











Research Funding Opportunities

McMaster Industry Liaison
Office (MILO)

Research Office for Administration, Development and Support (ROADS)











Research Office for Administration, Development & Support (ROADS)

- Encourages and assists faculty to apply for external nonindustry grants to support their research activities
- Assists with proposal development by reviewing applications and providing advice
- Ensures that applications comply with agency and institutional guidelines and policies
- Drafts institutional elements for major infrastructure project submissions
- Acts as primary institutional contact for external granting agencies











Research Office for Administration, Development & Support (ROADS)

Development Unit

- > identification of funding opportunities
- > provision of information sessions
- > assistance with budget development
- > review and editing of grant submissions
- > review for compliance with agency and institutional guidelines

Administration & Support Unit

- budget revisions and amendments; reporting
- assistance in managing McMaster's allocation for identified programs
- rensures that researchers and the University are protected through funding agreements and compliance with agency and institutional policy











McMaster Industry Liaison Office (MILO)

Mission: Support faculty and students in building partnerships with industry and the community for research collaborations and to transfer the results of this research to the public for economic benefit and social impact.

- ➤ Industry-sponsored contracts & grants
 - > Assisting with proposal development and submission
 - Negotiating agreements (research agreements, material transfer agreements, non-disclosure agreements, MOUs and others)
- ➤ IP management & Commercialization (Licensing, support startup company formation, commercial grants etc.)
- ➤ Educating the research community on partnership building and intellectual property











How MILO Can Help You with Your Partnership

- ➤ Advise on funding opportunities and IP support you in discussing and/or meeting with potential industry partner to determine best option
- > Assists in establishing the appropriate agreement
- MILO reviews, negotiates and is the signing authority on all NDAs, MTAs, and research contracts
- Support you in identifying your value proposition to industry partners











Eureka! You have a discovery, now what?

Before disclosing your work publicly, e.g.

- conference abstract or presentation
- publishing a paper
- defending a thesis

complete a <u>Discovery or Invention Disclosure Form</u>

Send to MILO Business Development team: Glen Crossley crosslg@mcmaster.ca

Failing to do so may impact patentability in certain countries.

Refer to the Joint Intellectual Property Policy











Commercialization Support from MILO

- ➤ Intellectual Property
 - > IP assessment, patent filing and prosecution management
- > Start-up formation
 - > Value proposition and pitch development
 - > Incorporation
 - > Early-stage funding, Entrepreneurs in Residence
- > IP/Entrepreneurial Education
 - > Regularly give talks in capstone and other courses, meet with student teams regarding IP and start-up issues











Office of Associate Dean, Research Innovation and Partnerships

- Focus on strategic initiatives
- Developing and implementing new programs
- Build McMaster Engineering's reputation and drive growth in specific sectors
- Create opportunities to grow external research partnerships
- Promote opportunities for commercialization and entrepreneurship

Contact:

- Gregor Lawson, Director, lawsong@mcmaster.ca
- > Sarah Novosedlik, Research Administrator, novosedlik@mcmaster.ca



Partnership Funding (MILO)











Mitacs Accelerate

- Purpose: Mitacs co-invests in research expertise for collaborative projects with organization-directed research challenges.
- Eligible researchers: undergraduate, Master's, PhD, postdoctoral fellow, and recent graduate (within 2 years)
 - Domestic and international students are eligible
- Eligible organizations: Companies (domestic and international), not-for-profits, municipalities, and hospitals
- Funds/Term: \$7.5k+; per 4 6 months; 1:1 Industry match (total \$15k, \$10k salary); program is scalable
- Notes:
 - Open deadline, 10 12 weeks turnaround time
 - Very high success rate (above 95%)
- MILO Contact:

