VISION: to establish and mobilize a network drawn from academia, industry, and not-for-profit research enterprises to maintain and improve Canada’s position as a global leader in developing next generation nanomedicines.

MISSION: to develop novel therapeutics to cure high-burden human diseases and new diagnostics to detect disease more precisely; to commercialize these products to bring health and economic benefits to Canadians; and to train the skilled workforce required by the growing nanomedicines industry.

FUNDING: NMIN was awarded $18,532,000 in funding over 6 years (2019-2025) by the Government of Canada through the Networks of Centres of Excellence (NCE) Program.

RESEARCH THEMES:
- Targeted Drug Delivery (Theme I)
  Leaders: Drs. Marcel Bally & Shyh-Dar Li
  University of British Columbia
- Enabling Gene Therapies (Theme II)
  Leaders: Drs. Pieter Cullis & Christian Kastrup
  University of British Columbia
- Diagnostics (Theme III)
  Leaders: Dr. Shana Kelley & Gilbert Walker
  University of Toronto

CORE FACILITIES:
- NANOCORE
  Nanomedicines Formulation and Characterization Core Facility
  Leaders: Drs. Pieter Cullis & Christian Kastrup
  University of British Columbia
- PHARMACORE
  Pharmacology/Toxicology and Scale-up Core Facility
  Leaders: Drs. Marcel Bally & Shyh-Dar Li
  University of British Columbia
ABOUT NMIN’s CORE FACILITIES

NANOCORE
Nanomedicines Formulation and Characterization Core Facility

Mission: To develop high-quality, state-of-the-art lipid nanoparticles encapsulating small molecule or nucleic acid drugs that enable proof-of-concept (POC) animal studies

- To standardize the physicochemical characterization in order to identify critical parameters

Formulation: High-quality, state-of-the-art nanoparticle formulations encapsulating small molecule, peptide or nucleic acid drugs that enable proof-of-concept (POC) animal studies.

Physicochemical characterization: Comprehensive portfolio of characterization assays including sizing & structure analyses that guarantee reliable interpretation of in vitro & in vivo studies & further optimization.

No nanoparticle formulation will enter animal studies in NMIN without being rigorously characterized.

PHARMACORE
Pharmacology/Toxicology and Scale-up Core Facility

Mission: To help research partners develop promising nanomedicines and provide capabilities to advance new treatments from the bench to the clinic.

Capabilities: Pre-clinical in vitro, pre-clinical pharmacology, GLP-guiding safety, manufacturing

Contacts
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