



**Written submission from  
Sylvia Fedoruk Canadian Centre  
for Nuclear Innovation Inc.**

**Mémoire du  
Sylvia Fedoruk Canadian Centre  
for Nuclear Innovation Inc.**

In the Matter of the

À l'égard de

**TRIUMF Accelerators Inc.**

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**TRIUMF Accelerators Inc.**

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Application by TRIUMF Accelerators Inc.  
for renewal of operating licence for its  
particle accelerator facilities

Demande de TRIUMF Accelerators Inc. pour le  
renouvellement de son permis d'exploitation  
pour ses installations dotées d'un accélérateur  
de particules

**Commission Public Hearing**

**Audience publique de la Commission**

**March 23, 2022**

**23 mars 2022**

2022 February 2

Canadian Nuclear Safety Commission  
280 Slater Street, P.O. Box 1046, Station B  
Ottawa, ON K1P 5S9  
Telephone: 613-995-5894 or  
1-800-668-5284 (toll free in Canada and the U.S.)  
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To Whom it May Concern:

I am pleased to offer this letter supporting a license renewal for TRIUMF. As an international leader in the particle accelerator community for more than five decades, TRIUMF is an essential partner and resource for Canadian nuclear research and business, including the Sylvia Fedoruk Canadian Centre for Nuclear Innovation Inc. (Fedoruk Centre).

The Fedoruk Centre operates a Class II nuclear facility that is owned by the University of Saskatchewan – the Saskatchewan Centre for Cyclotron Sciences (SCCS). The relationship between the Fedoruk Centre and TRIUMF has been growing steadily since establishment of our not-for-profit corporation in 2011. Academic, administrative and business activities are now well established, involving researchers and managers from both organizations in each other's scientific collaborations, peer reviews, consultations and governance. The SCCS houses a TR24 cyclotron, the same machine planned for installation within TRIUMF's Institute for Advanced Medical Isotopes (IAMI), creating an immediate sense of familiarity between our organizations. Both the SCCS and TRIUMF are multi-user research and production facilities that routinely provide radiopharmaceuticals for our respective local health authorities, while also enabling a large array of research experiments based on the isotopes and radiopharmaceuticals produced in-house. Both of our organizations support nuclear innovation, foster education, and draw public attention to the societal benefits of nuclear science and technology.

Together our organizations are poised to redefine the isotope production landscape within Canada. I would like to mention our recent acquisition of a solid target system from ARTMS, Inc. – a spinoff company formed from TRIUMF's efforts to leverage its target expertise to enable the cyclotron-based production of technetium-99m (Tc-99m) for other sites across the country. The ARTMS solid target system has allowed the SCCS to safely produce large amounts of other emerging medical isotopes, including zirconium-89 and gallium-68 – both of which are now available to support important research efforts at the University of Saskatchewan.

The Fedoruk Centre has developed very rapidly into a significant player in Canada's network of nuclear facilities thanks in large part to the foundational presence, knowledge and quality of legacy institutions like TRIUMF. With individuals from both institutions interacting, we are benefitting from access to world-class technological expertise as well as from established policies and procedures that address shared challenges and obstacles. Recent examples include exchanges to better our organizational structures, and experimental safety and scientific review and accountability procedures. In all, we have a strong motivation to work closely with TRIUMF and its international experts to share best practices in and around cyclotron-based production of medical isotopes and the manufacture of radiopharmaceuticals with Health Canada-compliant Good-Manufacturing-Practice (GMP) standards of quality.

In summary, it is clear to me that even after 50 years, TRIUMF continues to serve as an important part of Canada's R&D community, with clear impact on the lives of Canadians. The laboratory has my full support in its relicensing application, and I look forward to continuing our relationship in the years to come.

Sincerely,

A handwritten signature in blue ink that reads "John Root". The signature is fluid and cursive, with the first name "John" being larger and more prominent than the last name "Root".

John Root, PhD  
Executive Director