PARTNER PERSPECTIVE

Intellectual Capital is Vital to Our Innovation Ecosystem



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Innovators across Canada's National Design Network frequently credit their novel research, and the game-changing products resulting from it, to the NDN's unique ecosystem of tools, technologies, facilities, expertise and collaboration opportunities.

This infrastructure not only helps us bring innovation out of universities and into the hands of companies; it also provides training and experience to professors, students, and industrial innovators.

Training is the value-add that gives our NDN innovators their competitive edge. Academics and students who take our courses, workshops and webinars don't just learn how to use commercial tools or processes; those learnings become jumping-off points for exploring limitations or pushing the boundaries of tools and processes. Sometimes those investigations trigger industrial collaborations, leading to graduate hirings; and sometimes they lead to startup companies, headed by entrepreneurial faculty or students. But a particularly valuable outcome is when NDN trainees become academics themselves, because they pass on this learning and experience to their students, ensuring a new generation of micro-nano innovators.

We saw a wonderful example of this "continuity effect" recently at our annual TEXPO student research competition and exposition. Amin Rasouli, a graduate student at Simon Fraser University, won the Huawei Microsystems Design Award for his novel resonance sensing technique. Ten years ago, the same award went to a University of Manitoba graduate student, Behraad Bahreyni. Today Dr. Bahreyni is Professor of Mechanical Engineering at SFU, a leading MEMS researcher – and Mr. Rasouli's graduate supervisor.

Another example is our past board chair and longtime member, Dr. Yvon Savaria. A TEXPO winner in 2000, today he is Professor of Electrical Engineering, Polytechnique Montréal, where he has supervised more than 130 graduate students, a large number of whom have benefited from the NDN's resources.

There are many more examples from the NDN, but they share a common lesson: that intellectual capital is a vital piece of the innovation ecosystem, and that it makes sense to continue to invest in this knowledge asset.