



December 2023

## Get ready for 2024

### NMIN's 2024 Research Conference

With the Network's final research conference now just over a month away, NMIN encourages you to confirm your plans for attending soon!

The program is available on the [event webpage](#); check back regularly for more detailed updates.

Keynote speakers include:

- **Andrea Kates** (SUMA Ventures), who will share her expert insights into building and sustaining health science innovation ecosystems;
- **Keith Pardee** (University of Toronto), who will speak about building tools at the interface between synthetic biology and nanomedicine;
- **Pieter Cullis** (University of British Columbia), who will discuss the 'unlimited potential' of mRNA-based gene therapies; and
- **Dominick Witzigmann** (NanoVation Therapeutics), who will describe his company's achievements in advancing next-generation LNP technology for extrahepatic delivery of RNA molecules.



Panel discussions will explore the breadth and depth of the Network's research, and will reflect on future opportunities in nanomedicines for both scientists and companies.

A wide array of high-calibre research will also be on exhibit in the event's poster competition, with over 52 submissions received from leading nanomedicine labs across the country.

Continues on next page

## MESSAGE FROM THE SCIENTIFIC DIRECTOR

In a previous newsletter, I shared details from the Network's fourth NCE Annual Progress Report, which documented the degree to which NMIN had met its targeted key performance indicators in 2022-23.

I am pleased to report that the NCE Monitoring Committee recently issued its evaluation of NMIN's 2022-23 performance, in which it found that NMIN not only met all NCE expectations for Network performance, but in fact exceeded expectations in terms of research outcomes. This is the third instance in which NMIN has been judged to have exceeded NCE criteria for Network performance - a rare accomplishment!

Speaking of managing NMIN's research program, on 7 December NMIN's Board approved support for 14 new Strategic Initiatives to enable commercialization and knowledge mobilization of NMIN research outcomes. This additional commitment of \$563,000 brings NMIN's research funding to \$14.563M, or 76% of its total NCE award, in support of 70 projects between 2019 and 2024.

I thank NMIN staff, my fellow Research Leaders, Research Management Committee (RMC) and Commercialization Advisory Board (CAB) members, and NMIN's investigators for helping ensure NMIN has made the best, most thorough use of the research budget entrusted to it.

On that note, I want once again to remind all NMIN PIs that if you retain unspent NMIN funding beyond the end of NMIN's NCE mandate at 31 March 2024, your host institution must report on use of the NCE funds to The University of British Columbia (UBC) and ensure the account is fully expended by 31 March 2025. If NMIN funds remain unspent at 31 March 2025, your host institution must return them to UBC by 30 June 2025.

Meanwhile, let's make the most of the time remaining to NMIN as an NCE network. NMIN's 2024 Research Conference in Vancouver will provide a major opportunity for consolidating our ties and catalyzing future innovation, collaboration and discovery. I look forward to seeing you there to share our research, celebrate our accomplishments, and consolidate our legacy strategies.

Please also be sure, before NMIN's NCE mandate ends, to enter your information into this [brief online survey](#), toward helping NMIN build a legacy database of national nanomedicine expertise that will facilitate networking and collaboration when the NMIN Network formally winds up.

See you next month in Vancouver!

**Dr. Gilbert Walker, Ph.D.**  
Scientific Director & CEO, NMIN

If you have not yet registered for the event, NMN recommends you do so soon as spaces are rapidly filling with registrants spanning the spectrum from graduate students and early-career professionals to senior academics as well as industry, funding agency, and government representatives.

If you are a current or former NMN investigator or HQP and you meet the eligibility requirements, **travel support is available to facilitate your attendance of this event** but you must apply by December 22, 2023.

For more information, please contact NMN's Manager, HQP Programs & Network Events, Divya Rao: [divyarao@nanomedicines.ca](mailto:divyarao@nanomedicines.ca)

NMN is grateful to its conference sponsors:

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- Bronze: Genome BC & Jazz Pharmaceuticals



## RESEARCHER NEWS

NMN Founding Scientific Director Dr. Pieter Cullis was named a [2024 inductee](#) into the Canadian Medical Hall of Fame (CMHF), which celebrates Canadians whose work advances health in Canada and the world.



[READ MORE](#)

NMN researcher Dr. Shana Kelley helped create a [new method](#) to develop therapeutics for autoimmune diseases using a technique that sorts millions of CRISPR-edited cells based on their secretion patterns. She was also [named to the National Academy of Inventors](#).



[READ MORE](#)

NMN researcher Dr. Keith Pardee's work on a paper-based assay to detect Zika and chikungunya viruses was featured in a [Nature article](#) on efforts to develop low-cost diagnostics.



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## Nanomedicine Expertise Database

As part of its legacy strategy, NMN is creating an online database of Canadian nanomedicines researchers and the areas of expertise represented within their labs.

If you have not already done so, please complete the [NMN survey](#) with details about the research & development expertise within your lab, and NMN will include this information in the database to facilitate collaborative research opportunities Canada-wide.

