

Investment in Innovative Research Equipment to Help Advance Imaging and Diagnosis of Disease

August 12, 2019

Trent professors awarded \$244,896 from Canadian Foundation for Innovation to support leading-edge research labs and tools



Left: Dr. Aaron Slepkov Right: Dr. Sanela Martic

Improving imaging and making advances in the diagnosis of disease and healthcare management associated with aging populations: two Trent research projects that recently received a \$244,896 new-equipment-funding infusion through the Canada Foundation for Innovation's (CFI) John R. Evans Leaders Fund.

Dr. Aaron Slepkov, a Canada research chair in the Physics of Biomaterials and physics professor at Trent University, and Dr. Sanela Martic, a professor in Trent's Forensic Science program, received grants for their respective studies in advancing biomedical techniques.

The grants are part of a federal government investment of \$61 million aimed at equipping researchers across the country with innovative tools, announced earlier this week by the Honourable Kirsty Duncan, minister of Science and Sport.

"Congratulations to Professor Slepkov and Professor Martic for securing this funding for research infrastructure," said Dr. Neil Emery, vice president of research and innovation at Trent University. "These grants will enable Prof. Slepkov and Prof. Martic to invest in powerful, customized technology and the maintenance of high-end tools, a crucial aspect of advancing their research and the pursuit of discovery and innovation."

Prof. Slepkov received \$158,579 to help purchase a dual output laser system. This piece of equipment will be used to develop new microscopy techniques and enable the study of various biomaterials systems such as nutraceuticals, aquaculture, and environmental contaminants.

"The kinds of new microscopy techniques we're developing are of great interest for biomedical imaging fields and point-of-care diagnostics," said Professor Slepkov. "There have been some very promising advances towards, for example, skin cancer diagnosis, using similar techniques. Advances we make in our techniques are directly applicable to those used in biomedicine."

Prof. Martic received \$86,317 to help purchase five instruments for a new lab that is part of a proposed cutting-edge biomedical and biosensor research program.

"The requested infrastructure will make significant contributions to the development of biomedical tools and methods to better protect Canadians while reducing economics costs associated with healthcare by enabling novel research using interdisciplinary techniques," said Prof. Martic. "The expected benefits to Canadians are numerous, as the research will improve provincial and federal health management."

In the government announcement, Minister Duncan noted that the best science is dependent on researchers having the best tools.

"I am thrilled to announce funding for the infrastructure needs of Canadian researchers. Their ground-breaking contributions to science and research have an enormous impact on the breakthroughs that help make our visions for a better future of Canada a reality," Minister Duncan said.