



**Media Contacts:**

BC Cancer Agency  
Allison Colina  
Tel: 604.877.6272  
Cell: 604.861.8079  
E-mail:  
acolina@bccancer.bc.ca

TRIUMF  
Tim Meyer  
Tel: 604.222.7674  
Cell: 650.464.8955  
E-mail: tmeyer@triumf.ca

## MEDIA RELEASE

January 24, 2011

11:00am PST

### **BC Moves to the Forefront of Medical-Isotope Production Technology**

*New federal investments in BC Cancer Agency and TRIUMF will enable augmenting local supply of key medical isotope*

Vancouver—The Government of Canada today announced a \$6 million investment to develop an alternative medical-isotope production technology proposed by TRIUMF and the BC Cancer Agency (BCCA). The team will leverage existing capabilities at TRIUMF and BCCA to develop and demonstrate viable production of Technetium-99m (Tc-99m), the most widely-used medical isotope which gained worldwide attention last year due to reliability concerns around the nuclear reactor in Chalk River, Ontario.

Thomas J. Ruth, senior research scientist at TRIUMF and the BC Cancer Agency, is head of the proposal and said, "Together with our team, we are pleased to have this opportunity to address the isotope question facing all Canadians. This technology will take advantage of existing infrastructure to develop and demonstrate the capability for manufacturing technetium at multiple sites across the country using the most diverse collection of commercially available cyclotrons." The team includes the Centre for Probe Development and Commercialization and the Lawson Health Research Institute in Ontario.

Recently, the technetium isotope has been the subject of a world-wide shortage with the sudden and unexpected shutdown of the two highest-capacity nuclear reactors capable of producing Molybdenum-99 (Mo-99), an isotope whose decay to produce Tc-99m is the critical element of today's global supply chain.

"We are seizing a significant research opportunity thanks to our new cyclotron facility and the great partnerships that have been forged for this project," said Dr. Francois Benard, scientific director, Centre of Excellence for Functional Cancer Imaging, BC Cancer Agency, an agency of the Provincial Health Services Authority. "B.C. will be at the forefront of an incredibly significant move to secure a long-term production plan for medical isotopes through our research at the BC Cancer Agency and TRIUMF."

The team will be developing a long-known alternative technology for producing Tc-99m using particle accelerators (called cyclotrons) that already exist at TRIUMF and BCCA. The BC Cancer Agency cyclotron facility opened last fall, an initiative made possible through funding provided by the B.C. Ministry of Health Services and the BC Cancer Foundation. TRIUMF's isotope capabilities will be dramatically enhanced by an investment announced last summer by Premier Gordon Campbell for the Advanced Rare-Isotope Laboratory.

"The Provincial government applauds today's significant investment announcement from National Resources Canada to fund research into development of an alternative medical-isotope production technology," said Minister of Health Services Colin Hansen. "We are proud that our recent investments into the new radiopharmaceutical facility at the BC Cancer Agency and the isotope laboratories at TRIUMF are not only helping provide patients with the best care possible but are also facilitating cutting edge research that will benefit future patients."

The proposal was entitled "A Collaborative Program for the Production of Tc-99m

Using Medical Cyclotrons” and was submitted last July to the Non-reactor-based Isotope Supply Contribution Program formulated by Natural Resources Canada (NRCan) as part of the federal government’s intention to lay the groundwork for a more secure and sustainable supply of medical isotopes in the future. Another team successful in the NRCan program is being led by Advanced Cyclotron Systems, Inc., based in Richmond, B.C.

-30-

#### **About the BCCA**

The BC Cancer Agency, an agency of the Provincial Health Services Authority, is committed to reducing the incidence of cancer, reducing the mortality from cancer, and improving the quality of life of those living with cancer. It provides a comprehensive cancer control program for the people of British Columbia by working with community partners to deliver a range of oncology services, including prevention, early detection, diagnosis and treatment, research, education, supportive care, rehabilitation and palliative care. The BC Cancer Foundation raises funds to support research and enhancements to patient care at the BC Cancer Agency.

#### **About TRIUMF**

TRIUMF is Canada’s national laboratory for particle and nuclear physics. Located on the south campus of the University of British Columbia, TRIUMF is owned and operated as a joint venture by a consortium of the following Canadian universities, via a contribution through the National Research Council Canada: University of Alberta, University of British Columbia, University of Calgary, Carleton University, University of Guelph, University of Manitoba, McMaster University, Université de Montréal, University of Northern British Columbia, Queen’s University, University of Regina, Simon Fraser University, Saint Mary’s University, University of Toronto, University of Victoria, York University.