CONSCIENCE

ANNUAL REPORT

2025

Photo by Jesse Milns for Conscience

conscience.ca

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A Message from Our CEO

Peng Fu
Chief Executive Officer

At Conscience, our mission is to accelerate drug development and its enabling innovations through open science. In collaboration with our academic and industry partners, we are pioneering alternative frameworks that leverage the efficiency of open science to address unmet medical needs — particularly in areas underserved by conventional approaches.

The past two years since our inception have been defined by a critical transition: moving from concept to execution. We have funded our first cohort of projects through the Developing Medicines through Open Science (DMOS) program, and we are rapidly building the operational momentum to scale its delivery. Recognizing a growing need across the ecosystem, we also launched new advisory services to provide public and private sector organizations with the practical, hands-on guidance required to implement open science frameworks successfully.

Simultaneously, we significantly expanded the CACHE Challenges — our standard-setting, community-sourced computational hit-finding competition that draws participants and partners from around the globe. With the recent launch of our eighth challenge, CACHE has made a recognized impact in guiding the development of computational and AI-enabled methods for drug discovery.

Today, artificial intelligence and computational methods are evolving faster than our collective ability to validate them. The industry lacks the shared benchmarks and trusted intermediaries needed to keep pace. We helped launch the BEACON consortium precisely to address this gap, establishing benchmarking and critical assessment as essential scientific infrastructure. Conscience

acts as the neutral forum where groundbreaking innovation can be assessed, compared, and applied responsibly.

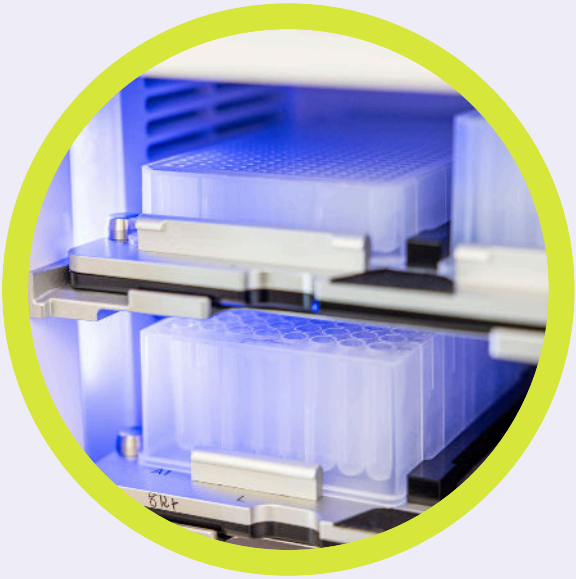
Our open science programs now span the entire drug development continuum, from early-stage discovery straight through to clinical trials and patient care. We are not here to displace traditional models of drug development; we are here to provide a faster, complementary approach that is built to scale.

With a solid foundation, deep community trust, and clear demand for our work, Conscience is ready for its next chapter. Our focus now shifts entirely to scaling our impact, deepening our strategic partnerships, and translating early momentum into measurable outcomes. We are actively seeking partners to join us in this mission, and we look forward to shaping the future of drug development, together.

Peng Fu
CEO of Conscience

About Conscience

Conscience is a non-profit focused on enabling drug discovery and development in areas where open sharing and collaboration are key to advancement towards accessible treatments. It does so by encouraging and funding the open sharing of knowledge and tools, the use and improvement of artificial intelligence, and the development of policies that break down barriers of traditional drug development.



Powered by a network that includes academics, industry, technologists, policy experts, and public support, Conscience seeks to drive innovation by turning drug discovery and development into a team sport. Its open science model brings unique value in areas where market solutions are limited, offering alternatives to traditional intellectual property models to make new accessible medicines so no one is left behind. Through key initiatives, such as its, CACHE (Critical Assessment of Computation Hit-finding Experiments) Challenges, DMOS (Developing Medicines through Open Science) program, and Advisory Services, Conscience is accelerating the path to treatments for those who need them most.

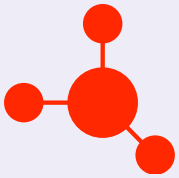
Together, there's something science can do.

Photos by Jesse Milns for Conscience

2025 Highlights

A new CEO brings fresh vision

In spring 2025, Peng Fu joined Conscience as CEO, bringing deep expertise in biotech, finance, and law, and a new perspective on the organization's strategic direction.



CACHE Challenges advance computational drug discovery

CACHE Challenge 7 launched in 2025, focusing on a potential contraceptive target affecting sperm mobility, while the results of CACHE Challenges 3 and 4 were published, reinforcing the value of community-driven benchmarking in early-stage drug discovery.

Symposium on Open Drug Discovery

March 2025 saw 126 participants from academia, industry, and nonprofit sectors convene in Montreal for a two-day symposium of panels, workshops, and discussions, showcasing how open science is driving the discovery of new medicines.

Launch of Advisory Services

In June 2025, Conscience introduced its Advisory Services, including the Open Science Advisory Services program and in-house Consultation Services. The first major consultation produced a foundational resource for establishing sustainable, community-driven open science principles and operational practices.

Building BEACON for rigorous benchmarking

Throughout 2025, Conscience partnered with leading benchmarking initiatives to design a new consortium. BEACON (The Benchmarking, Evaluation, and Assessment Consortium for Science), will focus on strengthening critical assessment as scientific infrastructure and ensuring innovation is paired with transparency, accountability, and trust.

