of CHEM 2OA3/2OB3 being run by Anthony Chibba. The incoming student partners would work with Anthony Chibba (Faculty member) and Kylie Luska (Course Coordinator), and would be responsible for building engaging social media posts that align with the course content in the formats listed above from September 2022 to April 2023 (1-3 hours/week). The student should have a strong familiarity with chemistry content taught in each course, a strong familiarity with social media platforms and an imagination to bring the two fields together.

The content generated by the student partner in this project could be utilized in future iterations of the courses and would improve student engagement in the large enrollment chemistry courses.

Most suitable work arrangement for this project:

Hybrid, Virtual, or In-person

Project 9: Continuing towards inclusive education: mapping learning objectives that exist outside of academic courses in the MSc(PT) Program

Contact: Sarah Wojkowski, Jasdeep Dhir, Jenna Smith Turchyn, & Patricia Miller

Project Description:

The goal of our project is to expand the work initiated as part of our MacPherson Leadership in Teaching and Learning (LTL) Fellowship which mapped and analyzed session learning objectives associated with each course in the current Master of Science Physiotherapy (MSc(PT)) curriculum to identify opportunities to introduce, reinforce and apply concepts of health justice (HJ) and Indigenous Health (IH). Through the LTL project, we have recognized our students complete many mandatory learning experiences which have learning objectives (LOs) that were not identified in session specific LOs. As such, these activities, while contributing to students' knowledge and experience with HJ and IH concepts, were not captured as part of the initial mapping exercise but are important for the Program to understand as part of our work towards building a more comprehensive evaluation of the existing curriculum. The proposed project will build a catalogue of these learning experiences and map their associated LO using the structure and processes established through the LTL Fellowship.

The outcome of this project will be the creation of a catalogue of the mandatory learning experiences related to HJ and IH for students in the MSc(PT) Program, which are not otherwise identified in existing session specific LOs. This will expand our existing curriculum map of session specific LOs to include Program, unit (term) and overall course objectives, as well as mandatory learning experiences.

The collation of these additional LOs with the curriculum map generated across the first year of the LTL Fellowship will provide the MSc(PT) Program with a comprehensive resource that identifies how intersectional influences of systems of injustice based on social constructs (i.e. indigeneity, race, ethnicity, religion, sexual orientation, socio-economic status) are being integrated into the curriculum.

Most suitable work arrangement for this project:

Virtual

Project 11: AnatoME: Removing Barriers to Representation of Skin Tone Diversity in Anatomical Sciences Education

Contact: Kristina Durham, Sarah Wojkowski, & Krista Howarth

Project Description:

As educators we strive to develop equitable, diverse, and inclusive curricular content and learning spaces that exemplify our commitment to McMaster University's Equity Diversity and Inclusion (EDI) Framework and Strategic Plan and the diverse populations that we serve. Inclusion of course materials that depict diverse skin tones and provide descriptors of clinical assessment with a skin tone diverse lens can be time intensive, and in some cases resources may not even be available. With this project we aim to explore the literature and non-peer reviewed educational resources, such as reports and documents from government or professional societies, to ascertain the depth and breadth of resources that exist in relation to skin based clinical assessments across diverse skin tones. We seek a student partner to guide this work to reach the following goals/project outcomes between September 2022-April 2023: 1) develop a scoping review protocol and, with our interdisciplinary team, execute the scoping review to identify and summarize the existing status of scholarly literature on skin-based assessments and the inclusion of skin tone diverse descriptive and/or visual (imagery, video) content, 2) develop an online catalogue to be housed on MacAnatomy of resources that depict or describe assessment findings in diverse skin tones, 3) identify gaps in resources to promote future work on resource development that is descriptive of or illustrating of given assessments across diverse skin tones. Upon completion of this project, students can expect to have experienced skill development in the following areas: leadership and mentoring, teaching/educational scholarship, scientific inquiry and writing, and knowledge translation.

Most suitable work arrangement for this project:

Hybrid

Project 12: International Grad Navigator Program Evaluation

Contact: Yufei Zheng

Project Description:

The purpose of this project is to evaluate the International Grad Navigator program. The student partner will be working directly with Yufei Zheng, the facilitator of the program, to develop and implement an evaluation strategy to determine whether the program meets its current goals and to provide/collect recommendations to improve the program.

The International Grad Navigator program is expected to be running in its third year in Fall 2022. Using existing information and feedback from the previous two years, the facilitator and the student partner will work collaboratively to potentially identify and collect further feedback from students/stakeholders, improve training and resources available to navigators, and determine the future direction of the program.

