







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
- ensures that researchers and the University are protected through funding agreements and compliance with agency and institutional policy



McMaster Industry Liaison Office (MILO)

- Advancing partnered/collaborative research and helping researchers obtain funding
- > Assisting with proposal development and submission
- Negotiating agreements that facilitate research (including research agreements, material transfer agreements, nondisclosure agreements, MOUs and others)
- Educating the research community on partnership building and intellectual property
- Commercializing research results to ensure greater social and/or economic benefits



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



Commercialization Support from MILO

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







Partnership Funding (MILO)



Mitacs Accelerate

- Purpose: Internship funds for graduate students and postdoctoral fellows for company-directed research challenges. This project is open to eligible not-for-profit and Crown corporation partners, as well as international partners from specific countries
- Funds/Term: \$7.5k; per 4 months; 1:1 Industry match (total \$15k, \$10k salary); program is scalable
- > Notes:
 - Open deadline, 4-6 weeks, very high success rate
 - Elevate program for PDFs only done via special call 2x/year

MILO Contact:

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



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; match depends on size of the partner and partnership composition
- Deadline: Rolling deadline
- > Notes:
 - 25% overhead on company cash contribution (overhead is not matched by NSERC)
 - > Partners can include NFP organizations and government departments

MILO Contact:

Amber Metham (metham@mcmaster.ca)

Ross Huyskamp (huyskar@mcmaster.ca)



NSERC Alliance Grants – Option 1

OPTION 1 (\$20K-\$1M per year; unlimited applications)						
Leverage	Size of Industry Partner	Type of Partnership and Cost Sharing Model				
50% (1:1)	Large (LE) (>500 employees)	LE. Requires a 50% cash contribution from the (combined) partner organization(s)				
66% (2:1)	Small and medium (SME) (<500 employees)	SME. Requires a 33% cash contribution from the (combined) partner organization(s)				
66% (2:1)		SME in partnership with LE. Requires a 33% cash contribution from the (combined) partner organization(s)				

Industry Liaison Office



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NSERC Alliance Grants – Option 2

- Purpose: Collaborative research projects with more than one private, public, or not-for-profit partners to address an unmet societal need and expected to have broad societal impact
- Funds/Term: Minimum of \$30K to maximum of \$300K per year for up to 5 years. NSERC will fund up to 90% of the project cost if with a private sector partners, or 100% if with an NFP or public partners.

> <u>Notes</u>

- Limit of **two applications** for the researcher (1 as PI, 1 as Co-I) per 12month period. No limit for partner organizations.
- Application requires a "Public Impact Value Proposition"
- Rolling intake

MILO Contact:

Amber Metham (metham@mcmaster.ca)

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



How to "test" if your project is a good fit for Option 2

- A high level of commitment from multiple partners must be demonstrated;
- It must be demonstrated that the project cannot be funded through alternative sources of funding;
- The project must be defined by working with end-users and implementers to ensure it is use- and needs-driven;
- The project should not primarily focus on the partners' specific priorities and long-term goals (the outcomes must not primarily benefit the partner organizations).
- > Not meant to provide a testing ground to establish new partnerships

Note that any Option 2 application must justify why a higher level of investment of public funds is required for the project. **Reasons such as COVID-19 related pressures on partner budgets are not sufficient.**





NSERC Review

Project Size	Small (\$20K-30K / year)	Medium (\$30K-300K / year)	Large (\$300K-1M / year)
Review Mechanism	NSERC File Managers. Evaluation supported by existing NSERC peer review (e.g. from a DG). If none available, then will go to External Referees.	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	~4 weeks	8-12 weeks	12-16 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.

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NSERC Alliance-Mitacs Accelerate

- Essentially a complete Mitacs Accelerate and NSERC Alliance 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
 - Overhead 25% on company cash contribution (overhead is not leveragable)
 - Taxes (13%) on any internships leveraged through Mitacs
 - The mechanics of the program are quite nuanced. Contact Ryan and Ross 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