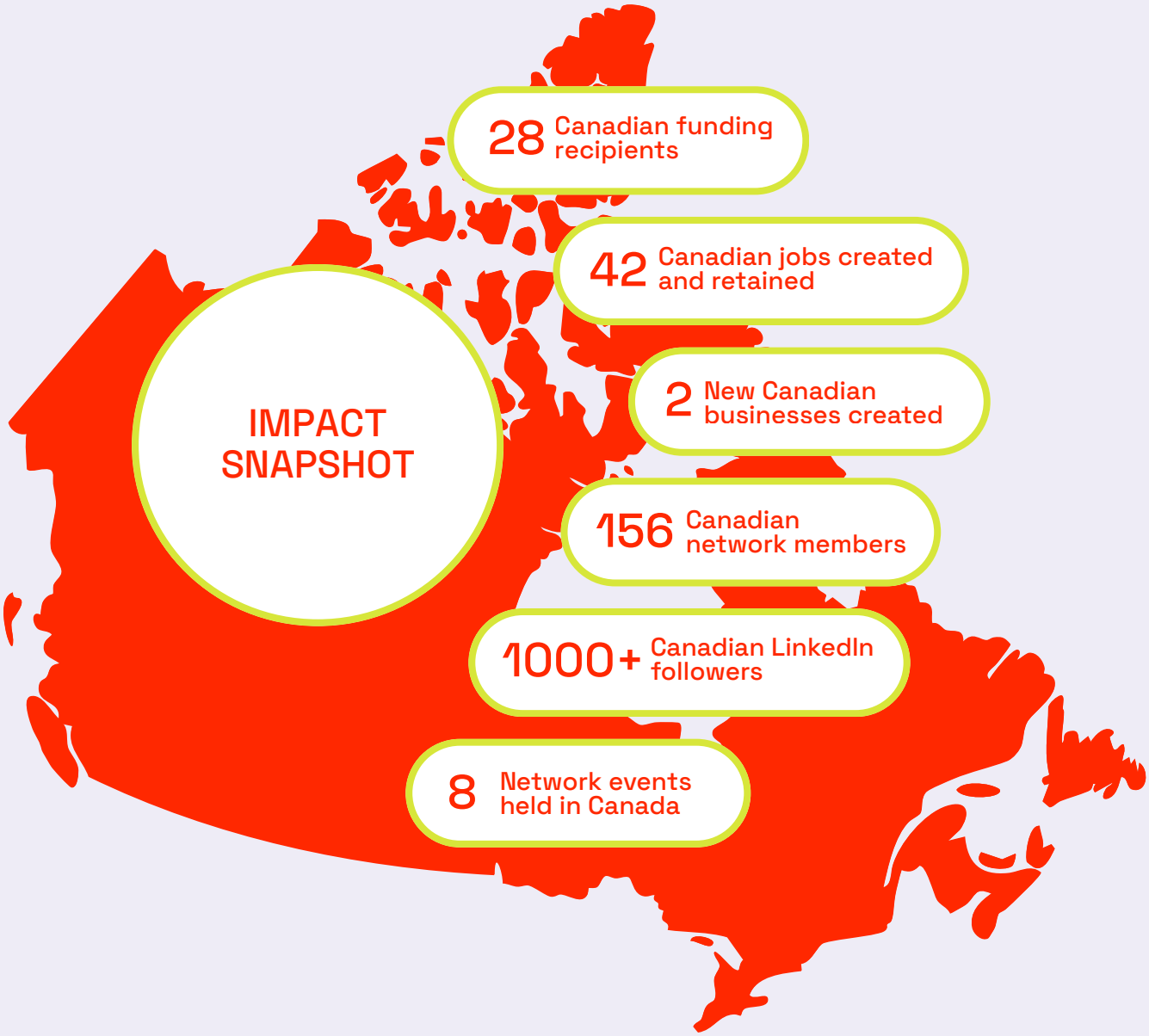
DMOS program funds first projects

Early in the year, the Developing Medicines through Open Science (DMOS) program committed $2.5 million across three preclinical projects targeting rare neuromuscular disease, pediatric brain cancer, and rare liver disease. These projects have already reached major milestones and attracted significant international funding, demonstrating open science in action.

Advancing Canadian Innovation in Drug Development

Conscience is proud to contribute to Canada's life sciences ecosystem through programs funded by the Government of Canada's Strategic Response Fund (formerly Strategic Innovation Fund). While our collaborations extend globally, our funding and activities are focused on supporting Canadian SMEs, researchers, and nonprofit organizations, helping them innovate, collaborate, and grow.

Since our inception, Conscience's programs have had measurable impact across Canada.



Supporting Canadian SMEs

Canadian startups and computational drug discovery companies like Molecular Forecaster are repeat participants in the CACHE Challenges, and are actively involved in collaborative projects funded through Conscience programs.

Boosting Canadian research leadership

Researchers from Canadian universities, companies, and institutions are playing key roles in collaborative projects funded through our programs, helping advance the frontiers of open science in drug development.

Building Canada's open science community

Events like the Conscience Symposium on Open Drug Discovery bring together Canadian researchers, companies, and patient organizations with international collaborators, strengthening the community and showcasing Canada's leadership in open science.

By creating jobs, supporting businesses, and connecting Canadian innovators to global research networks, Conscience is helping build a stronger, more resilient life sciences ecosystem — one that benefits researchers, companies, patients, and the broader public.

Canada

"...our government is proud to support [Conscience] as part of our continued commitment to building a strong and resilient sector that will protect Canadians' health and safety for generations to come."
— The Honourable François-Philippe Champagne, former Minister of Innovation, Science and Industry.

Our Programs

At Conscience, all of our programs are united around one idea, namely that open science and collaboration can accelerate the development of new medicines while making research more transparent, reproducible, and equitable.

Through our programs, we bring together academic researchers, industry partners, nonprofits, and funders to support new approaches to drug development, facilitate open science collaborations, and share practical expertise. Some of our initiatives focus on advancing scientific methods through benchmarking and community-driven challenges, while others support real-world research projects and help organizations design and implement open science strategies.

Together, these efforts help build the infrastructure, partnerships, and practices needed to make open science a viable and scalable model for biomedical research.

CACHE Challenges

Global benchmarking competitions to advance computational hit finding in drug discovery

Developing Medicines through Open Science

Supporting collaborative, open science drug development projects targeting unmet medical needs

Advisory Services

Helping organizations design, implement, and sustain open science approaches in research

CACHE Challenges

CATALYZING COMPUTATIONAL DRUG DISCOVERY THROUGH OPEN BENCHMARKING

The CACHE (Critical Assessment of Computation Hit-finding Experiments) Challenges are open, community-driven competitions designed to promote innovation and accelerate early-stage drug discovery. Researchers from academia, industry, and nonprofits deploy their best computational methods to predict new potential drug molecule starting points. CACHE then tests those predictions experimentally in the state-of-the-art labs at the Structural Genomics Consortium (SGC) to generate objective evidence on the performance of AI and computational methods. Findings are shared publicly to advance the field by fostering collaboration among industry, SMEs, and academia.

CACHE CHALLENGE SGC

CACHE runs structured, transparent competitions that directly test how well computational predictions perform in the lab. By centralizing compound purchasing and testing, using standardized experiments, and openly sharing results, the program produces clear, comparable evidence on different approaches while helping reduce early-stage discovery risk.

This shared infrastructure supports open data across the full hit-finding process, gives computational researchers access to high-quality experimental feedback, and fosters collaboration among academic groups, SMEs, industry, and funders.

