# Program Details

## Developing Medicines through Open Science (DMOS)

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## Background

Conscience is a non-profit organization committed to advancing drug development in areas of unmet medical needs by leveraging open science and artificial intelligence. Our inaugural funding was provided by the Government of Canada through the Strategic Response Fund (formerly Strategic Innovation Fund). We work in close partnership with the Structural Genomics Consortium.

Our **Developing Medicines through Open Science (DMOS) program** provides financial support and collaborative opportunities for preclinical and clinical drug development, with a focus on addressing areas of unmet medical needs.

### About DMOS

This program aims to foster collaborations that undertake preclinical and clinical work to develop novel drug candidates addressing unmet medical needs, establish proof of concept (POC) for an open science path to drug development, and further translate innovations into accessible medicines, generate economic activity, and support small and medium-sized enterprises (SMEs) in Canada.

With total funding of $15M, this program supports projects focused on life-threatening or severely debilitating diseases that have demonstrated strong target validation and tractability to enable clinical proof of concept and undertake either IND-enabling preclinical studies or human safety and efficacy studies.

### Conscience: What Sets Us Apart

Conscience differentiates itself by promoting open science and stimulating the Canadian economy. To align with this focus, **all applications must involve at least one Canadian SME and demonstrate alignment with our Guiding Principles.**

Our funding model is milestone-driven and reimbursement-based, ensuring financial support is tied to project achievements. Our application process and approach to

grant management are highly interactive and collaborative, including during the Letter of Intent (LOI) and proposal phases. Therefore, applicants might receive feedback on their submissions and may be requested to make changes. We aim to collaborate closely with grantees throughout the project, providing scientific support and working together to address any challenges. Additionally, we foster networking and collaboration opportunities and adhere to an Open Science Policy to promote shared knowledge and innovation.

## Section 1 - Scope

To be considered for support, applications must address an unmet medical need and be committed to developing accessible medicines. The project must fall within Technology Readiness Levels (TRLs) 2 to 7.

## Section 2 - Funding Structure

The DMOS funding period is 2 years, with the possibility of an extension. Funding is milestone-driven and reimbursement-based. **We will cover between 10% and 50% of eligible costs per Canadian participant*, with maximum total funding per project depending on the project's TRL, as follows:**

| **Project's TRL Category** | **Maximum funding from DMOS per project** |
|---|---|
| Lead Identification (TRL 2-3) | $200,000 |
| Lead Optimization (TRL 3-4) | $550,000 |
| IND enabling preclinical development (TRL 4-6) | $1,600,000 |
| Early to mid-stage (Phase 1-2) clinical projects (TRL 7) | $2,000,000** |

*Distribution of funds between eligible participants is to be confirmed with Conscience at the time of awarding.

**The indicative funding amount for TRL 6-7 projects is up to CAD 2.0M. Additional funding may be considered where the proposed scope, technical complexity, or regulatory requirements clearly justify a higher budget. Any such consideration will be based on the project's documented needs and alignment with program objectives.

Successful applicants must secure the remaining project costs through demonstrated matching funds. Please note that for SME applicants, 25% of the total project cost must come from non-Canadian government sources. It is also important to note that the Strategic Innovation Fund, which supports the DMOS program, operates as a **reimbursement fund** rather than a disbursement fund. This means we do not hold the funds required to reimburse project expenditures directly.

Each quarter, when the Ultimate Recipient (i.e. grantee) submits a claim form to our team, we will review and prepare it for submission to the Government for analysis. Funding will be provided to Conscience only after Government approval. Subsequently, we will request invoices from each Project Participant for their respective approved amounts and reimburse the expenses.

**Please note that Conscience will charge a 5% admin fee and hold up to 10% of the claim amount from each reimbursement. A detailed guide outlining eligible and ineligible expenses will be provided to applicants selected to submit a full proposal.**

## Section 3 - Eligibility Criteria

To be eligible for DMOS funding, applicants must:

- Propose a preclinical or clinical research plan in an area of unmet medical need with a commitment to developing accessible medicines.
- Conduct research at Technology Readiness Levels (TRLs) 2-7.
- Include at least one Canadian SME.
- Provide proof of matching funds to cover the remaining cost, as Conscience will fund a maximum of 33% to researchers, academic institutions and large enterprises and 50% to SMEs.
- Clearly demonstrate how the project will directly advance Conscience's mission in line with our Guiding Principles and Open Science Policy**.**

## Section 4 - Application Process

The DMOS application process comprises two essential phases: **Letter of Intent (LOI) and Proposal.** To start the process, applicants must answer a few preliminary

questions and submit a one-page LOI, which will be reviewed. Those selected will be invited to submit a full Proposal. **Both the LOI and Proposal applications must be submitted via our online grants management portal, accessible through the link on our website.**

The LOI stage is crucial to our evaluation process. **Only LOIs that fit within our scope, meet our eligibility criteria, and demonstrate alignment with our Guiding Principles and Open Science Policy will be invited to proceed to the Proposal stage.** Proposals will be evaluated by a panel of scientific reviewers and must outline milestones and go/no-go criteria at six-month intervals.

Please note that **our review process is interactive**, i.e., applicants may receive feedback requesting changes to their application. Additionally, Conscience will collaborate with applicants to determine the project's appropriate Technology Readiness Level (TRL). The TRL established during the LOI review will be used for the full proposal application. We adopt a collaborative approach, aiming to work with applicants to refine their proposals.

