INSTITUTE FOR ADVANCED MEDICAL ISOTOPES (IAMI)

A world-class centre for advanced isotope research and development
UNITING INTERDISCIPLINARY PARTNERS TO CREATE A PREMIER CENTRE FOR THE LIFE SCIENCES

Canada is home to world-leading researchers, clinicians, and industrial partners who are working to realize the benefits that medical isotopes — valuable tools for diagnosing and treating life-threatening illnesses, from cancer to dementia to cardiac disease — can bring to society. As a hub for this activity, the Institute for Advanced Medical Isotopes (IAMI) will accelerate academic research and industrial collaboration, positioning Canada as a global leader in the manufacture and study of existing and emerging medical isotopes.

EXPANDING CANADA’S EXPERTISE IN MEDICAL ISOTOPE RESEARCH
A world-class radiopharmaceutical research facility that houses both public- and private-sector research, development, and production, IAMI will expand Canada’s role in fast-moving advances in nuclear medicine that will improve health and save lives. Located on the TRIUMF campus, IAMI will bring together researchers from TRIUMF, the University of British Columbia, Simon Fraser University, and BC Cancer to enable the development of new medical isotopes and applications.

IMPROVING THE HEALTH OF CANADIANS
IAMI will support a network of domestic and international users focused on identifying and manufacturing isotopes and radiopharmaceuticals for imaging, diagnosing, and treating a variety of life-threatening diseases. The Institute will provide dedicated isotope production and laboratory space to accelerate the translation of nuclear medicine research, from bench to bedside.

IAMI AT A GLANCE:
A HUB FOR MEDICAL ISOTOPE RESEARCH AND INNOVATION
A 2500m² facility, featuring a dedicated, state-of-the-art TR-24 cyclotron and a suite of medical grade laboratories for conducting clinical trials.

A STEADY SUPPLY OF CRITICAL ISOTOPES
A dedicated production space significantly increasing the production capacity in British Columbia and Canada for medical isotopes necessary for research and clinical application, particularly $^18$F and $^{99m}$Tc, two of the most commonly used isotopes in diagnostic imaging.

A WORLD LEADER IN DEVELOPING TARGETED RADIONUCLIDE THERAPIES FOR CANCERS
Globally leading production capability for $^{177}$Lu and $^{225}$Ac-containing radiopharmaceuticals, which have demonstrated exciting potential for a targeted therapy in untreatable, late-stage prostate cancers.

SECURE ISOTOPE SUPPLIES
IAMI promises to secure a local supply of several important medical isotopes, including critical imaging isotope $^{99m}$Tc, and to enable Canadian access to the global $^{99m}$Tc market.

NEXT-GENERATION CANCER THERAPIES
By developing targeted radionuclide therapies for metastatic cancers, IAMI researchers will contribute to improving health outcomes for Canadians, place Canada at the centre of this promising, fast-growing field, and allow Canadian access to radionuclide therapy markets.

ACCELERATED GLOBAL DRUG DEVELOPMENT
Some early-stage drug development trials rely on highly sought-after isotope-based radiotracers to gauge drug efficacy. IAMI will provide a unique infrastructure for radiotracer production, positioning Canada as a key player in this space.

IMPROVED HEALTH OUTCOMES FOR BRITISH COLUMBIANS
IAMI will supply additional isotopes to the TRIUMF-UBC neuroimaging program at the Djavad Mowafaghian Centre for Brain Health and bring the power of personalized medicine to more patients who suffer from addiction, dementia, and other mental health issues. It will also boost the supply and diversity of important positron-emission tomography (PET) isotopes for BC Cancer patients, enabling thousands of PET scans annually at UBC and BC Cancer sites.

INDUSTRY PARTNERSHIPS AND INVESTMENT
IAMI will provide certified infrastructure for isotope production, enabling the development of new diagnostic and therapeutic substances by industry partners. The Institute will also establish a powerful training platform — at the interface between science and business — for young researchers.
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Learn more about IAMI and our Five-Year Plan 2020-2025
https://fivyearplan.triumf.ca

www.triumf.ca
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With local partners:

BC CANCER
THE UNIVERSITY OF BRITISH COLUMBIA
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Discovery, accelerated