

NMIN Lab Exchange and Research Skills Development Awards 2023-24 Competition

NMIN's Priority Areas for the Development of HQP (2019-2024)

The NanoMedicines Innovation Network's (NMIN) Highly Qualified Personnel (HQP) Program seeks to cultivate the next generation of nanomedicine scientists and entrepreneurs, and to train the skilled workforce required by the growing nanomedicines industry in Canada. The following Priority Areas have been identified as essential for the development of exceptional trainees within the nanomedicines field:

- *Priority Area 1:* Nanomedicine Research Skills and Experience
- *Priority Area 2:* IP Creation and Commercialization Skills and Experience
- *Priority Area 3:* Entrepreneurial and Leadership Skills and Experience
- *Priority Area 4:* Communication and Knowledge Mobilization Skills and Experience
- *Priority Area 5:* Genetics, Ethical, Environmental, Economic, Legal and Social (GE³LS) Issues Awareness and Understanding

Program Overview

NMIN is one of Canada's Networks of Centres of Excellence (NCE). Its mandate is to support research, networking, commercialization, knowledge mobilization and capacity building activities that contribute to nanomedicines innovations that generate social and economic benefits for Canadians.

The **Lab Exchange Program** offers funding for NMIN trainees to spend between six weeks and six months working on research projects with national or international investigators and their research teams. Research visits must contribute to the mission and vision of NMIN and provide for a unique training opportunity not available in the trainee's lab.

The **Research Skills Development Award Program** provides support for workshops and individual training opportunities that support HQP development in at least one of NMIN's Priority Areas for national capacity building.

Applications will be evaluated based on the potential contribution to NMIN-funded and nanomedicine-related research and the capacity-building benefits for the applicant.

Funding is restricted to a living allowance, eligible travel-related expenses, and tuition/workshop/research costs (if applicable) for NMIN trainees and NMIN HQP Network (NHN) members (NMIN HQP).

Program Purpose

- Provide NMIN HQP with new research, networking and capacity-building opportunities to gain valuable short-term national or international research and training exposure.
- Expose NMIN HQP to cutting-edge national or international discovery and development

efforts related to nanomedicines.

- Enhance NMIN's partnership linkages with national or international centres of excellence in nanomedicine research and training, through knowledge sharing, knowledge exchange and partnered research training.
- Develop national or international collaborations that facilitate long-term interactions between NMIN investigators and national or international research teams.
- Facilitate national or international trainee talent profiling to facilitate recruitment of Canadian talent by research organizations and industry.

Applicant Eligibility

- Graduate students and postdoctoral fellows enrolled in a full-time program or employed by a Canadian university or Canadian partner institution and in good academic standing, who are an NMIN HQP, are eligible to apply.
- *Lab Exchange* - The applicant's research visit must contribute to the advancement of the objectives and intended outcomes of NMIN's Research Program. Projects that do not align with the Network's strategic goals will not be funded.
- *Research Skills Development Awards* – Workshops and learning experiences must contribute to the development of the trainee in at least one Priority Area of the HQP Program (see 1 – 5 above)

Funding

- The number of *Lab Exchange Program* and *Research Skills Development Awards* approved annually is limited, according to available funding.
- NMIN *Lab Exchange Program* funding per applicant is limited to matching funding up to a maximum of \$6,000 for up to six months; Applications with 1:1 Non-NMIN/Non-NCE matching/partner funding will receive preferential consideration.
- *Research Skills Development Program* funding per applicant is limited to matching funding up to a maximum of \$1,000. Applications with 1:1 Non-NMIN/Non-NCE matching/partner funding will receive preferential consideration.
- Funding is restricted to eligible living allowances, travel-related expenses, and tuition/workshop/research costs (if applicable) for NMIN HQP.
- NMIN trainees may include a modest research allowance to cover direct research costs if required to fulfil the research visit's objectives.
- Allowable travel-related expenses for travel to and from the host country include economy travel, *en route* accommodations, ground transportation and meal *per diems*, in accordance with NMIN's Travel Policy.
- The award will provide a monthly living allowance for accommodations and other related living expenses, negotiated on a case-by-case basis.
- Accommodations other than hotels are strongly encouraged; the full cost of hotel accommodations may not be eligible for reimbursement.