Ryan Caldwell, <u>caldwejr@mcmaster.ca</u>, (647)-234-4213

Alexa Mainguy, mainguam@mcmaster.ca, 365-324-9212











Mitacs BSI

- Purpose: Mitacs co-invests in research expertise for collaborative projects with organization-directed development challenges.
- Eligible researchers: Undergraduate, Master's, PhD, postdoctoral fellow, and recent graduate (within 2 years)
 - Domestic and international students are eligible
- Eligible organizations: Companies (domestic and international), not-for-profits, municipalities, and hospitals
- Funds/Term: \$7.5k+; per 4 6 months; 1:1 Industry match (total \$15k, \$10k salary); program is scalable
- Notes:
 - Open deadline, 6 8 weeks turnaround time (no peer review)
 - Very high success rate (above 95%)
- MILO Contact:

Ryan Caldwell, <u>caldwejr@mcmaster.ca</u>, (647)-234-4213

Alexa Mainguy, mainguam@mcmaster.ca, 365-324-9212











Mitacs Elevate

- **Purpose:** Mitacs co-invests in **postdoctoral fellows** collaborating on projects with organizations in need of high-level **research** expertise.
- Eligible researchers: Postdoctoral fellows
- Eligible organizations: Companies (domestic and international), not-for-profits, municipalities, and hospitals
- Funds/Term: 1 or 2 year projects; \$30K/year from partner; 1:1 Industry match (total \$60K salary with a minimum stipend of \$55,000)
- Notes:
 - Open deadline, 10-12 weeks turnaround time
 - Includes exclusive professional development curriculum components
- MILO Contact:

Ryan Caldwell, <u>caldwejr@mcmaster.ca</u>, (647)-234-4213

Alexa Mainguy, mainguam@mcmaster.ca, 365-324-9212









OCI Collaborate2Commericalize (C2C)

- Purpose: Collaborations that help Ontario companies develop, implement and commercialize technical innovations with an academic partner
- Funds/Term for C2C: \$20k to \$75K/year for projects between 6 and 24 months
- ➤ Industry Match: 1:1 match of cash & in-kind industry cash must be a min. of 50% of the amount requested from OCI
- ➤ Eligibility: Company must be an Ontario based SME with at least 5 FTE and have been incorporated for at least 2 years.

Notes:

- Intake process initial call with partner and OCI BD. If the project is considered appropriate for the program, it will be invited for a full application.
- Assessment criteria focus on economic benefit/impact.
- High success rate and quick review time (~4 weeks usually)
- 30% overhead on industry cash contribution only

MILO Contact:

Ross Huyskamp (<u>huyskar@mcmaster.ca</u>)











OCI C2C-NSERC Alliance Combined Grant

Purpose: Collaborative projects expected to result in economic benefits to the company and to Ontario (company must be Ontario-based SME)

Total Project	OCI	NSERC	Partner	Partner	Overhead	Deadline
Cost	Contribution	Contribution	Contribution	Contribution		
			(cash)	(in-kind)		
\$60,000-	\$20,000-	\$20,000-	\$10,000-	\$10,000-	25% on partner	No
\$90,000	\$30,000	\$30,000	\$15,000	\$15,000*	cash	deadline
					contribution	
					only	
				*up to 50% of		
				the cash		
				contribution		

- Eligibility criteria of OCI C2C and NSERC Alliance Option 1 apply. Where there's a conflict, the stricter of the two applies
- Deadline: Rolling deadline
- MILO Contact:

Ross Huyskamp (<u>huyskar@mcmaster.ca</u>)











NSERC Alliance Grants – Option 1

- Purpose: Collaborative research projects with private, public sector, or not-for-profit partners
- Funds/Term: Minimum of \$20K to maximum of \$1M per year for up to 5 years. Scaling is permitted. **New:** 2:1 leverage ratio for *all* partners.
- Deadline: Rolling deadline
- Notes:
 - 25% overhead on company cash contribution (overhead is not matched by NSERC)
 - > Partners can include NFP organizations and government departments
 - National Security Questonnaire required for all proposals with a private sector partner
- MILO Contact:

