

CQDM-OCE Life Sciences R&D Challenge

Program Guidelines

Ontario Centres of Excellence (OCE) and the Québec Consortium for Drug Discovery (CQDM) in partnership with Life Sciences Ontario and BiopolisQuebec are working together to support collaborative R&D across the Ontario-Québec Life Sciences Corridor by deploying an R&D Challenge in the biopharmaceutical sector. This Challenge will target industry-academic projects that facilitate the development of innovative tools and technologies that accelerate the drug discovery process and lead to safer and more effective compounds.

This initiative will help build a competitive advantage for the sector by combining resources and strengths across the Corridor by:

- Attracting product mandates from pharmaceutical companies for SMEs in both provinces
- Paving the way for new and unique opportunities for investments, partnerships and collaborations across the Corridor

OCE funding will be provided through the Industry Association R&D Challenge Voucher Program.

How Funding works

OCE in collaboration with CQDM will support approximately three to four qualified projects (lasting up to three years) which undertake biopharmaceutical research with a focus on leading to novel, newly adopted processes or services that enable drug discovery technologies. This program is **not intended to fund research on new drugs** for specific therapeutic segments. Projects targeting the development of **cutting-edge technologies** with strong and immediate impact on the drug discovery and/or development process across several therapeutic fields are particularly of interest in this program call.

OCE and CQDM will each provide a minimum of \$125,000 and up to \$150,000 per project. The industry partner must provide (2:1) cash plus in kind matching. For example if OCE and CQDM each contribute \$125,000, then the industry partner must provide \$250,000 cash and \$ 250,000 in kind to the project.

	Contribution per project (\$)
OCE	125,000 – 150,000
CQDM	125,000 – 150,000
OCE, CQDM	250,000 – 300,000
Industry cash	250,000 – 300,000
Industry in kind	250,000 – 300,000
Total	750,000 – 900,000

	Total Program Contributions (\$)
OCE	500,000
CQDM	500,000
Industry cash and in kind	2,000,000
Total	3,000,000

Research agenda

The research agenda extends to **all scientific and technical fields** related to biopharmaceutical R&D and **all disciplines** that could provide new cutting-edge technologies, computational tools and devices for biopharmaceutical research. The scope includes (without limitation): biological and health sciences, chemistry, engineering, nanotechnologies, computational sciences, medical devices, imaging, biosensors, *in silico* and *in vitro* screening systems, and improved disease-relevant animal models.

Only projects with a well-defined near-term application deemed to significantly impact biopharmaceutical research will be funded under this program.

Eligible expenses

- Experimental design
- Lab analyses and related testing
- Highly qualified personnel (HQP) development
- Salaries and benefits not paid by public institutions including, but not limited to, students (undergraduate and graduate), post-doctoral fellows and technologists. *(Principal investigators salaries are not supported by this award).*
- Sub-contractor fees
- Materials and supplies
- Conference registration fees and travel and accommodation
- Project management
- Intellectual property costs associated with the patent application
 - Only eligible for CQDM funds
- Administration costs (overhead):
 - CQDM up to 15%
 - OCE up to 35%

Eligibility criteria

This program seeks to support creativity and innovation and is focused on multi-disciplinary and collaborative efforts between academic institutions and private organizations. Each research proposal must generate clear deliverables with immediate applications to the drug discovery and/or development process and be highly innovative with a strong and wide potential impact on biopharmaceutical research.

Although not mandatory, projects involving collaborations between academic and private sector organizations are of great importance for this program. Therefore, public/private partnerships will be prioritized in the selection process.

Academic Institution Eligibility

To be eligible for funding, research must be performed within one of the following academic institutions in Ontario and/or Quebec:

- Universities
- Colleges
- Hospitals affiliated with academic institutions
- Affiliated academic research institutions

Industry Partner Eligibility

To be eligible for funding, research must be performed within one of the following organizations in Ontario and/or Quebec:

- For profit industry partner:
 - SMEs and start-ups (in the field of life sciences, biotechnologies, biopharmaceuticals, medical devices, diagnostics, engineering, imaging or contract research organizations (CROs))
 - Large industry partners are not eligible for direct funding but are eligible to contribute in cash and in kind
- Not-for-profit organizations with a mandate for and experience in research (***eligible for CQDM funding only***)
- Industry partner must have an R&D presence in Ontario and/or Quebec and is expected to commercialize the innovation in Ontario and Quebec

Project Eligibility

- Projects are in the advanced health sector leading to novel processes, products, services that enable drug discovery technologies and benefit the pharmaceutical industry
- Project partners demonstrate close industry-academic collaboration
- The innovation has an economic impact in the pharmaceutical industry in Ontario and Quebec
- The projects show a high potential to be commercialized and to have a good return on investment for the project partners
- R&D projects must leverage the unique capabilities of the academic team and be non-competitive with Ontario and /or Quebec private sector capabilities

Participants must cooperate and provide project outcome metrics, annually at a minimum and all applicants must be in good financial and reporting standing with both OCE and CQDM.