An international graduate student or a graduate student with in-depth knowledge of the international student experience is the preferred applicant for this project. The student partner's experience and insight into the international and graduate intersectionality will be valuable in shaping the evaluation and recommendation process. As part of the evaluation may involve further interactions with students/stakeholders, the student partner should possess communication and information organization skills. Presentation and facilitation skills are also assets.

This project is expected to take place and conclude in the Fall 2022 term. However, the student partner may be invited to co-present and share their experiences of working on this project at student affairs conferences (e.g. CACUSS annual conference), international education conferences (e.g. CBIE conferences), and/or other relevant venues in 2023.

Most suitable work arrangement for this project:

Virtual

Project 14: Online Global Health Learning Symposium: Enhancing Student Engagement

Contact: Sonya de Laat & Sue Barclay

Project Description:

The central goal of this project is to co-develop, implement, and evaluate aspects of the online Global Health Learning Symposium with the goal of increasing student participation and engagement. The Symposium is a degree requirement for MSc Global Health students (GLOBHTH 710). The objective of the course is to consolidate collaboration and decision-making in transcontinental teams. During the two weeks, students from six partner educational institutions come together to complete group and individual assignments and present an abstract of their scholarly paper or thesis to peers and expert faculty in a conference-style setting. Prior to the pandemic, the annual course was held in person at our partner institution Manipal Academy of Higher Education (MAHE) in Manipal, India. For the past three years the Symposium was held online due to the COVID-19 pandemic. While the program hopes to hold the 2023 course in person in India, not all students will be willing to travel. The Student Partner will assist in co-creating the online Symposium by identifying and evaluating online conference platforms, proposing online group learning activities, and producing a summary report. Skills with online conferences is an asset, but not a requirement. The transdisciplinary Global Health program is interested in working with students from a wide variety of academic, cultural or research backgrounds. The Symposium Coordinator will oversee the project which provides an opportunity for the Student Partner to build skills in transnational collaboration, in program enhancements and curriculum development.

Most suitable work arrangement for this project:

Hybrid

Project 17: Peer Mentoring for Academic and Inclusive Excellence in Global Health Graduate Education

Contact: Christy Gombay & Sonya de Laat

Project Description:

The Master of Science in Global Health is a 12-month multi-institutional and transdisciplinary program that provides students with the experience and skills to meet global health demands. On average, students in the program represent some 25 different countries of origin, including newcomers to Canada and international students. The program also supports students who have been forcibly displaced, along with many students who come from equity-seeking groups. While many of the students in the program on a yearly basis excel—indeed flourish—in the multi-institutional, transcontinental, transcultural learning pods that are at the heart of the program, a smaller proportion face difficulties navigating a range of institutional and cultural dimensions of the program. The central goal of this project is for two Student Partners to co-develop, implement, and evaluate a Global Health peer mentorship program that aims to support students' full participation in the program and engagement as graduate students. The Student Partners will assist in evaluating existing peer mentorship structures and needs to co-create recommendations for a sustainable support system or network aimed at ensuring all students can thrive in the Global Health program. Skills with peer mentoring is an asset, but not a requirement. The transdisciplinary Global Health program is interested in working with students from a wide variety of academic, cultural or research backgrounds. Working with the project team, the Student Partners will build skills in peer mentorship, transnational / transcultural collaboration, and in program enhancements.

Most suitable work arrangement for this project:

Hybrid

Project 18: The Impact of Experiential Learning Opportunities Within the Faculty of Engineering: The Effect of First Year Engineering

Contact: Shelir Ebrahimi, Bosco Yu, Liza-Anastasia DiCecco, Dakota Binkley, & Shayna Earle

Project Description:

First Year Engineering is critical to ensure retention and positive experience across the faculty. Through both "The Pivot" and the shifts between virtual, remote and hybrid learning styles, there have been many factors impacting these fundamental experiences. Although there has been significant focus on these students' experiences, due to the large quantity of students, factors and changes to the programming much is left to be explored. The following SPP proposal looks to evaluate more of these experiences and guide both future development and areas that may need to be altered. This builds upon previously established research funded by the Priority Areas for Learning and Teaching Research (PALAT) grant from MacPherson, where surveys and ethical approvals for the work have been established. However, the work necessitates continued surveying to evaluate the long-term influence of the incorporation of experiential learning strategies on first-year experience. This work will involve the continued collection of survey data from both the first years and upper years, analysis of collected data, as well as supplementary qualitative data to support these findings. In addition, a workflow for the study will be established for future years to ensure the successful continued collection of survey data planned for a 3–5-year span. The large quantity of existing data will allow for the PI and the student partner to gain insight into this experience as well as work to set up future surveys for the upcoming year that can continue the tracking and trending of this work.