**If the project is selected for funding, applicants are required to sign the grant agreement within the timeframe specified by Conscience and must participate in a mandatory virtual onboarding meeting. Failure to complete either requirement within the specified timeframe will result in withdrawal of the funding offer.**

## Section 5 - Review Criteria

Our review process is based on the following criteria:

- **Scope Fit:** Is the proposed project within the program's scope? Does it aim to tackle an unmet medical need?
- **Scientific Merit/Rationale:** Does the proposed project fall into technology readiness levels 2-7, as explained below? Is the proposed experimental model and approach reasonable and feasible within the proposed timeline? Does the application include strong preliminary data to support the hypothesis/aims? Have applicants included the risks and limitations of the proposed project and how they plan to address them?
    - TRL Stages that would be considered for funding:

- **Lead Identification (TRL 2-3)**: These projects will translate initial chemical starting points into potent, selective, and cell-permeable ligands for novel targets of strategic priority.
- **Lead Optimization (TRL 3-4)**: These projects will use iterative medicinal chemistry to interrogate structure-activity relationship profiles and to identify and optimize lead compounds with promising drug-like properties in suitable in vitro assays and animal models.
- **IND enabling preclinical development (TRL 4-6)**: These projects will seek to generate (i) the GLP-compliant preclinical evidence base for regulatory approval of clinical trials—e.g., required animal pharmacology, toxicology, and efficacy studies; manufacturing data (formulation/composition, stability, manufacturing process, controls); and (ii) study protocols for proposed open science-based clinical trials.
- **Early to mid-stage (Phase 1-2) clinical projects (TRL 6-7):** These projects will seek to demonstrate clinical utility and feasibility in an appropriate operational environment and generate (i) human safety data and (ii) proof of concept for human efficacy. Such clinical studies can include dose-ranging and safety studies in healthy individuals, and small-scale efficacy studies in patients to determine therapeutic doses and report adverse events.

- **Quality of the team and research environment:** Does the team demonstrate expertise in the area of research? Is the research facility appropriate for the proposed work?
- **Robustness of the drug development plan:** Does the proposed study offer an innovative and impactful drug development plan? Does the proposal have regulatory-approved endpoints for a successful proof-of-concept? Have the applicants included a plan to develop the therapeutic further if the study produces positive outcomes?
- **Alignment with Conscience's guiding principles:** Does the applicant demonstrate how the project will directly advance Conscience's mission in line with our Guiding Principles and Open Science Policy? Does the application and list of milestones contain an appropriate plan for sharing the data?

# Section 6 - Reports and Assessment Criteria

If a grant is awarded, grantees must fulfill the following requirements. The templates for reports will be provided by Conscience:

- **Milestones Report:** These reports must be submitted **every six months** according to the schedule approved by Conscience at the time of awarding. These reports should detail progress on project milestones and address any go/no-go criteria established with Conscience.
- **Output Sharing and Impact Reporting:** Project teams are required to share relevant data and outputs in accordance with an agreed Output Management and Sharing Plan, finalized before grant agreements are signed, and to submit a project success story using the Conscience-provided template.
- **Claims report:** Conscience operates on an annual schedule with **four claim periods, one each quarter.** Ultimate Recipients are responsible for submitting reimbursement claims within 30 days after the end of each claim period. We anticipate receiving payment from the Government approximately 120 days after each claim period ends. Following this, we will request invoices from the Ultimate Recipient and all claiming project participants. Conscience will process and pay these invoices within 15 days of receipt. Additionally, Conscience may request additional documents from the Ultimate Recipient per the audit requirements. Failure to comply with the audit may result in reversal of payments.

| Claim Period | Deadline for Reimbursement Claims | Estimated Date of Invoice Request to Project Lead |
|---|---|---|
| April 1 to June 30 | July 30 | October 30 |
| July 1 to September 30 | October 30 | January 30 |
| October 1 to December 31 | January 30 | April 30 |
| January 1 to March 31 | April 30 | July 30 |

Please note that Conscience's funding is milestone-based. Therefore, if a project fails to meet milestones on schedule or go/no-go experiments result in a no-go decision,

Conscience reserves the right to terminate the project. In such instances, reimbursement will only cover costs incurred up to the date of the termination letter. Additionally, grantees must account for all expenditures under the grant. Only costs that align with the approved research project or are incurred with prior approval for changes will be reimbursed. **A detailed guide outlining eligible and ineligible expenses will be provided to applicants selected to submit a full proposal.**

- **Annual Financial Statement**: Each grantee must submit an audited financial statement within six months of the fiscal year end on an annual basis.
- **Invoices**: Grantees must submit all relevant invoices eligible for reimbursement each quarter along with the claims report.
- **Timesheet**: Grantees must submit a timesheet detailing staff hours each quarter in conjunction with the claims report.
- **Events**: Conscience may invite applicants to attend events to present the project's progress. Travel expenses for such events will be reimbursed in accordance with the eligible expenses criteria.
- **Applicant Site Visits**: Conscience may request to visit research sites to observe project progress. These visits are optional, and grantee consent will be sought in advance.

## Section 7 - Confidentiality

Conscience will handle all Letters of Intent (LOIs) and proposals with the highest level of confidentiality, implementing reasonable measures to protect this information from unauthorized disclosure to third parties not involved in the grant review process. However, **once projects are awarded, they must comply with our open science policy.**

During the review process, if Conscience or any member of its scientific review panel is required to disclose confidential information due to a legal request, Conscience will inform the applicant as soon as reasonably possible.