Intellectual property arising from the project will be managed in accordance with the Agreement.

Licensing Policy

IP generated under this funding program will belong to the inventors and their affiliated research entities. A non-exclusive license option (royalty-free) will be granted to the CQDM industrial sponsors for the use of the results for R&D purposes only. If background IP is needed to use the results, a non-exclusive license option to use the background IP will also be granted to the CQDM industrial sponsors. In this case, a financial consideration for the use of the background IP could be negotiated between the parties. The CQDM industrial sponsors will have no right to commercialize the results or the background IP.

A research agreement must be signed between CQDM, OCE and all the research entities involved in the project within three months following the final confirmation of funding. The research agreement will include, without limitations, the following aspects:

- A clear description of the project including main steps, milestones, deliverables and the role of each investigator;
- A detailed budget and payment schedule (quarterly) including the portion that will be allocated to each research entity;
- A commitment from all the research entities and the investigators involved in the project to perform the research;
- The main terms and conditions of the licence option in favour of the CQDM industrial sponsors for the use of the results generated by the project (and background IP, if necessary) for research and development purposes;
- Basic representations and warranties by the research entities including the required rights, consents and/or approval to perform the research project;
- Disclosure and publication requirements;
- Confidentiality obligations.

Monitoring of Funded Projects

For all funded projects, a project manager must be identified by successful applicants. This person will be responsible for co-ordination of financial reports (quarterly) and scientific reports (semi-annually). CQDM will monitor the progress of the project, and continuation of funding will be dependent on satisfactory progress against agreed milestones and budget.

This program is designed for researchers who are interested in establishing closer links with the pharmaceutical industry. In that respect, all funded projects will be assigned mentors from the pharmaceutical sector with experience in the drug discovery and development process. Mentors are senior scientists from CQDM's industry sponsors who provide expertise and access to useful resources. Their role is to ensure that the project is progressing well and that it remains aligned with the industry's requirements in the drug R&D process.

Benefits for Project Partners

Companies:

- Access new talent and established academic researchers
- Identify innovative, marketable solutions to current industry challenges
- Gain affordable short-term skilled labour
- Increase productivity and revenue
- Gain exposure for company and brand

Academia:

- Access exciting innovation challenges and conduct cutting-edge research
- Increase visibility of your team in both academic and industry research environments
- Create intellectual property
- Establish relationships with industry firms

Students:

- Gain real-world experience
- Enhance skills through R&D training and development
- Connect with established companies
- Use knowledge and fresh ideas to solve industry innovation challenges

How to apply

OCE and CQDM jointly call for applications for the Ontario-Quebec R&D Challenge and invite qualified applicants to prepare an application with assistance from an OCE Business Development Manager.

Applicants are required to submit an application through OCE's Management Information System (MIS) along with a signed letter of industrial commitment which must include the following:

- Support for and agreement with the proposal
- Reasons for being involved in the collaboration
- Anticipated benefits from the project outcomes
- Effort required to exploit the results in Ontario
- Benefits to the Ontario and Quebec economies and/or healthcare delivery and the relevant time frame
- Anticipated interaction of industry personnel with the university researchers
- The contribution to the direct costs of the research (cash and in-kind)
- In the case of a small company, it is recommended that a company profile be included

The OCE application will be initiated by an OCE Business Development Manager in MIS. The application template will be available in the OCE MIS system.

Timelines

<u>Date</u>	<u>Application steps</u>
October 28, 13	Call for initial application
November 28 th , 13	Ontario-Quebec Partnering Event
January 6, 14	Initial application due for submission (including a signed form and a letter of industrial support)
January 27, 14	A joint panel (OCE, CQDM, industry experts) reviews the applications
January 29, 14	Selected applicants are notified and invited to submit full application
February 24, 14	Final application due for submission (including updated application and term sheet)
February 26, 14	Final application submitted for Scientific Peer Review Risk analysis to be performed in parallel (CQDM)
March 31, 14	Advisory Scientific Board reviews and recommends to CQDM Board of

	Directors
April 17, 14	CQDM Board of Directors makes final recommendation
April 20, 14	OCE IRP committee reviews and approves qualified applications
April 28, 14	OCE and CQDM jointly notify the applicants
After August 1st, 14	Project starts