"The strength of CACHE lies in giving the community a clear, fair metric to compare different computational hit-finding approaches, backed by robust and independent experimental testing."
— Matthieu Shapira, Head of computational chemistry, protein bioinformatics, and data management at SGC Toronto

Photo by Jesse Milns for Conscience

Fostering Global Collaboration

CACHE continues to attract a diverse and growing global community of participants. Teams from academia, industry, and nonprofit organizations across more than 23 countries and 100 institutions contribute a wide range of computational approaches and scientific perspectives.

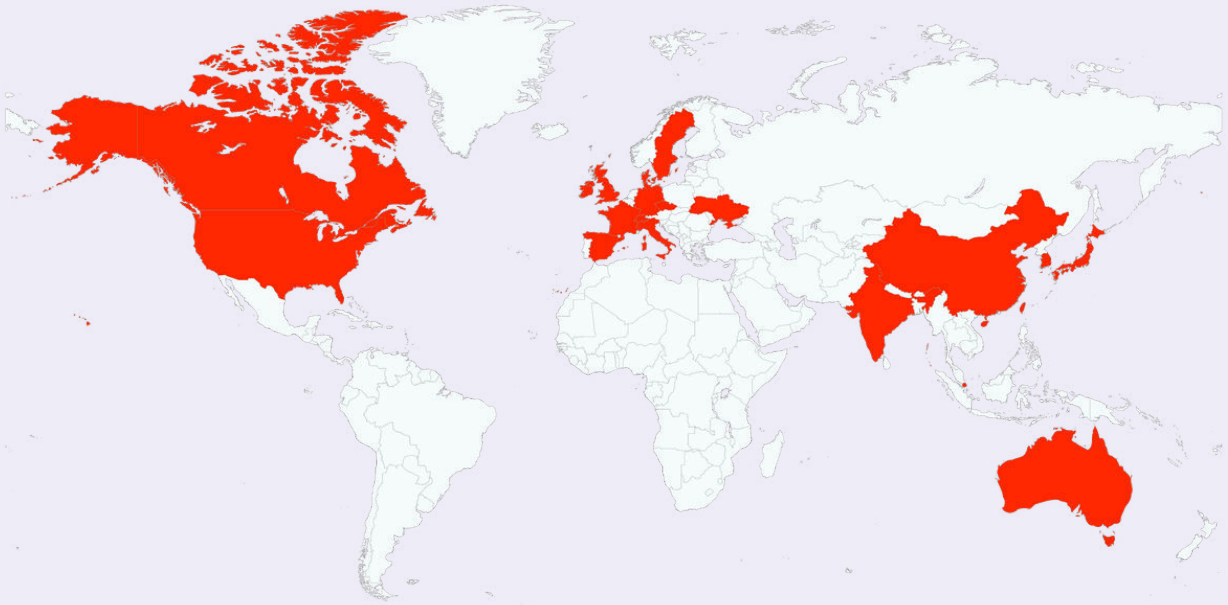
7 challenges launched

169 teams

23 countries

100 institutions/ organizations

30% private sector participants



CACHE is guided by an international Governing Board that brings together leaders from industry and the research supply ecosystem. The Board includes representatives from Boehringer Ingelheim, AstraZeneca, UCB, Bayer, and chemical supplier Enamine. Their collective expertise helps shape challenge design, ensure scientific rigor, and connect CACHE to the needs and perspectives of the broader drug discovery community.

CACHE in Action: Progress Across the Challenges

The CACHE portfolio continued to expand in 2025, with multiple challenges reaching key milestones across a diverse set of biological targets. Together, these efforts reflect steady progress toward building a robust evidence base for computational hit-finding while maintaining a consistent commitment to open data and experimental validation.

Challenge	Target	Status
CACHE 3	ADPr site of the SARS-CoV-2 Nsp3 macrodomain (Mac1), a target for coronavirus drugs	Completed
CACHE 4	TKB domain of the E3 ligase CBLB, a cancer immunotherapy target	Completed
CACHE 5	MCHR1, a G-protein coupled receptor implicated in food intake regulation, sleep, anxiety, depression, and learning	In progress - Round 2 experimental validation
CACHE 6	SETDB1, a multi domain protein involved in epigenetic mechanisms and a cancer immunotherapy target	In progress - Round 1 experimental validation
CACHE 7	PGK2, a kinase and a potential contraceptive drug target affecting sperm mobility	In progress - Round 1 predictions

Beyond the Competition: Insights from Returning CACHE Participants

The CACHE Challenges provide multiple benefits for early-stage drug discovery and the companies and researchers that participate in them. While hit-finding is the ultimate goal, the impact of participating in a challenge goes far beyond the competition itself, evidenced by the fact that some teams keep coming back for more and have participated in multiple challenges so far.

A perfect example is Molecular Forecaster, a computational chemistry company that helps businesses make smarter drug design decisions. The team has participated in all seven CACHE Challenges launched to date.

‘We were drawn to participate in the first CACHE Challenge for several reasons, including the fact that this is a Canadian initiative. We continue to participate because the challenges are an excellent opportunity for our junior scientists to get valuable hands-on experience working with complex, real-world scientific problems. We also benefit from being able to share our data and access the data generated by others. For us, the lessons of CACHE go far beyond winning or losing; they are opportunities to learn and collaborate.”

— Josh Pottel, CEO, Molecular Forecaster

“...now is the right time and the right place for CACHE as open science competitions like this can lead to greater opportunity for economic balance. The CACHE Challenges also allow for benchmarking in the field, which then leads to sharing and greater adoption of best practices. Plus, the competitive edge of the competitions can be beneficial and I’ve found that it encourages participation.”
— Artem Cherkasov, Professor at the University of British Columbia
Has participated in three challenges

“By continuously participating in challenges, we have been able to explore and refine our own workflows while learning from the varied methodologies of other teams. We expect that the valuable targets and resulting datasets provided by CACHE will play a key role in advancing more effective virtual screening and drug discovery strategies.”
— Keunwan Park, Principal Researcher at the Korea Institute of Science and Technology
Has participated in four challenges

Photo by Tiah Coxon/Cine-Cast for Conscience

Quantum Leap: From CACHE Participation to Commercialization

QuAccel, a recent spin-out from the Ontario Institute for Cancer Research (OICR), is pioneering the use of quantum computing to accelerate the screening of protein-ligand interactions, offering new possibilities for faster, more accurate early-stage drug discovery.

Hugo Bohórquez, the scientist behind QuAccel, participated in CACHE Challenge 3 with funding support from Conscience for Canadian participants. This involvement allowed him to refine his computational workflows and methodologies in a structured, competitive environment. The independent validation provided by CACHE demonstrated the utility and robustness of his approach, giving OICR the confidence to pursue commercialization and support the spin-out of QuAccel.