Most suitable work arrangement for this project:

Hybrid

Project 21: Embedding Computational Skills in the Undergraduate Experience across the Faculty of Science

Contact: Alison Sills, James Wadsley, Paul Ayers, Ana Campos, Erin Clements, Rosa da Silva, Matheus Grasselli, Cécile Fradin, Fiona McNeill, Paul McNicholas, Bruce Newbold, Gianni Parise, Sarah Robinson, & Mel Rutherford

Project Description:

In the last decade, computational tools such as Machine Learning and Data Analytics have become embedded in all research areas in Science. Experience in using these tools is now a valuable skill for employment in both the life and physical sciences, but requires competence in programming languages such as Python, R, or Julia. While some departments in the Faculty of Science have offered computational courses at the undergraduate level for many decades, others have only recently started to incorporate programming skills into their undergraduate curriculum. At the moment, there is no Faculty-wide approach to introducing and developing programming skills at the undergraduate level. In this project, the student will do an environmental scan of all current programming/data science learning opportunities in the Faculty of Science, and the anticipated needs of students in the near future, particularly in programs which traditionally do not have a programming component. They will also solicit information and feedback from undergraduate student societies (the McMaster Science Society and department/program-based societies), alumni working in relevant fields where possible, and co-op employers. We will be paying particular attention to identifying barriers that prevent students from engaging with this kind of content to begin with. The outcome of this project will be a proposal for a Faculty-wide approach to embedding these skills in our current programs, possibly through Faculty-wide courses, modules within existing courses, or other modes that emerge from the environmental scans. The student will have a basic familiarity with the terms used to describe the computational tools and techniques, and an interest in cross-department teaching/learning. All Schools/Departments within the Faculty of Science, and the Associate Dean (Academic) office, are participating in this project.

Most suitable work arrangement for this project:

Hybrid, Virtual, or In-person

Project 22: Exploring student motivations and interest in Physics; A comparative study

Contact: Miranda Schmidt & Pat Clancy

Project Description:

The first goal of this project is to improve our understanding of the similarities and differences in students' perceptions and attitudes towards Physics among the three cohorts who study Introductory Physics at McMaster. These courses are taken by more than 2000 students each year. Although there is significant overlap in the curricula, the student populations and demographics can be quite different. Notably, we see variation in terms of previous Physics experience, mathematical background, student motivation, and level of interest in the subject matter between students in the Physical Sciences, Life Sciences, and Engineering streams. The second goal is to extend our research to a longitudinal study of the Physics programs to gain insight into the motivations of our students in a more formal manner. We are interested in the pathways that students are taking and exploring factors that cause students to choose their program, stay in their program, and switch programs.

We began this project in the Fall of 2020 by designing and carrying out a series of surveys for all Introductory Physics courses in December and March. In September 2021 we added another survey to gain insight into students' feelings directly out of high school and to allow us to track students' progression throughout their first year at university. We have also conducted complementary short online surveys of our upper year Physics students (year 3+) in Term 2. This gives us a different perspective where the students now have some hindsight and addresses in more detail what inspired students to study Physics and their academic trajectory. By examining the similarities and differences between the different student cohorts taking Introductory Physics as well as the pathways that students in Physics-related programs take, we hope to guide and inform future improvements in course and program modifications.

This project will be led by Dr. Miranda Schmidt and Dr. Patrick Clancy in the Department of Physics and Astronomy. We are seeking one student partner to assist with the analysis of current survey data, to compare the results from different survey rounds, to review and discuss relevant Physics Education literature, and to help contribute to future survey design in the development of a longitudinal study. Previous experience with Physics courses could be an asset, but is not required.

Most suitable work arrangement for this project:

Hybrid, Virtual, or In-person

Project 25: CityLAB Semester in Residence Course Redesign

Contact: Randy Kay, Dave Heidebrecht, Darina Vasek, & John Maclachlan

Project Description:

Building on learnings from a May 2022 course (re)design workshop, this project will pilot and evaluate the redesign of one component of a 15 unit course by evaluating Intended Learning Outcomes, assessment and evaluation tools, and classroom activities developed over Summer 2022.