Decision-Making Process

The application stage is a two-step process. Applicants submit an initial application which will be reviewed by a joint panel comprising OCE and CQDM members as well as industry experts. The panel selects only qualified applications to proceed and submit a full application. The scientific evaluation of the full proposals will be performed by an International Scientific Peer Review committee totally external to OCE and CQDM. The following criteria will be used for the evaluation:

- Scientific excellence
- Creativity and innovation
- Competitiveness in the scientific field of the proposal
- Feasibility to execute the project within time and budget allocated
- Clear, well-defined deliverables and milestones
- Potential of applications in drug research:
 - immediate impact on drug discovery or development
 - capacity to address important unmet needs
- Track record of the participants (principal investigator and co-investigators)
- Multidisciplinary and multi-organizational aspects of the research candidates
- Complementarity between partners

After the scientific peer review, the applications are provided to the OCE/CQDM Advisory Scientific Board who will present their recommendations to the CQDM Board of Directors. The CQDM Board of Directors makes their final selection and submits for approval to the OCE/IRP committee.

OCE and CQDM jointly notify the applicants whose project has been awarded.

Risk Assessment

In parallel, upon submitting the final application for Scientific Peer Review, OCE and CQDM will evaluate aspects linked to intellectual property, potential ethical problems, corporate information (for private companies) as well as any potential risks that could jeopardize the successful achievement of the research project. Furthermore, given that this funding program implies large scale projects oriented towards applicable results that will require significant multidisciplinary resources, the project management aspect will also be an important criteria in the evaluation.

Terms and Conditions

By submitting the application you agree to the following terms:

1. Agreement

The successful grant recipient, partners, CQDM and OCE will enter into an Agreement (the “Agreement”) prior to the commencement of the project. This Agreement will contain all the terms and conditions which govern the relationship of the parties and the operation of the project.

2. Term of Grant

The grant will be held to the terms and conditions outlined in the Agreement.

3. Start Date

Successful Program grant recipients are expected to commence their project within 90 days of award acceptance in accordance with the Agreement. Therefore the Agreement must be fully executed within 90 days of the award.

4. Approved use of Grant

Grant may only be used for work as outlined in the approved application specifically adhering to the Agreement.

5. Reporting

Reporting contained in the Agreement will be governed by terms related to continued disclosure and reporting obligations including but not limited to the following:

- Submission of a financial, milestone and metrics report outlining the project progress as well as a final report at project completion.
- During the term of the project and for a period of seven years thereafter, program recipients must keep accurate and complete records of the activities related to the funded demonstration project. Any records required to be maintained pursuant to this Agreement are subject to the *Personal Information Protection and Electronic Documents Act (Canada) (PIPEDA)* as it relates directly to, and is necessary for, the program. Information can be found on the CQDM [website](#) or the OCE [website](#).
- During the five years following the completion of the award, CQDM/OCE may collect information on impacts and outcomes resulting from the grant funding, such as new or

enhanced products and processes, intellectual property generated, new customers, new or increased sales, market capture, and other significant outcomes.

6. Intellectual Property

Intellectual property developed during the project will follow the Agreement. This should include scenarios such as the generation of new IP as a result of the award. An IP ownership agreement between the project partners must be in place prior to execution of the Agreement.

7. Acknowledging the Funding Agencies

All publications, presentations and public messages arising from this project must acknowledge the support of CQDM and OCE.

8. Public Information

CQDM and OCE reserve the right to publish and/or disseminate non-confidential information regarding its grants. As a public body, CQDM and OCE are regulated by and Personal Information *Protection and Electronic Documents Act (Canada) (PIPEDA)*. As such, CQDM/OCE will not communicate personal data of supported grant recipients to anyone outside of CQDM/OCE's organization.

9. Changes and Termination

Award recipients will be expected to achieve the milestones of the project as outlined in the application. Any substantial changes must be approved by CQDM/OCE and remain consistent with the overall intention of the approved award. CQDM/OCE must also be notified if the project is terminated by any of the partners. Failure to complete all required documentation may result in the grant repayment and the company being deemed ineligible to apply for future funding from CQDM/OCE.

To apply to the Ontario-Quebec R&D Challenge Program contact your Business Development Manager:

OCE: John Fielding, Business Development Director: john.fielding@oce-ontario.org

CQDM: Judith Caron, Director of Programs, CQDM: jcaron@cqdm.org or Helen Loughrey, Sr. Director Scientific Affairs, CQDM: hloughrey@cqdm.org

For more information about the program contact:

OCE: Nicole Mihai, Program Manager: nicole.mihai@oce-ontario.org

CQDM: Judith Caron, Director of Programs, CQDM: jcaron@cqdm.org or Helen Loughrey, Sr. Director Scientific Affairs, CQDM: hloughrey@cqdm.org