CACHE's independent validation of the team's methodologies also played a key role in attracting investment, helping secure a $200,000 first investment from FACIT, an early-stage Canadian biotech investor. Bohórquez notes that this outcome would have been difficult without CACHE's rigorous validation, given the highly specialized intersection of AI and quantum computing.

Through projects like QuAccel, CACHE showcases how open, collaborative competitions can not only advance scientific innovation but also help translate promising research into real-world impact.

"Participating in CACHE Challenge # 3 gave us an objective way to test and refine our approach. That independent experimental validation was critical in demonstrating the real potential of our technology and helped move QuAccel toward commercialization and ultimately supporting our ability to secure early-stage investment."
— Hugo Bohórquez, Senior Research Scientist at the Ontario Institute for Cancer Research

Developing Medicines through Open Science Program

BUILDING A NEW PATH FOR DRUG DEVELOPMENT

Launched in 2024, the Developing Medicines through Open Science (DMOS) program was established to address a critical gap in drug development. In areas of high unmet medical need, such as rare diseases or conditions with limited commercial incentives, promising research often stalls before reaching patients who desperately need new treatments.

DMOS was created to help overcome these barriers by supporting drug development through open sharing and collaboration. By supporting preclinical and clinical research within an open science framework, DMOS brings together researchers, industry partners, and patient communities to accelerate progress toward affordable medicines for life-threatening and severely debilitating diseases.

"Open science has the power to accelerate the discovery and development of new, accessible treatments for Canadians. Through initiatives like the DMOS program, the Government of Canada is supporting innovative collaborations that bring together researchers, businesses, and communities to tackle unmet medical needs and drive economic growth."
— The Honourable Mélanie Joly, Minister of Industry and Minister responsible for Canada Economic Development for Quebec Regions.

"The DMOS program is underscored by our vision of a world where more drug therapies are developed, and these treatments are both accessible and affordable. We believe collaboration is the solution and proudly support projects that undertake research to establish proof-of-concept for an open science approach towards treatments and cures for life-threatening or severely debilitating diseases."
— Anne Fortier, VP, Drug Discovery and Development, Conscience

Delivering Impact through Partnership

With total available funding of $15 million, DMOS supports projects that address diseases with strong target validation and clear pathways toward clinical proof of concept. Initially designed to fund IND-enabling preclinical studies, the program has recently been expanded to include early human safety and efficacy studies. This expansion reflects DMOS's role in demonstrating how open science can be applied across the drug development timeline, while also contributing to economic activity and strengthening Canada's small and medium-sized enterprises.

Partnerships play a key role in the program's impact by expanding funding opportunities and connecting researchers across disciplines. In 2024, DMOS launched a joint call with the **Quebec Consortium for Drug Discovery (CQDM)** to co-fund Quebec-based projects, and partnered with **Brain Canada** to support neuroscience-focused initiatives. Most recently, Conscience announced a collaboration with the U.S.-based nonprofit **Every Cure** to identify new uses for existing medicines. Together, these partnerships strengthen regional and cross-border innovation while advancing open science approaches to traditionally challenging diseases.

EVERY CURE

cqdm

Fondation Brain Canada Foundation

$2.5M AWARDED ACROSS THREE PROJECTS

In its inaugural funding round, DMOS committed $2.5 million across three preclinical projects focused on a rare neuromuscular disease, a form of pediatric brain cancer, and a rare liver disease. These projects are progressing in line with their planned scientific milestones, providing early evidence that open, collaborative approaches can help advance traditionally challenging therapeutic areas.

Major Milestone: DMOS-Funded Project Nominates Lead Development Candidate

In December 2025, a DMOS-funded project reached a pivotal milestone in the fight against a type of pediatric brain cancer. Agora Open Science Trust announced the nomination of M4K2009 as the lead development candidate for its M4K Pharma program targeting Diffuse Intrinsic Pontine Glioma (DIPG), a rare and devastating pediatric brain cancer.

This nomination, which moves the project from discovery into IND-enabling studies, is a major step toward clinical evaluation and eventual treatment of patients. It demonstrates the tangible progress that DMOS-supported projects can achieve in areas of high unmet medical need, particularly in rare pediatric diseases where families have few or no treatment options.

Led by Dr. Peter Sampson with co-investigators Dr. David Uehling at the Ontario Institute for Cancer Research and Dr. Neil Vasdev at the Centre for Addiction and Mental Health, the project exemplifies collaborative open science in action, bringing together partners from academia, industry, and the nonprofit sector.

Read the press release »

AGORA OPEN SCIENCE TRUST

M4K PHARMA MEDICINES 4 KIDS

"Our nomination of M4K2009 represents an important milestone for open science drug discovery. By pooling resources, foregoing patents and secrecy, and instead working openly and collaboratively across institutions with complementary capabilities and expertise, our team has now shown that open science is capable of delivering high-quality, clinically viable candidates, particularly in areas of market failure underserved by traditional proprietary approaches."
— Max Morgan, CEO of Agora Open Science Trust

"Participation in Conscience's DMOS program has strengthened... collaborations by providing dedicated funding at a critical inflection point, as we transition from drug discovery to drug development. Advancing our lead molecule toward human clinical trials is an expensive and resource-intensive process, with few funding mechanisms available to support the IND-enabling studies required for regulatory approval. DMOS support helps de-risk the program by providing the resources necessary to navigate these regulatory requirements and move the project forward effectively."
— Peter Sampson, Principal Investigator

International Recognition: DMOS Recipient Attracts Major European Funding

A project funded by DMOS's inaugural round has since gone on to receive major international support and recognition. Led by Dr. Sonya MacParland at University Health Network, the collaborative translational research project on Primary Sclerosing Cholangitis (PSC) was selected for funding by the European Rare Diseases Research Alliance (ERDERA) in 2025.

The project, named ASCENT-PSC, brings together investigators from Canada and Europe to build advanced preclinical models and data resources to identify and test therapeutic targets for PSC. The selection of this project through a highly competitive international call highlights both the scientific strength and collaborative foundation of work supported through the DMOS program.

This achievement illustrates how DMOS funding can catalyze further investment, amplify impact, and position Canadian researchers at the forefront of global efforts to address rare diseases.

