



Innovation Challenge Competition Application Guidelines (April 2021)

Overview

ST Innovations is the business arm of the Sensory Motor Adaptive Rehabilitation Technology (SMART) Network—a multidisciplinary entity comprised of engineering, medicine, rehabilitation, computer science, neuroscience, and social sciences. It brings together over 200 researchers focused on developing intelligent medical devices and innovative health solutions to improve patient outcomes and well-being.

ST Innovations mission is to:

Translate and enhance health technologies through partnerships, collaborations and specialized commercialization expertise; contributing to the care and well-being of people, while building innovation capacity and wealth.

ST Innovations is pleased to announce an Innovation Challenge focusing on opportunities to mobilize creativity, entrepreneurship and adoption of groundbreaking, disruptive solutions to major clinical problems associated with neuro-musculo-skeletal impairment.

The Innovations Challenge

The ST-Innovations Challenge offers \$120k+ to a team comprising the following anchor partners:

- At least one academic innovator
- At least one commercial entity willing to commit to a pathway to commercialization of the disruptive innovation
- At least one clinical expert, advocate and opinion leader committed to adoption

*** One of the three anchor partners must include a member of the SMART Network.**

Selection Process

Applicants must register to qualify to compete for this Challenge. At the end of the registration period all registrants will be sent the application link. The application will be reviewed by members of the International Advisory Board of ST Innovations who comprise industry-based experts in health technology innovation ranging from small-to-medium size enterprises (SMEs) to large multi-national companies. Additional experienced, international health innovation experts will be consulted as part of the review process according to the nature of the specific technologies proposed by the applicants. The top three submissions will be selected to pitch their proposal to the review committee prior to final selection. A representative of at least one anchor partner must be available to present on behalf of the team.

Selection Criteria

- The innovation must propose a **daring, original and groundbreaking** technological solution that is **disruptive** rather than one that just builds on an existing solution.
- The innovation must provide a solution to an unmet real-world clinical problem, with the potential to have substantial impact for stakeholders such as patients, clinicians and systems of care. Applicants will be expected to estimate the impact this innovation will have in economic terms for Alberta and in social/quality of life terms for the end-user.
- The proposal must demonstrate a strong collaborative culture between the 3 anchor partners. Evidence of how this partnership plans to employ established, best practices for an integrated team culture for work in co-design and co-development will be required in the proposal.
- A clear plan will be required that demonstrates:
 - Development milestones expressed as technological and business development objectives
 - Clear role definitions for the anchor partners and strong evidence of how they interact in the co-development process
 - Proposed sources of further investment, strategies, expertise and resources to access them
 - A rationale for an expected return on these investments
 - Applicants will include with their proposal a simple business case outline that represents the opportunity that would be presented to potential investors
 - Produce a functioning prototype and be prepared to present for a media event at the end of the project
- The proposal will outline a highly collaborative program of activities involving all the anchor partners and representation from end-users. The program of activities will include establishing an adoption beachhead that will demonstrate how the innovation will be tested in an intended use setting.
- The proposal will provide evidence that the applicants have access to a network of experts who will ensure the innovation follows an efficient development pathway.
- The innovation must offer significant business potential demonstrating both a viable and lucrative market for commercialization as well as social and/or quality of life benefits to intended users.
- The winning team will have full access to the SMART Network infrastructure, resources and expertise to complete their project and is strongly encouraged to utilize these.



Tentative Timeline (subject to change):

Registration Deadline	May 16 (11:59 pm MDT)
Full application sent to registrants	May 17, 2021
Information session 1	May 19, 2021 10:00 MDT
Information session 2	May 31, 2021 10:00 MDT
Deadline for submission	July 14, 2021 (11:59 pm MDT)
Winner selected	August 2021
Project start	August/September 2021