Ross Huyskamp (<u>huyskar@mcmaster.ca</u>)











NSERC Alliance Grants – Option 2

- Purpose: supports research with goals aimed at filling identified gaps at the intersection of science and society. To solve these challenges, teams must involve people or societal groups affected by these issues in setting the goals and research strategy, and must share the research in unconventional ways that will mean the results are used by those affected groups. Because this approach takes more effort, NSERC may cover up to 100% of the project costs.
- Funds/Term: Minimum of \$30K to maximum of \$1M per year for up to 5 years. NSERC will fund up to 100% of the project cost.
- Notes
 - No limit to number of applications
 - Application requires a "Public Impact Value Proposition"
 - Rolling intake
- MILO Contact:

Ross Huyskamp (huyskar@mcmaster.ca)







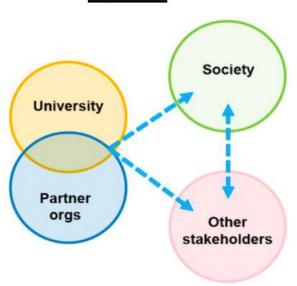




Is my project a good fit for Option 2?

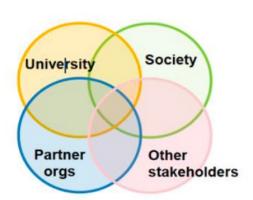
Visualization of Option 1 vs. Option 2

Option 1:



In **Option 1 projects,** university expertise is focused on a partner's challenge. The financial risk is lowered, but partners invest cash and in-kind.

Option 2:



Option 2 projects involve a wider collaboration where many expertises and points of view address a societal need and where knowledge dissemination and mobilization link directly to end users and practical results.











NSERC Review

Project Size	Small (\$20K-\$30K / year from NSERC)	Medium (\$30K-\$300K / year from NSERC)	Large (\$300K-\$1M / year from NSERC)
Review Mechanism	NSERC File Managers. Evaluation supported by existing NSERC peer review (e.g. from a DG).	External referees with expertise directly related to the proposal. Provide review based on all evaluation criteria.	Ad hoc committee members with expertise directly related to the proposal. Provide review based on all evaluation criteria.
Decision Time	5-9 weeks (if evaluation is supported by existing NSERC peer review) 9 – 18 weeks if no existing NSERC peer review	9-18 weeks	14-24 weeks

Note: Option 2 will first be vetted by NSERC administrative staff using the PIVP. Once NSERC staff has determined that the project is eligible for Option 2, it will go on to external review as per the table above.

Option 1 and Option 2 are reviewed in separate pools.

McMaster University Office









NSERC Alliance-Mitacs Accelerate

- Essentially a complete Mitacs Accelerate and NSERC Alliance Option 1 application applied for in parallel, with the benefit that you can leverage the industry cash contribution through both Mitacs and NSERC.
- Funds/Term: The normal eligibility/guidelines/limits for Mitacs Accelerate and NSERC Alliance Option 1 apply.
- Notes
 - No overhead on any funds leveraged through both Mitacs and NSERC. Keep in mind that any funds leveraged through Mitacs are subject to HST (13%)
 - The mechanics of the program are quite nuanced. Contact MILO for guidance on how to build your budget and maximize your leverage through this program.
- ➤ **Deadline:** Rolling (Mitacs application needs to be submitted to Mitacs for preapproval at least 2 weeks ahead of the full application being submitted to NSERC).
- MILO Contact:

Ryan Caldwell, <u>caldwejr@mcmaster.ca</u>, (647)-234-4213











SOUTHERN ONTARIO PHARMACEUTICAL & HEALTH INNOVATION ECOSYSTEM (SOPHIE) PROGRAM

- Purpose: This funding will support collaborative projects for Ontariobased life science firms in the later stages of commercialization and in need of financing to secure technology validation and first sale.
- Funds/Term: \$100K from SOPHIE, \$35K cash + \$90K in-kind match required from sponsor company.
- https://innovationfactory.ca/funding-sophie/
- MILO Contact:

