Program Details
Developing Medicines through Open Science (DMOS)

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

Our **Developing Medicines through Open Science (DMOS) program** offers financial support and collaborative opportunities for preclinical drug development, focusing on areas of market failure such as orphan diseases and antimicrobial resistance.

About DMOS
This program aims to foster collaborations that undertake preclinical work to develop drug candidates for ignored diseases by the pharmaceutical industry, establish proof of concept (POC) for an open science path to drug development, and further translate innovations into affordable medicines, generate economic activity, and support small and medium-sized enterprises (SMEs) in Canada.

With total funding of $15M, of which $5M is allocated to the inaugural round, this program will support projects that (1) undertake preclinical research on life-threatening or severely debilitating diseases currently dismissed by the pharmaceutical industry and (2) demonstrate strong target validation and tractability.

Conscience: What Sets Us Apart
Conscience differentiates itself by targeting areas of pharmaceutical market failure, promoting open science and stimulating the Canadian economy. To align with this focus, **all applications must involve at least one Canadian SME and demonstrate commitment to our open science policy. Our funding model is milestones-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, offering 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

Conscience's mission is to address the lack of effective treatments for diseases with market uncertainty or limited size, such as, but not limited to, orphan diseases and antimicrobial resistance.

To be considered for support, applications must address a lack of therapies in disease areas with a limited number of active pharmaceutical programs. The project must fall within Technology Readiness Levels (TRLs) 2 to 6.

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**
Chemical starting point to chemical probe projects (TRL 2-3)	$200,000
Chemical probe to lead drug candidate projects (TRL 3-4)	$550,000
Lead to IND/CTA enabled drug candidate (TRL 4-6)	$1,600,000

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

Successful applicants must secure the remaining project costs through demonstrated matching funds. Please note that for SME applicants, 25% of matching funds should come from non-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 research plan in an area of pharmaceutical market failure.
- Conduct research at Technology Readiness Levels (TRLs) 2-6.
- 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 academics and 50% to SMEs.
- Commit to our 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 a commitment to our open science policy will be invited to proceed to the Proposal stage.** Our open science policy can be reviewed here. 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 must sign the grant agreement within the timeframe specified by Conscience and participate in a virtual onboarding meeting.

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 or discover and advance therapeutics for a dismissed disease, such as an orphan disease?

- **Scientific Merit/Rationale:** Does the proposed project fall into technology readiness levels 2-6, 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:
        - **Chemical starting point to chemical probe projects** (TRL 2-3): These projects will translate initial chemical starting points into potent, selective, and cell-permeable ligands for novel targets of strategic priority.

- **Chemical probe to lead drug candidate projects** (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.
- **Lead to IND/CTA enabled drug candidate** (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.

- **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?
- **Commitment to Conscience's open science policy:** Does the applicant demonstrate commitment to Conscience's 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.

- **Annual Progress Report:** This report is required once a year in conjunction with the 2nd and 4th milestone report and must include relevant data and updates on outcomes such as publications, conference presentations, and additional funding. **It should also include results to be made public in accordance with our open science policy.** Additionally, Conscience may request a virtual call to discuss progress at any stage of the project.

- **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.**

- **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.