

Arthur B. McDonald Canadian Astroparticle Physics Research Institute (McDonald Institute)

Job Title(s):

Role 1: Finance Intern

Role 2: Special Events Intern

Role 3: Education and Professional Development

Intern Role 4: Communications Intern

The [Arthur B. McDonald Canadian Astroparticle Physics Research Institute \(McDonald Institute\)](#) is Canada's network for astroparticle physics, uniting researchers, theorists, and technical experts within one organization. Inspired and built on the legacy of Dr. Arthur McDonald (Nobel Laureate, 2015) and the SNO+ experiment, the McDonald Institute aims to connect talent within the larger community to maximize Canada's scientific impact.

In 2016, the McDonald Institute was awarded \$63.7 million through the Canada First Research Excellence Fund (CFREF) for seven years. This award enabled the McDonald Institute to significantly build on Canada's capacity to deliver a world-leading scientific program in astroparticle physics while engaging industrial partners, students, and Canadians of all ages. In April of 2024, the Government of Canada allocated another \$45.5 million in new funding for five years for the McDonald Institute's continued support of Canadian astroparticle physics research across the country.

The McDonald Institute welcomes PhD student or candidate applicants for the QDIUA from any discipline who are interested in leveraging their skills when learning about the function of a [Tier 1 Research Institute](#) at Queen's University. The Institute is committed to employment equity and diversity in the workplace and encourages applications from equity-deserving students to gain skills and experience in administrative roles.

The McDonald Institute consists of faculty members and research scientists across 13 different institutions and research facilities in Canada. [A team](#) of research associates, postdoctoral fellows, graduate students, engineers, technical experts and administrative staff deliver research and programming to support the function of the Institute nationally. The administrative office for this national network is housed at Queen's University in Stirling Hall within the Department of Physics, Engineering Physics, and Astronomy.

Internship Role 1: Finance Intern

Overview: This internship supports the McDonald Institute's finance team to gain hands-on experience in the operations of a Tier 1 Research Institute. This role focuses on supporting essential administrative functions related to pre- and post-awards services.

Reports to/mentor: Finance Officer

Key Responsibilities:

- Collaborate with the Finance Officer to create and implement an efficient tracking system for budget versus actual tracking and new grant reporting structure.
- Work cooperatively with other individuals, departments, and units to gather and/or prepare financial information.
- Participate in training sessions or other workshops to enhance understanding of finance and accounting practices and systems at Queen's.
- Prepare re-classification accounting journal entries and gather required supporting documentation.
- Assist with other duties and special projects as required by the Finance Officer.

Learning Outcomes:

- Develop financial management and operations experience.
- Refine project management and communication skills.
- Understand the administrative processes within a research institute.
- Develop skills using multiple ERP systems (PeopleSoft, acQuire, etc.).
- Network with professionals across Queen's University and links with partner institutions across Canada.

Qualifications:

- **Required:** PhD student or candidate in any discipline, with interest in financial management.
- **Additional:** Adaptable to new technologies with a desire to learn and being self-motivated.

Internship Role 2: Special Events Intern

Overview: This internship supports the McDonald Institute's commitment to fostering equity, diversity, inclusion, and Indigenization (EDI) within its programs and national research network. The intern will have the opportunity to work on initiatives that promote diversity in the field of astroparticle physics.

Reports to/mentor: Manager for EDII Capacity Development

Key Responsibilities:

- Collaborate with the Manager for EDII Capacity Development for the coordination and facilitation of two special events next year: Women in Physics Canada+ (WiPC+) and the McDonald Institute National meeting
- Liaise with the WiPC+ Committee at Queen's to coordinate the national conference for Women in Physics (scheduled for July 2025).
- Collaborate with the Associate Director, External Relations for the McDonald Institute Annual National Meeting (location TBD).
- Coordinating the following aspects of events, including:
 - Event planning
 - Speaker coordination
 - Marketing and outreach
 - Registration management
 - Budget tracking

Learning Outcomes:

- Gain insights into EDII principles and their application in academic settings.
- Develop skills in event coordination, stakeholder engagement, and program assessment.
- Build connections with professionals dedicated to EDII at Queen's and across Canada.

Qualifications:

- **Required:** PhD student or candidate with an interest in event planning, community engagement, EDII best practices and actions.
- **Additional:** Strong organizational and communication skills.

Internship Role 3: Education and Professional Development Intern

Overview: Work closely with the Manager for Education and Public Outreach to enhance the McDonald Institute's engagement with the broader community and stakeholders. This role focuses on revisiting an existing professional development opportunities program and supporting outreach events for the Winter 2025 term.

Reports to/mentor: Manager for Education and Public Outreach

Key Responsibilities:

- Collaborate with administrative team to review and revisit an existing Professional Development Opportunity program for highly qualified personnel in astroparticle physics.
- Support the Manager for Education and Public Outreach with the collection and evaluation of data for internal evaluation and reporting to funding bodies.
- Participate in the development of educational programming for astroparticle physics.

Learning Outcomes:

- Enhance skills in strategic planning, program coordination, and data management.
- Understand the importance of community engagement in educational outreach.
- Network with educators and outreach professionals across partner institutions.

Qualifications:

- **Required:** PhD student or candidate interested in education and outreach, data management, program development.
- **Additional:** Ability to work collaboratively and adapt to changing project needs.

Internship Role 4: Communications Intern

Overview: Support the McDonald Institute's Communications Officer and help enhance the visibility and engagement of our programs as well as research successes across the national network. This internship provides an opportunity to develop skills in internal and external communication strategies for an organization and alumni engagement.

Reports to/mentor: Communications Officer

Key Responsibilities:

- Assist the Communications Officer with alumni tracking and engagement initiatives.
- Support the updating, enhancement, and promotion of recruitment initiatives including the astroparticle physics careers website and video.
- Contribute to the creation of promotional materials, including newsletters, social media content, and event announcements.
- Collaborate with other administrative staff to strategize promotion of outreach efforts and professional development series.

Learning Outcomes:

- Develop professional competencies in communication strategies, both written and digital.
- Gain insight into how a research institute communicates its initiatives and engages with partners and stakeholders.
- Network with professionals in the field of communications and outreach.

Qualifications:

- **Required:** PhD student or candidate with a focus on communications, public relations, or a related field.
 - **Additional:** Strong writing and organizational skills, with a keen interest in digital communication
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