

## CQDM Connect-Pharma: Pitch Day

### Call for Ideas: Innovations in RNA therapeutics and modalities

CQDM is pleased to launch a call for ideas for our upcoming CQDM Connect-Pharma: Pitch Day.

We are searching for world-class research on RNA therapeutics and relevant modalities to present to domain experts from leading global pharmaceutical organizations on **May 29, 2025**.

Our objective is to bring ground-breaking, innovative Canadian research to CQDM's pharmaceutical members and facilitate interactions between our pharma members and the Canadian ecosystem. Collaborative projects developed with a CQDM pharmaceutical member are eligible to obtain funding via CQDM's Quantum Leap program.

We invite passionate Canadian researchers and visionary teams to submit innovative ideas that have the potential to transform the landscape of medicine and improve patient outcomes.

Research Focus Areas: We are particularly interested in technologies that improve RNA therapeutics including but not limited to, the following areas:

#### Technology Improvements

- New Breakthroughs in ASO/siRNA Technology
  - *For improved efficacy, specificity, stability, delivery, silencing efficiency and tissue targeting.*
- New Breakthroughs in mRNA Technology (e.g., self-amplifying (saRNA), Circular RNA)
- Use of mRNA for Protein Replacement Therapy
- Use of mRNA for Vaccine Development

#### Target and Tool Identification

- New Targets Identification
  - *Emphasize understanding of biological pathways and mechanisms for more precise targeting.*
- AI-Assisted Drug Discovery Platforms

#### Translation

- siRNA Validated Assays with Good In Vitro to In Vivo Predictability
- Predictive Models for Better Clinical Prediction
- In Vitro / In Vivo Models for Fast Development, Data Generation

#### Delivery (major breakthroughs)

- Antibody-siRNA Conjugates
  - *Explore novel conjugation techniques to combine the specificity of antibodies with the silencing capability of siRNA, for targeted therapy in complex diseases like cancer.*
- siRNA-siRNA Linkers
  - *Develop siRNA linkers that can improve the synergistic effects of combining multiple siRNA molecules, allowing for broader therapeutic action against diseases.*
- Increased Potency

- Increased Specificity
- Increased Loading
- Decreased Immunogenicity
- Novel Lipid Nanoparticles (LNPs)
  - *Significant LNP improvements*
- Delivery with Exosomes
- Use of Bicyclic Peptides/Aptamers for Delivery

#### **Manufacturing / Regulatory**

- AI Improvement of Manufacturing Efficiencies
- CMC of Oligotherapies
- CMC of mRNA/LNP
- Process Improvements
- Increase Durability, Stability, Sterility, Sustainability
- New FDA Regulations (Platform Approval)
  - *Investigate strategies to align with emerging regulatory frameworks, particularly with regard to platform-based approvals for RNA therapies, speeding up the path to market.*

#### **Industry and Therapeutic Impact:**

- **Therapeutic Areas:** Projects addressing high-priority diseases like cancer, autoimmune disorders, infectious diseases, rare diseases or neurodegenerative conditions.
- **Faster Drug Development:** AI tools to reduce timelines in preclinical development
- **Cost Reduction:** Solutions that lower the costs associated with drug discovery and development.

Process: All submitted projects will be shared with CQDM's pharmaceutical members for review and ranking. Top ranked projects will be selected to present to CQDM's global pharmaceutical members at a **CQDM Connect-Pharma: Pitch Day on May 29, 2025.**

Who can apply: Canadian academic institutions, biotech companies, and research organizations are eligible to apply. Collaborative projects that involve partnerships between academia and industry are also encouraged. We welcome multidisciplinary teams that can bring diverse expertise to the table.

Deadline and Submission: Submission deadline is **April 28 2025**, please submit to [appliquez-apply@cqdm.org](mailto:appliquez-apply@cqdm.org). Detailed guidelines and instructions for proposal submission and the selection form are available on the [CQDM website](#).

For more information visit the [CQDM website](#) or contact Simon Fournier ([sfournier@cqdm.org](mailto:sfournier@cqdm.org)).

#### About CQDM:

[CQDM](#) is a non-profit biopharmaceutical research consortium whose mission is to support and facilitate multi-stakeholder collaborative R&D that accelerates translation of leading-edge discoveries into vaccines, therapeutics and diagnostics addressing unmet medical needs while generating significant benefits for the Canadian economy.