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



Alliance-Accelerate Example

NSERC Alliance (Option 1) with SME

NSERC Alliance-Mitacs Accelerate with SME

SME contribution <u>NSERC Match:</u> Total Budget:	\$45,000 (plus 25% OH) <u>\$90,000</u> \$135,000	SME contribution NSERC Match: <u>Mitacs Contribution:</u> Total Budget:	\$45,000 (plus 25% OH) \$90,000 <u>\$45,000 (6 Internship Units (IUs))*</u> \$180,000
Budget HQP 1 (ALLRP) HQP 2 (ALLRP) HQP 3 (ALLRP) HQP 4 (ALLRP) Equipment Consumables <u>Travel</u> Total	\$25,000 \$25,000 \$25,000 \$20,000 \$10,000 \$5,000 \$135,000	*Additional cost to co Budget HQP 1 (ALLRP) HQP 2 (ALLRP) HQP 3 (ALLRP) HQP 3 (ALLRP) HQP 4 (Mitacs) HQP 5 (Mitacs) HQP 6 (Mitacs) Equipment Consumables	\$25,000 \$25,000 \$25,000 \$25,000 \$25,000 (2IUs) \$25,000 (2IUs) \$20,000 (2IUs) \$20,000 (paid by 6IU excess funds) \$10,000
		<u>Travel</u> Total	\$5,000 \$180,000



OCE VIP

- Purpose: Collaborations that help Ontario companies develop, implement and commercialize technical innovations with an academic partner
- **Funds/Term for VIP:** \$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 OCE
- > Notes:
 - Intake process initial call with partner and OCE 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
 - 30% overhead on industry cash contribution only

MILO Contact:

- Amber Metham (<u>metham@mcmaster.ca</u>)
- Ross Huyskamp (<u>huyskar@mcmaster.ca</u>)



OCE VIP-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		

- Deadline: Rolling deadline
- > MILO Contact:

Amber Metham (<u>metham@mcmaster.ca</u>)

Ross Huyskamp (huyskar@mcmaster.ca)







Commercialization Grants



NSERC I2I Program

- Purpose: Develop university-based research to the point where a company will take it on to commercialize
- Funds/Term: Phase 1 Up to \$125K for 12 months, no company match but strong letter of support required. Phase 2b up to \$350K over 2 years, company must match with cash and in-kind 1:1, cash must be 40%
- > **Deadline:** September 28, 2021 (deadlines are quarterly)
- Review/Success: 3 months, 50% success rate for Phase 1, Phase
 2 much higher
- MILO Contact:

Alan Sawula (sawulad@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 one to five years, the normal duration being five years.
- > Deadline: Mandatory NOI August 4; full application November 2
- > Deadline to submit draft to ROADS for Peer Review: August 31
- > <u>New hires and first-time applicants must complete Eligibility Form</u>
- ROADS contact: Nathan Coschi, <u>coschimn@mcmaster.ca</u>



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 PI/coPI on **one** application
- > Deadline to submit draft to ROADS for Peer Review: August 31
- > Full application deadline: October 26th
- ROADS contact: Sean Kinnear, kinnes@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

- 2021 Exploration Stream competition.
 Deadlines: Notification of Intent August 10, 2021, Full Application October 19, 2021
 - > Applications must include at least two team members
 - > To be considered interdisciplinary, proposals must combine at least two disciplines that do not traditionally collaborate.
- ROADS contact: Nathan Coschi, <u>coschimn@mcmaster.ca</u>



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's 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, 4-6 weeks, very high success rate
 - Occasional targeted calls for collaborations between selected countries and/or research networks
- ROADS Contact:

Miky Dumitrescu, dumitrm@mcmaster.ca







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 2022;
- 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
- \succ Will contribute a maximum of 1/3 of the operating costs.
 - For Tier 1: between \$200,000 and \$1,000,000 over five years
 - For Tier 2: between \$1,000,001 and \$4,000,000 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
- 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 Spring; invited application Fall
- ROADS contact: Nathan Coschi, <u>coschimn@mcmaster.ca</u>



NSERC/CIHR

Collaborative Health Research Projects (CHRP)

- Supports collaborative research projects between natural sciences or engineering and health sciences
- Requires the translation of the research results to knowledge/technology users (KTUs) and related stakeholders
- Support provided for up to three years; no upper limit on awards
- Deadlines: LOI Spring; invited full application Fall
- ROADS contact: Virginia Viscardi, viscarvl@mcmaster.ca



Multidisciplinary ccollaboration opportunities CIHR and SSHRC programs



CIHR Catalyst Grants

In general, the CIHR Catalyst Grant Program is designed to support the:

- Generation of preliminary observations, data or knowledge, or to facilitate team formation as a first step towards the pursuit of more comprehensive funding opportunities (e.g., operating grants, team grants) by researchers or teams of researchers;
- Development and/or validation of new inventions, tools, methodologies, protocols, theoretical models or frameworks;
- Planning and/or development activities of teams (multi-disciplinary, multisectoral, etc.) coming together to address health research priorities.
- > Grants will have a specific target research area
- > Value, duration, and deadlines vary by CIHR Institute
- ROADS contact: Virginia Viscardi, viscarvl@mcmaster.ca