CityLAB SIR has evolved annually based on collected feedback and post-semester work completed by SIR alumni in paid positions as student ambassadors. Now in our 5th year as a program, we are looking to revisit our course outline and, for the first time, redesign how we align and deliver course content to improve outcomes for students.

There are three distinct areas of teaching in the program (CMTYENGA4A06/4A09): Design, Dialogue, and Project Management. A fourth area, City Building, emerged over the first 5 years of the program, and was identified through course (re)design sessions as well-intentioned but often comprised of hidden curriculum that was unclear related to student learning outcomes and expectations. We hope to make teaching methods and pedagogy of this component transparent and accountable to give students an active role in co-designing their learning experience in real-time.

A student who has completed CityLAB SIR will work with the teaching team to research and evaluate learning outcomes, class activities, and incorporate principles of Universal Design. The student will have an interest in course design and will be able to test new ideas in the classroom with SIR students taking part in the evaluation of activities.

Faculty involved are Dave Heidebrecht, Darina Vasek, John Maclachlan and Randy Kay.

Most suitable work arrangement for this project:

In-person

Project 27: Expanding the reach: Developing an engaging and interactive resource hub for effective community outreach

Contact: Ivona Kučerová & Nadia Lana

Project Description:

In 2021, the ARiEAL Research Centre hosted virtual sessions with elementary and secondary students in the community where ARiEAL trainees shared research on the science of language. We received valuable feedback from students about Zoom fatigue and their hesitation to participate in yet another virtual session. We since pivoted our 2021-2022 Student Partner Project to develop asynchronous, self-paced resources for the community. This asynchronous resource brings the laboratory to the students allowing them to make decisions about when, what, and for how long they want to learn about a certain topic through interactive, engaging "game" modules.

The goal of this project is to continue developing a variety of asynchronous research disseminating resources for the ARiEAL Community Outreach Resource Hub. The hub will contain at-home language experiments, mini learning modules and Kahoot! Games, which children and youth from our 2021 virtual events showed high engagement with. This virtual asynchronous delivery will also allow us to expand our reach to new communities, including historically disadvantaged or underrepresented groups. In addition, the secondary goal of this project is to engage ARiEAL trainees during this development process so they can also gain hands-on experience in science communication and further develop and refine their skills.

The Student Partner is expected to bring in science communication and other technical skills needed to create e-resource, and will be working closely with Ms. Chia-Yu Lin, Manager in Development & Research at ARiEAL and Nadia Lana, ARiEAL Knowledge Mobilization Coordinator to ensure the content is aligned with ARiEAL research and appropriate for the community.

Most suitable work arrangement for this project:

Hybrid

Project 29: Embedding EDI in career education and professional development

Contact: Tara Zabella; Bhagwati Gupta, & Alice O'Carroll

Project Description:

The Science Career and Cooperative Education Office and Science Graduate Studies are developing career education programming designed to equip Science graduate students to transition from graduate students to scientific careers and to excel in their chosen field. It is crucial that EDI considerations are central to the development of this programming so that our diverse student body is empowered to achieve career success.

To ensure that EDI considerations are centrally positioned in this programming, we are seeking a student partner to conduct a literature review and a sector scan to inform our understanding of how EDI is addressed in graduate professional development. We will use the sector scan to understand if and how EDI is embedded in graduate professional development programs in other universities in order to identify components and strategies that can inform this work in the Faculty of Science. We will use the literature review to develop a career development program that is grounded in EDI theory and research. This project is an exciting opportunity for the right individual to make a significant contribution to student success and a culture of equity, diversity, and inclusion.

We are seeking an individual who is familiar with EDI literature and theory and is excited to see how these concepts intersect with career education and/or professional development programming to support transitions to employment. Students who have a background or interest in career education or professional development programming are also encouraged to apply. We particularly welcome applications from persons with disabilities, Black, Indigenous, Racialized, women-identified and 2SLGBTQ+ community members.

Most suitable work arrangement for this project:

Virtual

Project 30: Developing a framework for EDI in Career Development

Contact: Tara Zabella; Bhagwati Gupta, & Alice O'Carroll

Project Description:

The Science Career and Cooperative Education Office and Science Graduate Studies are developing career education programming designed to equip Science graduate students to transition from graduate students to scientific careers and to excel in their chosen field. It is crucial that EDI considerations are central to this programming so that our diverse student body is empowered to achieve career success.