To date, over 50 Canadian researchers from have submitted entries about their expertise via the online survey for the database.

A preliminary database has been developed by NMN staff. You can test its functionality on the [NMN website](#). Your feedback is welcome and can be sent to [info@nanomedicines.ca](mailto:info@nanomedicines.ca).

Please complete the survey



### Nanomedicine-related R&D capacity in Canada

A survey towards the development of a Canadian database of nanomedicine-related research expertise

As part of its legacy strategy, the NanoMedicines Innovation Network (NMN) is creating an online database of Canadian nanomedicines researchers and the areas of expertise represented within their labs. The database is intended as a tool to facilitate collaboration among nanomedicine researchers and labs—within and beyond the NMN Network, now and in the future.

If you would complete the form below by providing details about the research & development expertise within your lab, NMN can include this information in an online database that facilitates collaborative research opportunities for NMN participants and nanomedicine researchers Canada-wide.

Thank you. Please direct any questions to: [dianaroyce@nanomedicines.ca](mailto:dianaroyce@nanomedicines.ca)

Name

First

Last

Email

Institution

1. Please indicate the type(s) of NANODELIVERY in which your lab specializes:

- ☐ Lipid-based
- ☐ Polymer-based
- ☐ Inorganic
- ☐ Other

2. Please indicate the TARGETING APPROACH(ES) in which your lab specializes:

- ☐ Active targeting (e.g., antibody modification of nanomedicine)
- ☐ Physical targeting (e.g., use of pH sensitive nanomedicine)
- ☐ Other

3. Please indicate the principal APPLICATION(S) of the nanodelivery system(s) in which your lab specializes:

- ☐ Drug delivery
- ☐ Gene delivery
- ☐ Peptide/protein delivery



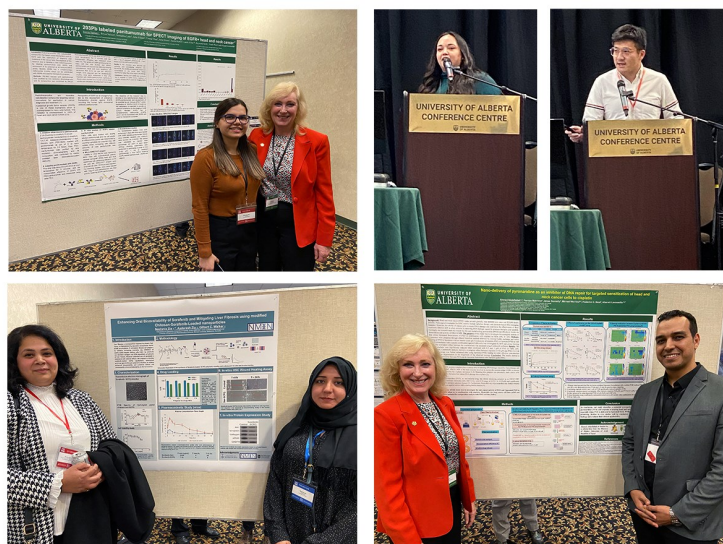
# Recent & Up-coming Events

## NMIN well represented at Deep Tech event

NMIN participation was significant in the event *From Innovation to Impact: Deep Tech Transforming the Future of Healthcare*, which took place October 16-17, 2023, at the University of Alberta in Edmonton. Co-hosted by NMIN and partner organization Deep Tech Canada, the event featured discussions with renowned speakers on the current state of deep tech in health.

NMIN researchers, staff, committee members and HQP spoke on and/or moderated panel discussions and participated in the event's poster competition.

The cross-sectoral event was attended by over 100 individuals. [Read more.](#)



Top, left to right: trainees Nasim Sarrami, Samantha McWhirter, and XuXin (Kevin) Sun. Bottom, left to right: Nashmia Zia & Ahmed Abdelfattah Mohamed Ahmed with NMIN's Diana Royce & Divya Rao, at the DeepTech event in Edmonton, AB.

## Vancouver Nanomedicine Day 2023

For the fourth consecutive time, NMIN was a proud supporter of Vancouver Nanomedicine Day in its 2023 iteration. The conference took place 15 November 2023 in the Pharmaceutical Sciences building on the University of British Columbia (UBC) campus.

Close to 400 people registered for the event and close to 300 attended. Informal feedback was very positive.

"For me, [Pieter Cullis' talk](#) about the future of nanomedicines was a highlight," said the event organizer, UBC's Dr. Urs Häfeli. "The meeting was so much fun that we plan to do it again next year, probably on November 13, 2024, so please mark your calendars."

Many other NMIN researchers and trainees contributed to the days' activities. Half the presenters were NMIN-affiliated as were all the talk moderators. The poster competition organizer was an NMIN HQP, as was a competition winner.

[Read more](#); see [videos of the talks](#).



NMIN's Founding Scientific Director Dr. Pieter Cullis delivers his keynote presentation at Vancouver Nanomedicine Day 2023. Credit: Oleksii Popov / UBC Faculty of Pharmaceutical Sciences



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