UHN Canada's Hospital

"We are grateful for how the Conscience grant is supporting Primary Sclerosing Cholangitis (PSC) research. PSC is a rare and devastating liver disease with no treatments or cure. This grant enables us to build on work that maps PSC liver cells for pursuing preclinical drug development. With an unwavering commitment to a cure, we believe in the power of an open science approach. We envision a world where a PSC diagnosis comes with a safe and effective treatment, and Conscience's Developing Medicines through Open Science program takes us one step closer."
— Mary Vyas, President, PSC Partners Seeking a Cure Canada

"While rare diseases affect a limited number of people, their effects are devastating to those impacted and their loved ones. That is why our government supports Conscience's expertise through the Strategic Innovation Fund (SIF) to tackle rare diseases to improve access to care and treatments for Canadians. This contribution will help develop drug discovery through open science, and I look forward to the results of these projects."
— The Honourable François-Philippe Champagne, former Minister of Innovation, Science and Industry

Looking Ahead: Expanding Into Clinical Research

In its first year, the Developing Medicines through Open Science program has built a strong foundation for collaborative drug development. With projects hitting key milestones, partnerships broadening funding opportunities, and international recognition growing, DMOS is demonstrating that open science can accelerate the path from discovery to patient treatment.

Building on this momentum, DMOS is expanding its scope to include clinical trials, marking an important evolution in our ability to support the full continuum of drug development. In early 2026, the program will launch its first call for early-phase clinical studies (phase 1 and phase 2), enabling researchers to advance promising therapies through a stage where funding is often scarce, particularly for rare diseases. By supporting the transition from preclinical work to human studies, DMOS aims to give promising new treatments the best chance of reaching patients successfully.

Looking ahead, Conscience remains committed to supporting researchers, strengthening Canada's scientific research ecosystem, and, perhaps most importantly, bringing hope to patients and families affected by devastating diseases.

Advisory Services

MOBILIZING EXPERTISE TO ACCELERATE OPEN INNOVATION

A central focus of Conscience's work is identifying new pathways to bring medicines to patients by embedding open science practices into research and development. While these approaches create significant opportunity, they also introduce practical and strategic challenges. Advancing along this new terrain often requires translating open practices from other sectors into drug development, or developing entirely new models tailored to the life sciences ecosystem.

Conscience's Advisory Services are designed to meet this need. Drawing on deep internal expertise, an extensive network of external specialists, and targeted funding, these services support organizations working at the forefront of innovation. The goal is not only to help individual projects progress, but also to strengthen the broader innovation environment. By centering openness, collaboration, and knowledge sharing, our Advisory Services help ensure that advances achieved today create durable benefits for the field as a whole.

CONSULTATION SERVICES

Conscience's Consultation Services leverage internal expertise to help organizations understand and implement open science practices.

OSAS PROGRAM

The Open Science Advisory Services (OSAS) program provides funding for companies and organizations to hire third-party expertise to advance open-science-aligned innovations.

Consultation Services

Conscience leverages deep-seated internal expertise to help individuals and organizations understand and implement open science practices. These services are designed to bridge the gap between curiosity and execution, providing a roadmap for those who recognize the value of transparency but require guidance on the mechanics of implementation.

Complimentary, one-hour consultations are offered to network members to help organizations identify which open science practices are most relevant to their specific goals. This initial engagement serves as a high-value entry point for innovators to explore how collaborative frameworks can increase the efficiency and reach of their work.

For organizations seeking deeper integration, Conscience provides comprehensive, contract-based consultation. These engagements move beyond theory into practical, high-impact implementation. Expertise is focused on four core pillars:

- **Community building and engagement:** Developing and sustaining the networks necessary for collaborative research
- **Best practices and compliance:** Ensuring that open science activities meet rigorous industry, ethical, and regulatory standards
- **Implementation strategy:** Designing the technical and operational roadmaps required to transition to open models
- **Financial sustainability:** Crafting pricing and financing plans that ensure long-term viability within an open science ecosystem

Empowering the ecosystem

By mobilizing specialized knowledge in open science, Conscience ensures that collaborative R&D is not just an ideal, but a functional and scalable reality for Canadian innovators. Whether through a free initial assessment or a long-term strategic contract, the goal remains the same: to empower the life sciences sector to work smarter, together.

Case Study: Open Science in the Synthetic Cell Community

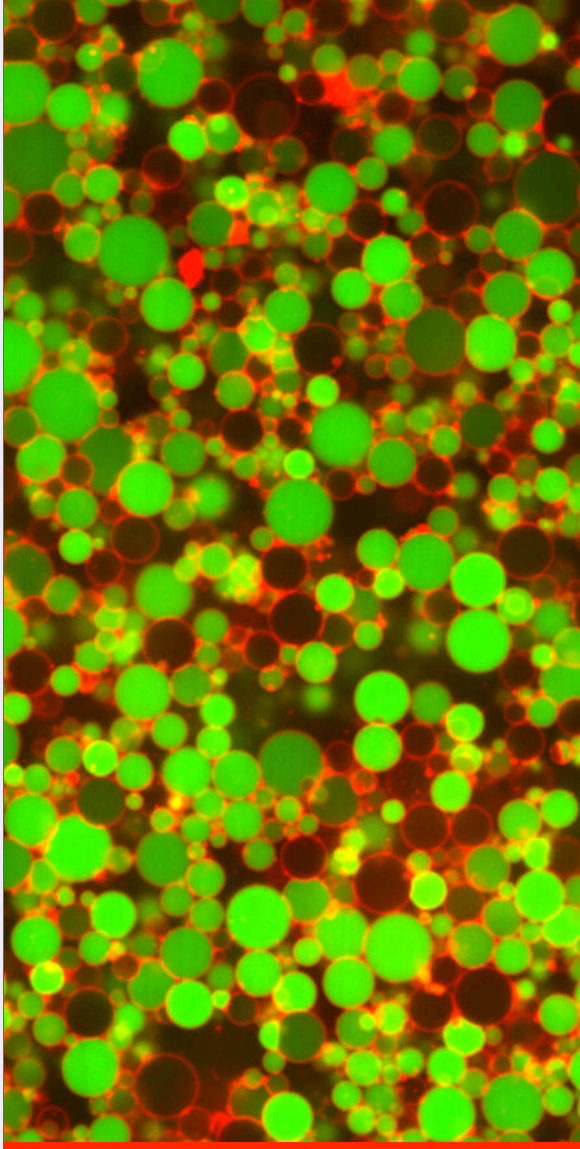
In late 2025, Conscience completed its first major consultation contract: a qualitative research study commissioned by **b.next** to examine the role of open science within the synthetic cell research community. This study serves as a foundational resource for establishing community-derived open science principles and operational practices that are sustainable within the scientific, institutional, and commercial realities of synthetic biology.