To ensure that EDI considerations are centrally positioned in this programming, we are seeking a student partner to collaborate on the development of an EDI framework that will be embedded in all aspects of the career development program. Building from the EDI research completed in the preceding SPP submission, “Embedding EDI in career education and professional development”, we will establish EDI best practices for career development programming in the Faculty of Science in order to ensure that EDI is a central and driving factor of our offerings.

In close collaboration with staff and consulting with McMaster groups and committees that are focused on EDI initiatives, the proposed framework at the end of the project may take the form of establishing best practices for different types of programming, developing a continuous improvement strategy for EDI considerations, developing an EDI advisory committee, etc. These examples are provided to help prospective SPP applicants understand the nature of our project, but in no way are they intended to be prescriptive. We are committed to collaboration with the successful student partner and welcome and encourage alternative ideas.

We are seeking an individual who is familiar with EDI literature and theory and is excited to see how these concepts intersect with career education and/or professional development programming to support transitions to employment. Students who have a background or interest in career education or professional development programming are also encouraged to apply. We particularly welcome applications from persons with disabilities, Black, Indigenous, Racialized, women-identified and 2SLGBTQ+ community members.

Most suitable work arrangement for this project:

Virtual

Project 33: Uncovering authentic connections between Calculus for the Life Sciences and other undergraduate courses

Contact: Caroline Junkins

Project Description:

The purpose of this project is to investigate existing connections between Math 1LS3 (Calculus for the Life Sciences I) and other undergraduate courses at McMaster. Students who take calculus as a program requirement (vs. personal interest) often struggle to see how the course material intersects with their scientific interests or career goals. As a result, these students may have a harder time with motivation, persistence, and knowledge transfer.

Initial data collection has already taken place as part of a course assignment with approximately 2500 student responses to the following prompt: "Pick a concept, definition, or technique from the material on our upcoming Math 1LS3 test. In a couple sentences, describe how it relates to content you are learning in another course or something in your personal experience". Many of these responses include visuals (diagrams, slides, practice problems) from other courses.

The student partner will lead the analysis of this data, with the goal of identifying both common themes and unique examples of interest. The student partner will then be involved with the planning stages for the next phase of this project: presenting findings to, and collecting feedback from, instructors of courses identified through this analysis.

We welcome applications from anyone who has completed Math 1LS3, with a preference for students who have completed the Level I Life Sciences Gateway program. Experience in qualitative or quantitative research is not required; training will be provided as needed. The successful student partners would work together with Dr Junkins in the department of Mathematics & Statistics.

Most suitable work arrangement for this project:

Hybrid, Virtual, or In-person

Project 34: Assessment and Mapping of First-Year Curriculum Strategies Related to Inclusive Excellence

Contact: Sean Beaudette & Katie Fitzgerald

Project Description:

•Develop a plan for assessing learning in co-curricular strategies related to inclusive excellence in consultation with the Senior Advisor, Equity, Inclusion and Anti-Racism.
•Build a strategy for community relations and engagement related to the first-year experience in consultation with the Office of Community Engagement and the President's Committee on Community Relations (PACCR).

The Student Success Centre (SSC)'s Orientation and Transition Team (OTT), in partnership with McMaster's Residence Life team, has developed a first-year curriculum to help guide learning outside of the classroom. The curriculum focuses on three primary learning goals: Self-Discovery and Learning, Sustainability and Wellness, and Inclusive Excellence. Under the Inclusive Excellence learning goal, strategies are in place to build a culture of mutual respect, nurture a sense of belonging, enhance inclusive leadership capabilities and recognize the unique lived experiences and barriers faced by equity-deserving groups. These scaffolded and sequenced strategies will be implemented exclusively for first-year students to ease the transition to university life and equip them with the knowledge and tools to be successful McMaster students.

The OTT is seeking to assess and map the student learning associated with the Inclusive Excellence strategies, with a focus on strategy-level evaluation. There will also be opportunities to develop new experiential strategies, specifically in the areas of community engagement and civic inclusion, based on consultation with McMaster's AVP Student Affairs and Dean of Students and the President's Advisory Committee on Community Relations.
Within the parameters of this project, the OTT will seek collaboration and consultation from the student partner on the reassessment of existing curricular strategies, new strategy proposals, strategy-level evaluation techniques and overall assessment of the Inclusive Excellence learning goal and its outcomes. Should the student partner be interested, there may be opportunities to deliver virtual and in-person strategies and engage with the first-year student population.

