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UNB researchers named among top researchers for Canada 150

4 minutes

Four University of New Brunswick researchers are being hailed as among Canada's top emerging innovators.

The national not-for-profit organization Mitacs is saluting 150 researchers from all across Canada who it says are shaping the future of the country. The researchers highlighted represent various academic disciplines, and mirror Canada's diversity and innovative spirit.

"For Canada's sesquicentennial, we're showcasing 150 Mitacs researchers whose dedication and vision have impacted our past

and will inspire our future," says Alejandro Adem, Mitacs CEO and scientific director. "Researchers like these four from UNB exemplify the creativity, diversity, and tenacity that make Canada a wonderful place to live."

The UNB innovators – Tanzina Huq, Arash Lashkari, Andrien Rackov and Babak Shirani – are involved in a variety of research fields from cybersecurity to early cancer detection.

"These are researchers whose ingenuity and dedicated pursuit of innovation is inspiring, and I congratulate them for this well-deserved national recognition," says University of New Brunswick President Eddy Campbell. "At UNB, where we conduct about 70 per cent of publicly funded research in the province, we're proud of our record of innovation, the impact it is making, and the people who make it happen."

The four researchers from UNB are:

Dr. Tanzina Huq, a postdoctoral fellow in UNB's faculty of engineering, who is creating a sustainable natural food preservative that will impact the food industry. Through the startup Chinova Bioworks, she has been part of the team that has developed a natural preservative from mushroom extract instead of a widely used animal extract. The research will result in more environmentally friendly food, and has the possibility to benefit cosmetics and pharmaceuticals;

Dr. Arash Lashkari, a research associate with the Canadian Institute for Cybersecurity at UNB as well as UNB's faculty of computer science. Dr. Lashkari has more than 20 years of experience developing technology that detects and protects against cyberattacks, malware and the dark web. Currently, he is

developing databases of malware for anti-virus software developers to test their products in order to ensure their firewalls can withstand a cyber attack. His research has already had real-world applications with IBM;

Dr. Andrien Rackov, a postdoctoral fellow in [UNB's department of chemistry](), who is isolating chemicals in breath to determine an individual's health. Partnering with the New Brunswick Research and Productivity Council, Dr. Rackov is creating a breathalyzer to make early detection for heart disease, lung cancer and other diseases easier and less intrusive. His research also includes the development of an "air sniffer" test to determine if a building has mould.

Dr. Babak Shirani, who received a doctorate in chemical engineering from UNB in 2016, has research interests that include developing new technologies to purify natural gas to limit air pollution and protect the environment.

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Photo: From left, UNB innovators Dr. Tanzina Huq, Dr. Arash Lashkari, Dr. Andrien Rackov and Dr. Babak Shirani have been named among the top emerging researchers in Canada by Mitacs.