Alexa Mainguy mainguam@mcmaster.ca



Commercialization Grants











NSERC 121 Program

- Purpose: Develop university-based research to the point where a company will take it on to commercialize
- > Funds/Term:
 - ➤ Market Assessment: \$15K
 - ➤ **Phase 1:** Up to \$125K for 12 months, no company match but strong letter of support required.
 - Phase 2: up to \$350K over 2 years, company must match with cash and in-kind 1:1, cash must be 40%
- Deadlines: January, April, June, September
- Review/Success: 3 months, 50% success rate for Phase 1, Phase 2 higher
- MILO Contact: Glen Crossley (<u>crosslg@mcmaster.ca</u>)
- Link for more information: NSERC Idea to Innovation grants (nserc-crsng.gc.ca)











Lab 2 Market

- ➤ **Purpose:** A 16-week program to help researchers validate their ideas with the purpose of finding business/commercial value.
- Funds/Term: Similar to 'Idea to Innovation –Market Assessment' but led by the graduate student. \$15,000 available, \$10K to student, \$5K to supervisor.
- ➤ **Deadline:** see website https://lab2market.ca/programs/
- MILO Contact:

Glen Crossley (crosslg@mcmaster.ca)



New Research Opportunities (ROADS)











NSERC Discovery Grants Program

- Supports ongoing programs of research by:
 - promoting and maintaining a diversified base of high-quality research capability in the natural sciences and engineering in Canadian universities;
 - fostering research excellence; and
 - providing a stimulating environment for research training.
- Considered 'grants in aid' of research as it provides long term operating funds to support the costs of a research program.
- Awarded for five years, the normal duration being five years.
- Deadline: Mandatory NOI August 1; full application November 1
- Deadline to submit draft to ROADS for Peer Review: August 31
- New hires and first-time applicants must complete Eligibility Form
- > ROADS contact: Ryan Heyden, heydenrw@mcmaster.ca











NSERC Research Tools and Instruments (RTI)

- RTI Grants are one-year awards of up to \$150,000, meant for purchase or fabrication of research equipment with a net cost between \$7,001 and \$250,000
- To be eligible, applicants and co-applicants must **each** currently hold, or be applying for, an NSERC research grant at the time of application.
- A researcher is only allowed to be an applicant or co-applicant on one application
- Applicants and co-applicants who were successful in the previous year's RTI competition are ineligible to apply for one year.
- Deadline to submit draft to ROADS for Peer Review: August 31
- > Full application deadline: October 25th
- > ROADS contact: Grace Kim, kimps@mcmaster.ca











New Frontiers in Research Fund – Exploration Stream

Exploration Stream - opportunities for Canada to build strength in high-risk, high-reward and interdisciplinary research

- 2023 Exploration Stream competition deadlines:
 - > NOI TBD
 - > Full Application TBD
 - > Applications must include at least three team members
 - To be considered interdisciplinary, proposals must combine at least two disciplines that do not traditionally collaborate.
- ROADS contact: Ryan Heyden, heydenrw@mcmaster.ca











Ontario Early Researcher Award (ERA) Program

- Funding to new researchers to build a research team.
- Maximum award of \$100,000; matched by \$50,000 from the Faculty/Department over five years
- > Eligibility:
 - ➤ full-time faculty who started independent academic research career no later than 5 years ago and completed first PhD, DVM or MD no more than 10 years ago
 - Continued education, required training (e.g. medical training and fellowships), and parental leave are considered eligible interruptions
- Competitive applicants supported by peer-reviewed funding and demonstrated academic independence from previous supervisors.
- > ROADS contact: Grace Kim kimps@mcmaster.ca











Canada Foundation for Innovation (CFI) John Evans Leaders Fund (JELF)