CIHR

Planning & Dissemination Grants

- Support planning activities, partnership development, dissemination events and activities that focus on the communication of health research evidence to researchers and/or knowledge users
- Grants are 1-year in duration and a maximum of \$25,000
- This funding opportunity is not intended to support the direct cost of research including primary research or data collection
- Competition deadline varies by year
- ROADS contact: Virginia Viscardi, viscarvl@mcmaster.ca



CIHR Project Grant

- Supports health-related research and knowledge translation projects at any stage, from discovery to application, including commercialization
- Knowledge translation and commercialization projects include a partnered/integrated knowledge translation approach
- Priority research areas announced for each competition
- > Most Project grants will be \$50K to \$750K per year for 1 to 5 years
- Depending on the nature of the project, a commitment (cash or in-kind) from knowledge user(s) or other partners may be expected
- ROADS has started an internal peer-review process for Project Grant applications starting for the Fall 2021 submission (Aug. 4/21 deadline)
- Deadlines: Spring and Fall of each year
 - Fall: ROADS Peer-Review Deadline: Aug 4, CIHR Registration Deadline: August 12(tentative), ROADS Draft Deadline: September 1, CIHR Full Application Deadline: September 15(tentative)
- ROADS contact: Virginia Viscardi, viscarvl@mcmaster.ca



CIHR Team Grant

- Builds capacity for multidisciplinary research in research areas that are specified upon the announcement of a Team Grant competition
- Proposed research has strong and meaningful engagement with communities and organizations
- Team Grants will have a specific target research area when announced
- > Value, duration, and deadline varies by competition
 - Although budget maximums and duration vary by competition, they are typically \$100,000-\$500,000 per year for a maximum of 3 to 5 years
- ROADS contact: Virginia Viscardi, viscarvl@mcmaster.ca



SSHRC

Partnership Development Grants (PDG)

- Provide support to: 1) develop research and/or related activities in the social sciences and humanities by fostering new partnerships with existing and/or potential partners; or 2) design and test new partnership approaches for research and/or related activities that can result in best practices or models—these can either be adapted by others or have the potential to be scaled up
- Partnership funding is intended for formal partnerships between postsecondary institutions and/or organizations of various types
- Partner organizations are expected to support the activities of the partnership through cash and/or in-kind contributions
- Duration: 1 year to 3 years
- Value: between \$75,000 and \$200,000
- ROADS contact: Christina Pellegrini, <u>pellegrc@mcmaster.ca</u>



SSHRC

Knowledge Synthesis Grants (KSG)

- Support researchers in producing knowledge synthesis reports and evidence briefs that:
 - support the use of evidence in decision-making and the application of best practices; and
 - > assist in developing future research agendas
- Not intended to support original research but support the synthesis of existing research knowledge and the identification of knowledge gaps
- Duration: 1 year
- > Value: typically \$30,000
- ROADS contact: Christina Pellegrini, <u>pellegrc@mcmaster.ca</u>



SSHRC Partnership Grants (PG)

- Provide support for new and existing formal partnerships to advance research, research training and/or knowledge mobilization in the social sciences and humanities
- Are intended for large teams of postsecondary institutions and/or organizations of various types that work in formal collaboration
- Duration: 4 to 7 years (for Stage 2)
- > Value:
 - Stage 1: up to \$20,000
 - Stage 2 (by invitation only): up to \$2.5 million
- Two stage adjudication process; only applicants successful in Stage 1 will be invited to apply in Stage 2
- ROADS contact: Christina Pellegrini, pellegrc@mcmaster.ca



Funding Opportunities and Management

- Funding Opportunities Database: <u>https://research.mcmaster.ca/support-for-researchers/secure-funding/</u>
- Research Funding planning: talk to ROADS and MILO Senior Advisors
- Subscribe to the biweekly ROADS Funding Opportunities Bulletin: contact Miky Dumitrescu, Senior Advisor (Engineering): <u>dumitm@mcmaster.ca</u>
- Additional calls for proposals for specific opportunities will be sent periodically.
- > Manage your funding:

<u>https://research.mcmaster.ca/support-for-researchers/manage-</u> <u>funding/</u>



Contact Us

McMaster Industry Liaison Office (MILO) **Research Office for Administration, Development, and Support (ROADS)**

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