The mandate: Bridging the gap in synthetic biology

Synthetic cell research is characterized by immense technical complexity and a fragmented landscape of non-interoperable tools and protocols. Recognizing that no single laboratory can progress in isolation, b.next engaged Conscience to investigate how open science and the Nucleus platform could address these unmet needs.

Led by Sarah Ali-Khan, a Conscience Senior Fellow, the research was based on in-depth interviews with 16 synthetic cell researchers and three institutional technology transfer office (TTO) professionals. The study provides a detailed account of current practices, challenges, and opportunities for strengthening open collaboration in this scientifically challenging field.

b.next



Synthetic cells expressing the fluorescent reporter protein plamGFP. Anton Molina / b.next, CC BY 4.0.

Key findings

The reality of “pragmatic openness”

The study identified a high level of agreement that collaboration and openness are not optional but are scientific necessities. However, a persistent gap exists between the aspiration for open science and actual sharing practices. This led to the defining concept of ”pragmatic openness”: being as open as possible while remaining as closed as necessary to attract investment and reach real-world impact.

To shift these norms across the broader field, the research highlights three critical levers:

- **Incentive realignment:** establishing tangible rewards for open contributions, such as DOIs and open science metrics, to align sharing with academic and professional advancement
- **IP reconciliation:** developing credible models where open-source pathways coexist with the IP protections required by TTOs to recoup investment and enable scale
- **Cultural infrastructure:** shifting from technical platforms alone to a ”rising tide” culture where mandated openness from funders and transparent governance ensure that shared foundational resources benefit all stakeholders

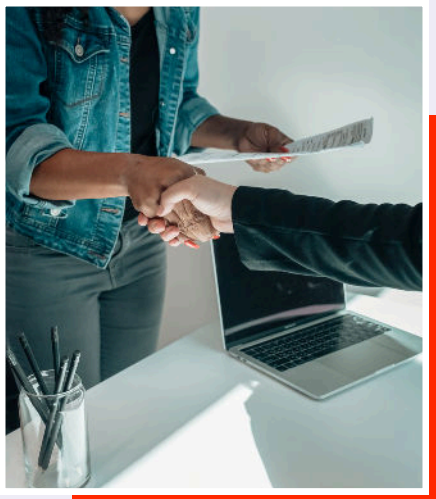
”We commissioned this study because we believe that engaging the community at the earliest stages is critical for helping b.next build Nucleus, an open source framework for making synthetic cells. Conscience’s finding that collaboration and openness are scientific necessities in this field validates our core belief that Nucleus can help the field thrive and strengthens our conviction to tackle the challenges ahead. The community’s candid feedback on governance, recognition, and our role as a for-profit entity gives us the substrate we need to build operational principles that are grounded in the community’s actual needs and concerns. We’re grateful for the community’s participation and look forward to continuing the conversations as Nucleus grows.”
— Akshay Maheshwari, CEO, b.next, and Anton Molina, Head of Open Source Ecosystem, b.next

Open Science Advisory Services Program

Launched in June 2025 as an extension of our in-house Consultation Services, the Open Science Advisory Services (OSAS) program provides funding to help companies, non-profits, and academic organizations access the specialized expertise needed to advance open science-aligned life sciences innovations toward the market. By reducing financial barriers to critical third-party services, OSAS supports projects in areas where open sharing and collaboration are central to progress.

With $4.9 million CAD available for disbursement, OSAS enables applicants to overcome key development hurdles while ensuring that supported work contributes meaningful value back to the ecosystem.

Comprehensive support and matchmaking for innovation



The scope of OSAS is purposefully broad, encompassing any life science innovation with the potential to impact human health. For applicants who identify a need but lack a partner, the program also serves as a strategic matchmaker, ensuring that every project is paired with the right expertise to move the needle.

Funding is directed toward hiring Canadian third-party experts, including:

- **Regulatory & IP strategists:** Navigating filings and charting open commercialization pathways
- **Business consultants:** Conducting market, customer, and competitive analyses
- **Contract Research Organizations (CROs):** Performing vital in-vitro, in-vivo, or in-silico studies
- **Legal & financial advisors:** Establishing open science partnerships and sustainable pricing plans

BEACON: The Benchmarking, Evaluation, and Assessment Consortium for Science

STRENGTHENING SCIENTIFIC TRUST IN AI-DRIVEN DISCOVERY

Scientific progress depends on rigour and reproducibility, but many areas of biomedical research still lack a consistent framework for validating results. The rapid growth of AI and advanced computational methods has amplified this gap, producing predictions faster than they can be reliably evaluated.

Throughout 2025, Conscience worked with leading benchmarking initiatives to design and align a new consortium model that could address this challenge at scale. BEACON (The Benchmarking, Evaluation, and Assessment Consortium for Science) was created through this preparatory work to strengthen critical assessment as scientific infrastructure, ensuring innovation is matched with transparency, accountability, and trust. Through BEACON, Conscience advances its mission to accelerate patient-relevant treatments by enabling the responsible, evidence-based application of AI in drug discovery and disease research.

"Biology is generating extraordinary amounts of data, but our ability to interpret and critically assess that information has not kept pace, contributing to replication failures and research misdirection. CASP and other initiatives like it have shown that open, community-driven science, combined with rigorous and independent assessment, can produce validated answers to complex biological problems at scale. BEACON applies those same principles, integrating open collaboration, advanced AI, and critical evaluation to identify gaps, clarify what is reliable, and inform more effective directions for future research."
— John Moult, Co-founder and Chair of CASP

A consortium model built for independent evaluation

BEACON is an open, coordinated consortium focused on advancing benchmarking and critical assessment across biomedical science. It brings together leading initiatives, including CASP, DREAM, Sage Bionetworks, OpenADMET, and CACHE/Conscience, whose collective experience spans decades of community-driven evaluation.

Over the past year, Conscience and BEACON's founding partners worked to align scientific vision, governance, and operating principles for the consortium. BEACON is structured as a Limited Partnership managed by Conscience and overseen by a founding Governance Committee of internationally recognized experts in benchmarking, computational biology, and translational science. This model is designed to ensure independence, scientific rigor, and long-term sustainability.

