



**Invention to Innovation: Mobilizing Ideas and Talent
to Meet Societal Challenges**

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Innovation - distinctive ideas, of value, put to practice - is often confused with invention in the realm of university-related research. Societies invest substantially in supporting university-based research and the training of highly qualified personnel (HQP). What are the pathways to impact from universities? How do they relate to regional and national boundaries, and particularly economic impact? How does receptor capacity play a role in deploying talent and ideas? How might we catalyze the career impact and professional growth of HQP in Canadian society and beyond? While Canadian research is highly-ranked globally, primary success metrics of IP and venture creation around translation of Canadian research into commercialization and impact fall short of comparator nations. How do the time, risk and capital scales to commercialization inherent in (bio)chemical design and innovation factor into the mechanisms of knowledge mobilization? Science-based entrepreneurship and innovation ventures face particular challenges, including longer commercialization timeframes, need for substantial funding and complementary resources, and balancing commercial progress with advancing science (Maine & Garnsey, 2006; Pisano, 2010; Lubik & Garnsey, 2016).

(See slide 2)

While ventures formed and intellectual property are without doubt indicators of commercial progress, this narrow definition of success, and policies that drive toward those indicators without full understanding of the conditions and people necessary for the success of an interdependent science-based ecosystem are unlikely to solve this national challenge.

In this talk, I will review the mechanisms of knowledge and talent mobilization from universities. I will offer perspectives and reflections from the work that my colleagues and I have been doing over more than 10 years at the Dunin-Deshpande Queen's Innovation Centre, and I will provide perspectives from research in university-anchored innovation and entrepreneurship ecosystems conducted in collaboration with colleagues at Simon Fraser University, notably the notion of boundary spanning, capabilities, and developing champions of innovation within universities, and insights gained from the Mitacs/SFU Invention to Innovation program. The expectations of universities in the societies that support them is evolving, and I will provide an overview of recent trends, along with new approaches to assessing the societal impact of university research that are gaining momentum in the US and globally.