- Allows individual researchers or a small group of up to three investigators to acquire, develop, or lease research infrastructure
- Funding envelope managed by the Faculty.
- > Provides funding to a maximum of 40% of the total eligible costs
 - Ontario Ministry of Innovation and Science 40%.
 - in-kind or cash contributions from vendors, the university or other eligible partners 20%
- Competitions February, June and October of each year
- ROADS contact: Pam McIntyre mcintyp@mcmaster.ca











Mitacs Globalink Research Award (GRA)

- Purpose: supports two-way mobility between Canada and Mitacs partner countries.
- ➤ GRA program is open to academic/research partners from specific countries (Stream 1), as well as eligible countries (Stream 2)
- Awards offered in partnership with Mitacs' Canadian and international academic partners; subject to available funding
- Funds/Term: \$6,000 for 12- to 24-week terms; McMaster contribution required for Stream 2 only
- Notes:
 - Open deadline, 10 12 weeks, very high success rate
 - Occasional targeted calls for collaborations between selected countries and/or research networks
- ROADS Contact:

Miky Dumitrescu, <u>dumitrm@mcmaster.ca</u>



Larger Research Opportunities (ROADS)











Canada Foundation for Innovation (CFI) Large Infrastructure Fund (IF)

- ➤ CFI-IF supports the acquisition or development of research infrastructure that enhances research capacity by forging productive partnerships within and among institutions, sectors and disciplines for the effective and sustainable use of the research infrastructure and facilities;
- Maximum allocation of CFI funding for each institution
 - > internal review process usually conducted
- Next competition TBD;
- > ROADS contact: Pam McIntyre mcintyp@mcmaster.ca











Ontario Research Fund-Research Excellence

- > Supports leading-edge, transformative, and internationally significant research of strategic value to the province
- Projects must demonstrate research excellence and the investment of partner organizations
- ORF request includes 40% indirect costs
- Will contribute a maximum of 1/3 of the operating costs.
 - For Stream 1: between \$500,000 and \$2,000,000 over five years
 - > 1/3 of the remainder (cash and in-kind) coming from the applicant institution(s) and/or non-private sector partners, and 1/3 from private sector partners
 - For Stream 2: between \$300,000 and \$2,000,000 over four years
 - ➤ Blended budget model is acceptable where 2/3 of the total project costs is a combination of institutional and private sector partner contributions.
- ➤ If interested, please submit EOI to ADR and ROADS **ASAP**
- > ROADS contact: Grace Kim kimps@mcmaster.ca











NSERC Collaborative Research and Training Experience (CREATE)

- Supports innovative training programs that:
 - > encourage collaborative and integrative approaches
 - address significant scientific challenges
 - > facilitate the transition from trainees to productive employees
- Up to 50 % of the grants dedicated to industrial stream
 - > must have one or more industrial members(s) on the program committee
 - must include internships for all trainees for at least 20 percent of training
- Up to \$1.65M over six years
- ▶ Deadline: LOI May 1st; invited application September 22nd
- > ROADS contact: Grace Kim, kimps@mcmaster.ca











Contact Us

McMaster Industry Liaison Office (MILO)

Amber Metham

Associate Director, Research Contracts metham@mcmaster.ca

Ross Huyskamp

Research Contracts Advisor huyskar@mcmaster.ca

Glen Crossley

Associate Director, Business Development and Intellectual Property crosslg@mcmaster.ca

Amy Hector

Business Development Manager hectoraj@mcmaster.ca

Ryan Caldwell

Senior Advisor, Mitacs caldwejr@mcmaster.ca

Alexa Mainguy
Advisor, Mitacs
mainguam@mcmaster.ca

Research Office for Administration, Development, and Support (ROADS)

Grace Kim

Assistant Director, Development kimps@mcmcmaster.ca

Miky Dumitrescu

Senior Advisor, Development dumitrm@mcmaster.ca

Ryan Heyden

Senior Advisor, Development heydenrw@mcmaster.ca