BEACON's initial work will focus on:

1. **Establishing a think tank** to advance the science and application of critical assessment and address growing challenges in ensuring rigor and reproducibility across healthcare, structural biology, virtual cells, AI-based foundation models, and frontier science
2. **Engaging with the broader community** of benchmarking and solver organizations to establish a framework for collaboration and coordination to enhance the sustainability and collective impact of biomedical challenges and community-sourced research
3. **Building an open platform** for running challenges and sharing data, methods, and results

A long-term infrastructure for the research community

BEACON is intended as shared infrastructure for the scientific ecosystem, and its success depends on sustained, mission-aligned support. Conscience and BEACON's founding partners are inviting philanthropists and organizations to join as Limited Partners, helping to establish and steward the next generation of benchmarking and critical assessment science. Limited Partners will contribute to BEACON's sustainability, participate in governance, and help ensure the next wave of AI-driven discovery is built on a foundation of rigor, transparency, and accountability. BEACON's public launch at the MAINFRAME Symposium in Barcelona in March 2026 will mark the start of this effort, with its impact shaped by those who choose to support and guide it over time.

Shaping the Conversation

CONSCIENCE'S CONTRIBUTIONS TO POLICY AND PUBLIC DISCOURSE

Open science drug development remains a relatively new concept for many researchers, companies, and policymakers. As a result, advancing the field requires not only building programs and partnerships, but also building community and fostering informed discussion about how open science can contribute to scientific progress, innovation, and public health.

At Conscience, we meet people where they are, whether through direct policy engagement, public commentary, or by convening forums where researchers, companies, and governments can explore the opportunities and challenges of open science together.

Our engagement strategy focuses on three complementary areas:

Engaging policymakers

We share insights from our programs with government officials and international partners, helping inform policy discussions on innovation, health research, and technology development.

Contributing to public discourse

Through opinion pieces and media engagement, Conscience brings open science drug discovery into broader discussions about innovation policy, responsible AI, and the future of drug discovery and development.

Building a global open science community

Through events, webinars, and communications platforms, Conscience connects researchers, companies, patient advocates, and policymakers interested in exploring open science approaches to drug discovery.

Photo by Tiah Coxon/Cine-Cast for Conscience

Engaging Policymakers

Throughout 2025, Conscience engaged with policymakers in Canada and internationally, sharing insights from our work implementing open science approaches in drug discovery.

These discussions focus on how collaborative research models can complement existing innovation strategies, strengthen research ecosystems, and contribute to both health outcomes and economic resilience. Conscience's role in these conversations is not to advocate for a specific policy position, but to make our expertise available to policymakers as they consider new approaches to supporting scientific research and innovation.

Over the past year, Conscience representatives met with Canadian government officials responsible for innovation and health policy, contributing perspectives from our programs and partnerships. These discussions highlighted how open science models can help foster collaboration across sectors while ensuring that research outputs remain widely accessible.

Shaping international discussions

Our engagement also extends internationally. In partnership with the **TRIDENT (TRanslational Initiative to DE-risk NeuroTherapeutics)** project and the **Organisation for Economic Co-operation and Development (OECD)**, Conscience has been preparing an international workshop on Open Science Innovation Partnerships, to be held in Paris in April 2026.

Photo by Tiah Coxon/Cine-Cast for Conscience

By contributing to international dialogue on these topics, Conscience helps position Canada as an active participant in shaping emerging approaches to collaborative research and innovation.

Contributing to Public Discourse

Alongside policy engagement, Conscience contributes to public discussions about innovation, open science, and responsible technology development through opinion pieces and commentary in leading publications.

These articles connect our work in open science drug discovery to broader questions about Canada's innovation ecosystem — from the importance of transparency and benchmarking in AI systems to the role of collaborative research models in strengthening economic resilience and technological sovereignty.

Throughout 2025, Conscience perspectives appeared in outlets reaching audiences across policy, research, and industry communities, including The Globe and Mail, The Hill Times, Canadian SME Magazine, Drug Discovery World, The Canadian Science Policy Centre, and Canada's National Observer.

Intellectual Property Strategies in the age of AI

by Richard Gold and Peng Fu

Read it here »

CANADIANSME BUSINESS MAGAZINE

Open Science as a Catalyst for Canada's Innovation Strategy

by Richard Gold and Estrid Jakobsen

Read it here »

CSPC

From Risk to Resilience: How Creativity and Open Science Are Transforming Drug Discovery

by Peng Fu and Estrid Jakobsen

Read it here »

DRUG DISCOVERY WORLD DDW turning science into business

Redesigning Canada's health policy to spur innovation

by Richard Gold

Read it here »

THE HILL TIMES

As U.S. tariffs loom, Canada should use AI to fight back

by Richard Gold

Read it here »

CANADA'S NATIONAL OBSERVER

Canada's Innovation Policy: Designed in Ottawa, Owned in America

by Richard Gold

Read it here »

THE GLOBE AND MAIL

Building a Global Open Science Community

Connecting face-to-face

Conscience continues to strengthen the growing community exploring open science approaches to drug discovery. Throughout 2025, we engaged researchers, companies, investors, patient advocates, and policymakers through events, webinars, and targeted discussions designed to highlight both the practical opportunities and the broader implications of open science approaches.

Our flagship event of 2025 was the Conscience Symposium on Open Drug Discovery, which attracted over 125 international participants interested in drug development, artificial intelligence, and the intersection of intellectual property and open science. We also hosted webinars and targeted engagement sessions focused on Conscience initiatives like the CACHE Challenges and OSAS program.

Additionally, Conscience representatives contributed to major industry and innovation events such as the OBIO Investor Summit and Effervescence 2025, helping introduce new audiences to open science models and connect stakeholders interested in collaborative approaches to drug discovery.

Expanding our digital reach

These engagements are complemented by Conscience's growing communications platforms, including our monthly newsletter and an expanding social media presence. Together, these channels help sustain an active and growing network of researchers, companies, funders, and policymakers exploring how open science can advance drug development.

2500+ LinkedIn followers

400+ Newsletter subscribers

8400+ Unique website visitors

Photos by Tiah Coxon/Cine-Cast for Conscience

2025 Conscience Symposium on Open Drug Discovery

SHOWCASING COLLABORATION IN ACTION

In April 2025, over 125 members of our community gathered in Montreal for the Conscience Symposium on Open Drug Discovery, a two-day event designed to showcase how open science is already advancing the discovery of new medicines. Attendees came from academia, industry, and the nonprofit sector to explore topics ranging from artificial intelligence and benchmarking to patient engagement and policy development.