- NMIN investigators and/or host institutions may choose to exceed or 'top-up' these limits by acquiring funds from non-NMIN sources. Such arrangements must be declared to NMIN.

Conditions of Funding

- Applicants must be able to obtain the necessary authorization to enter the host country.
- Trainees and researchers must comply with all applicable institutional agreements and policies/procedures related to national or international research visits.
- Any agreement for academic cooperation and associated IP Rights must be negotiated and documented through separate agreements in accordance with the NCE Standard Network Agreement, policies and procedures of the Canadian academic institution(s) and the national or international host university.
- Submission of a final report must be forwarded to the NMIN Administrative Centre with the expense report and is required before expenses are eligible for reimbursement.

Application Process

- Prior to completing a *Lab Exchange Program/Research Skills Award* application, interested trainees must contact NMIN's HQP Program and Network Events Manager to confirm compliance with the application criteria.
- Only complete applications will be considered.
- A letter of invitation from the national or international host supervisor and a letter of support from the NMIN supervisor must accompany the application (as required).
- Evaluation of applications will take a minimum of eight weeks.

Research Project Proposal (*Lab Exchange Only*)

The maximum length of the project proposal is two pages and must include the following:

- Introduction to proposed research project and focus
- Hypothesis
- Project objectives (maximum two)
- Selected research methodology and its appropriateness
- Access to novel equipment or facilities not available at the trainee's institution
- Anticipated research outcome(s), which clearly define what will be achieved through the research visit, and how it/they will build capacity and advance NMIN Network research

Note: Where the research visit provides for new skill acquisition only, a research project proposal is not required. However, in place of the project proposal, a one-page detailed description of and relevance of the new skill acquisition strategy or training program must be provided.

Evaluation Process

Applications will be reviewed on a “first-come, first-serve” basis, subject to available funding.

NMIN will assess applications according to the following criteria:

1. Excellence of the Applicant

- Do the applicant’s prior achievements, including transcripts, publications, presentations and past experiences, indicate a high level of excellence?
- Is the proposed research project/training program an appropriate fit given the applicant’s education, experience and interests?
- Does the research visit/training program have the potential to enhance the trainee’s research career path by providing for value-added learning and skill-development opportunities?

2. Excellence of Training Opportunity

- Is there a strong rationale for the research visit/training program?
- Does the research visit/training program provide for a unique training opportunity not available in the trainee’s lab?
- *Research Skills Development only:* Who will provide the skills development training, and what are their qualifications?
- *Lab Exchange only:* Is the host supervisor well funded and well published? Does his/her record demonstrate productivity, impact and collaboration?
- *Lab Exchange only:* Is the proposed research realistic and appropriate for the selected host institution? Is the trainee’s proposal achievable?
- *Lab Exchange only:* Is there quality and scientific merit in the proposed research, including the strength of the hypothesis, research objectives, methodology and anticipated outcomes?
- *Lab Exchange only:* Will the research visit provide the trainee with exposure to cutting-edge national or international discovery and development efforts contributing to the advancement of the nanomedicines field, or to novel equipment and facilities not available at the trainee’s institution?
- *Lab Exchange only:* Will the research visit help to develop collaborations that facilitate long-term interactions between NMIN investigators and national or international research teams?

Program Availability

Applications to this program will be accepted from 3 July 2023 to 15 November 2023 at 5:00 pm in the applicant’s time zone on a “first-come, first-serve” basis, subject to available funding.

The proposed lab exchange/skills development activity must be completed, and all related funds expended by 31 March 2025.

Application Package

Please submit the application package electronically in PDF format to Divya Rao, HQP Program and Network Events Manager, at divyarao@nanomedicines.ca. Only electronic applications will be accepted.

The completed application package must include:

- Completed application form
- For Lab Exchange only*: Research Project Proposal (or training program description)
- Letter of invitation from the national or international host supervisor
- Letter of support from the NMIN supervisor
- Trainee's *curriculum vitae*
- NMIN supervisor's *curriculum vitae*
- For Lab Exchange only*: Host supervisor's *curriculum vitae*
- Copy of trainee's academic transcripts (for degree(s) completed and current studies)

Notification Process

Decisions will normally be communicated to applicants within eight weeks of the competition.

Contact Information

For further information or assistance in completing the application, contact:

Divya Rao – HQP Program and Network Events Manager divyarao@nanomedicines.ca