

# Vaccines and Immunotherapeutics program

**NRC-CMRC**

Human Health Therapeutics

## Working together to develop new vaccines and immuno-therapeutics

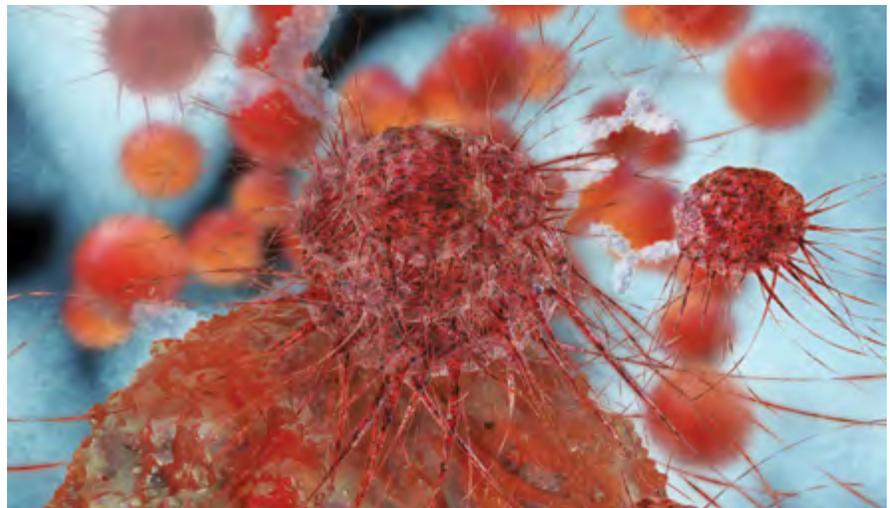
**NRC's Vaccines and Immunotherapeutics program serves as an integrated R&D extension to your team. We can de-risk product development, add significant value to vaccine and immuno-therapeutic candidates, and accelerate their progress along the value chain, up to early clinical trials.**



## Harnessing the immune system to prevent and treat disease

As a key contributor to disease prevention and treatment, vaccines offer low-cost and low-risk options that increase quality of life and reduce health care costs.

In partnership with industry, NRC's Vaccines and Immunotherapeutics program develops novel and improved vaccines that prevent viral and bacterial infections and that treat cancer and other chronic diseases. The program deploys its expertise in immunomodulation, analytics and bioprocessing to enable the vaccine industry to harness advances in adjuvants, biomarkers and vaccine production.



### Collaboration Opportunity

We are seeking collaborators to work with us on the following priorities:

- Cancer vaccines and immunotherapeutics
- Infectious disease vaccines: antimicrobial resistance, emerging infections

- Vaccines against chronic immune disorders

We establish our vaccine development priorities in consultation with the Canadian vaccine industry, as well as by liaising with the Public Health Agency of Canada about national vaccine priorities identified for short, medium, and long term development.



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Canada 

## Vaccines and Immunotherapeutics program



### Expertise and Facilities

We offer unparalleled expertise and leading-edge facilities in:

- Vaccine formulation and immunomodulation: portfolio of antigens, adjuvants, and vectors or custom development
- Biomanufacturing: production of vaccines and virus-like particles (VLPs) in bacterial, mammalian, insect and viral vector expression systems, with scale up in our Microbial Fermentation Pilot Plant or Cell Culture Pilot Plant
- Biomarkers and analytics: expertise in Biophysical Characterization and access to the Advanced Analytical Platform

- Immune monitoring and efficacy: expertise in Functional Characterization and access to the Preclinical *in vivo* Facility

### Collaborator benefits

NRC has extensive experience in working with its partners in the following ways:

- Vaccine and immunotherapeutic candidate co-development
- Research services in immune monitoring, animal models of infection and cancer, and human immunology
- Licensing of adjuvants, vectors, cGMP-compatible expression systems for vaccine production, as well as other enabling technologies

**“NRC understands what we are trying to do and demonstrated remarkable agility in adapting to our needs.”**

– Adam Buckley, Vice-president of Business Development, VBI Vaccines

Our business specialists have established best practices to guide the management and commercialization of intellectual property for co-developed products and enabling technologies.

We observe the rigorous standards set forth by Health Canada’s Biologics and Genetic Therapies Directorate (BGTD), ensuring that all our co-developed products meet their regulatory approval requirements to be sold in Canada and other jurisdictions. Canadian cGMP vaccine manufacturers who benefit from our bioprocessing expertise will be well positioned to supply both domestic and global markets.

### Your partner of choice

A globally recognized leader in vaccine and immunotherapeutic development, NRC offers our partners access to a highly qualified research team that can deliver first rate results while maintaining confidentiality.

### Contact

**Lakshmi Krishnan**  
Program Leader  
Tel.: 613-991-3210  
Lakshmi.Krishnan@nrc-cnrc.gc.ca  
[www.nrc-cnrc.gc.ca/eng/solutions/collaborative/vaccines\\_index.html](http://www.nrc-cnrc.gc.ca/eng/solutions/collaborative/vaccines_index.html)

### Interested?

If you’re interested in exploring robust and cost effective vaccine production methods, developing more effective approaches to immune monitoring and biomarkers, or connecting with our experts, contact us today!