Key highlights

- **Spotlighting our community:** CACHE Challenge teams, DMOS grantees, and network members shared their projects in flash talks, sparking collaboration and meaningful connections.
- **Patient-centered perspective:** Sessions led by patient advocates and an exhibition by the Rare Artist program emphasized why inclusive, patient-driven approaches are essential.
- **Inspiring discussions:** Panels, workshops, and Café networking sessions fostered active participation, rich dialogue, and cross-sector collaboration.
- **Transformative impact:** Attendees reported new perspectives on open science, saying the event strengthened their confidence in collaborative approaches and helped them forge connections they would not have made otherwise.

We thank our speakers, sponsors, staff, and all participants for making this event a success. As our Board Chair, Anke Mueller-Fahrnow, noted, the energy in the room was truly inspiring. Recordings of the sessions are available on our website and YouTube channel.

Photos by Tiah Coxon/ Cine-Cast for Conscience

What's Next for Conscience?

As Conscience continues to grow, our focus for the year ahead is clear: translating early momentum into measurable impact across our programs and partnerships.

Driving therapies to the clinic: A central priority is advancing open science further along the translational pathway through our DMOS program. By supporting a program through to an Investigational New Drug (IND) application and expanding into clinical-stage funding, we will demonstrate that open science can go beyond building collaborative frameworks — it can actively deliver new medicines to the patients who need them most.

Leading in critical assessment: As we enter the complex data era in which AI and computational methods will shape and transform biomedical research and drug development, the need for robust benchmarks becomes critical — not just as measuring sticks, but as catalysts to guide and shape the frontier. We will expand on the scientific novelty and relevance of the CACHE Challenges and accelerate the work of BEACON, ensuring that scientific and computational innovations reliably translate into real-world breakthroughs.

Ensuring long-term growth: To sustain and scale these open science models, we must continue to build financial independence and durable institutional foundations. Strengthening this operational core will remain a major priority.

These goals are ambitious, but they are a natural evolution of what our work and our community have already proven possible.

We remain deeply grateful to our partners, funders, and collaborators. The success of Conscience is built entirely on a shared commitment to rigorous, collaborative science. We look forward to shaping the next chapter of drug development alongside you.

Our Team

Peng Fu
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Jeeshan Ifthikar
Chief Financial Officer

Richard Gold
Chief Policy and Partnerships Officer

Aled Edwards
Chief Science Officer

Keri Stalker
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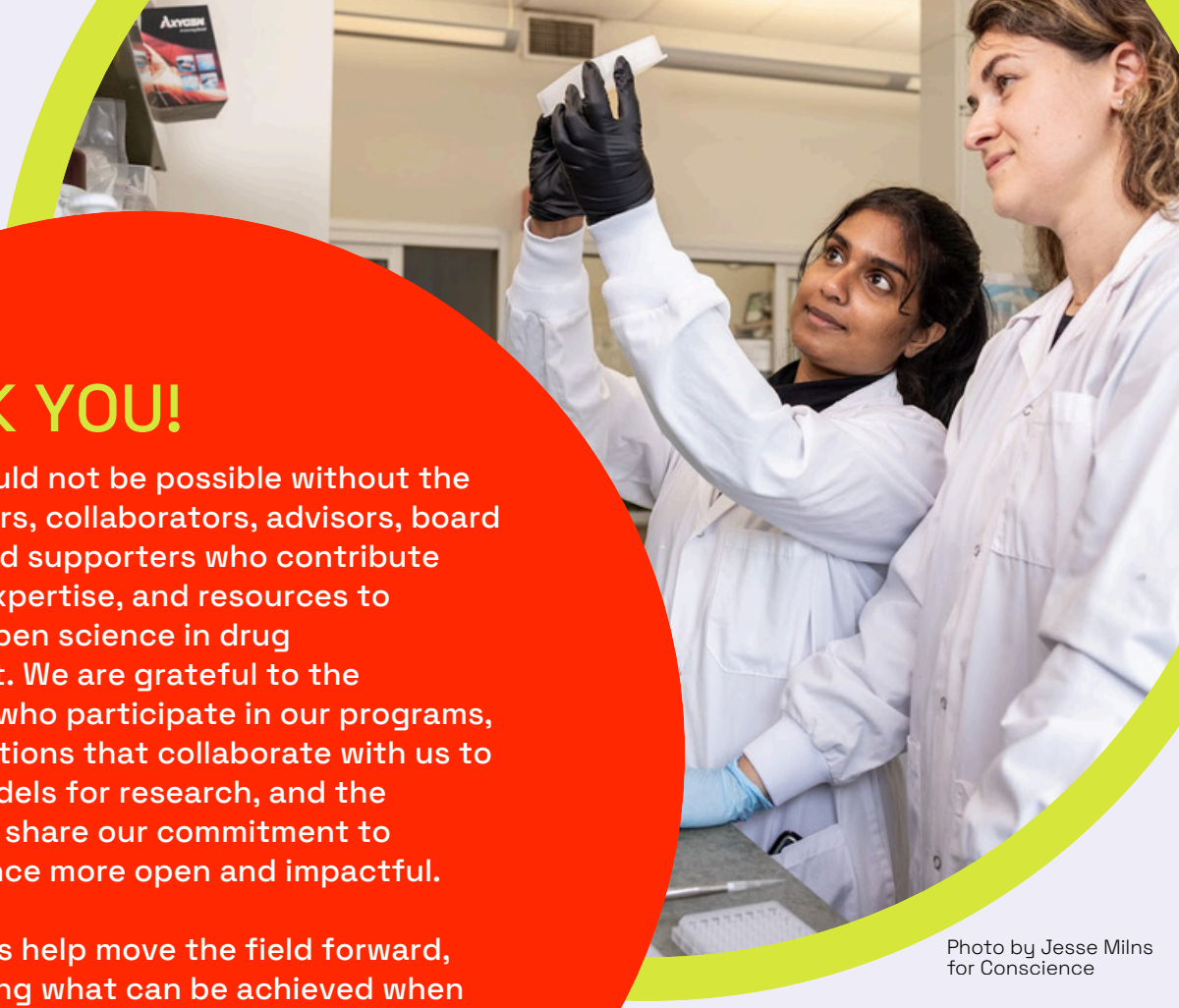

Photo by Jesse Milns for Conscience

THANK YOU!

Our work would not be possible without the many partners, collaborators, advisors, board members, and supporters who contribute their time, expertise, and resources to advancing open science in drug development. We are grateful to the researchers who participate in our programs, the organizations that collaborate with us to test new models for research, and the funders who share our commitment to making science more open and impactful.

These efforts help move the field forward, demonstrating what can be achieved when the scientific community works openly and collectively — because together, there's something science can do.

Keep in touch

Subscribe to our newsletter at
conscience.ca/sign-up

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Together, there's something science can do.