





Collect and evaluate data that informs on development and equity-based implementation of medical counter measures

Health threat surveillance, prediction, detection

Connected & accessible patient health data

Community engagement on equitable access and policy



Canada-US cross-border surveillance and detection of emerging health threats & supply chain management



Development and deployment of scalable diagnostic platforms



Canada-wide primary care clinic and ER departments alert system network with access to real-time samples for faster development of medical countermeasures



AI-enabled digital research infrastructure connecting inter-provincial hospital clinical data in real-time - world's largest repository of linked clinical and imaging data



Artificial Intelligence & Machine Learning Enabled



Precision Intervention

Create and develop innovative and equitable medical countermeasures that are adaptable and rapidly deployable

Deep immunoprofiling

Next-gen vaccines, therapeutics and diagnostics

GLP, CL3, GMP capacity

Clinical trial access

- Next-generation **mucosal vaccine** platform with targeted delivery and immune response
- Next-generation engineered **mAbs** with precision binding affinity and targeted delivery (prophylactic/preventative and therapeutic applications)



Process Innovation

Design, develop, and implement next-gen biomanufacturing technologies to accelerate scale-up production

Cell-based & cell-free digital and automated bioprocess

Bioanalytics

Nimble scale-up capacity