The ideal student partner will have an interest in equity and inclusion, community engagement and enhancing the first-year experience. Experience with and knowledge of assessment and evaluation techniques is also required.
The student partner will report to Katie Fitzgerald, Transition Program Coordinator. Opportunities for collaboration with various members of the Student Success Centre and other campus and community partners will also be available in this role.

Most suitable work arrangement for this project:

Hybrid

Project Su7: Decolonising Ontario Archaeology: An Indigenous Voice for Indigenous Pasts

Contact: Scott Martin

Project Description:

Currently, there are nearly no Indigenous archaeologists who write any part of the hundreds of archaeological reports that are submitted to the province each year. This means there is next to no Indigenous voice in Ontario Archaeology in spite of the fact that about 80% of archaeology in this province is Indigenous archaeology. When Settler archaeologists visit Indigenous communities to tell them about their own Indigenous pasts, they mostly do so in the context of training a small team of community archaeological monitors. Archaeology remains largely inaccessible to the public in these communities and Indigenous-voiced archaeology is a rarely heard on First Nations.

The central goal of this project is to facilitate bringing an Indigenous voice to Indigenous pasts. The Indigenous student partner will produce several short thematic archaeological workshops comprising slideshows and accompanying text, as well as artefact reference kits for in-person instruction. SA McMaster will provide background literature, artefacts and resources to facilitate Indigenous-led collections-based research.

The proposed outcome is that the student partner will bring an Indigenous perspective to Ontario Archaeology and foster Indigenous-designed collections-based research. Workshops will be curated online on the SA McMaster website to be employed as a resource by instructors, students and members of the public, both Indigenous and Settler.

This project is to commence in spring-summer 2022 and will be supervised by Scott Martin, Operations Manager, Sustainable Archaeology McMaster and Adjunct Assistant Professor in the Department of Anthropology. Required student partner experience pertains to an interest in achieving equity in Ontario archaeology.

Most suitable work arrangement for this project:

Hybrid, Virtual, or In-person

Project 0: Applying a 4M framework to interprofessional education: Connecting the academy to local, global, and Indigenous communities

Contact: Kelsey Harvey

Project Description:

Interprofessional education [IPE] is a well-established approach to collaborative education in social service and health care education (World Health Organization [WHO], 2010). IPE has been employed by educators in post-secondary institutions in Canada and abroad. However, questions as to IPE's sustainability have been recently raised as some IPE programs have folded or stagnated, while other programs remain strong (Lawlis, Anlis & Greenfield, 2014; Memorial University, 2019). To understand this phenomenon, the primary goal of this research to appraise the current state of IPE in Canada and abroad in order to comprehend which aspects of IPE have remained effective over the past decade or more. As a result, we will better understand what elements of IPE need to modernize to meet the current sociocultural, political, and economic landscapes affecting post-secondary education in Canada (Giroux, 2021). Toward this aim we aim to create an integrated system of IPE that better connects the education taking place on campus to the education that takes place in the community, as well as to apply an equity, diversity, and inclusivity lens (EDI) to IPE.

This research will unfold in four overlapping phases in accordance with a 4M framework (Friberg, 2016; Simmons, 2016). The 4M framework connects micro-meso-macro-mega levels, or individual-programmatic-community/institutional-global/inter-institutional levels (Friberg, 2016; Simmons, 2016) to explore IPE's impact at these various levels. With this in mind, the objectives of this project are to:

- Micro: Evaluate students' long-term experiences and utilization of IPE principles within their first year of working in professional practice in order to foster sustainable IPE transitions from classroom into professional practice (this will involve **a confirmative evaluation using survey and interview methods**);
- Meso: Define and appraise the current state of IPE in Canadian post-secondary education (this will involve an **environmental scan**);
- Macro: Engage and collaborate with social service and health care workers in achieving a coordinated IPE approach between post-secondary institutions and the broader communities in which they are situated (this will involve a **needs assessment using survey and interview methods**, as well as the **development of educational webinars**);
- Mega: Incorporate global, multicultural, and Indigenous worldviews into IPE curriculum to create sustainable IPE befitting the sociocultural and political landscape in which post-secondary education is currently situated (this will involve an **environmental scan**).

For more details about this project, please refer to this article on the MacPherson Institute Blog or McMaster Daily News.

The project team is looking to work with one or more student partners (undergraduate or graduate students) who have experience and/or expertise in IPE, as well as an interest or expertise in EDI. Experience with survey methods and analysis would be an asset.

Most suitable work arrangement for this project:

Hybrid or Virtual