

Dr. Tsanka Todorova: DMRF Research Fellow in Osteoarthritis,
Department of Applied Oral Sciences, Dalhousie University



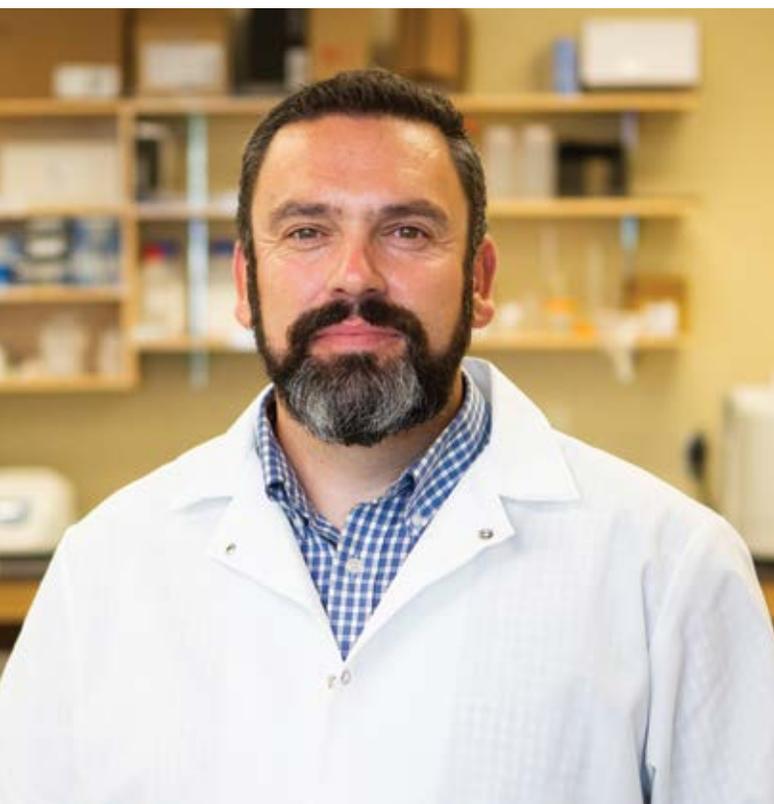
SEEING THE FUTURE OF HEALTHCARE THROUGH GLASS TECHNOLOGY

Last fall, we were pleased to feature the work of Dalhousie's Dr. Daniel Boyd, a globally recognized inventor of several biomaterial technologies. Taking the world by storm, Dr. Boyd has led the development of pioneering glass compounds over the last several years with demonstrated abilities to aid in cancer treatment, the healing of bone fractures, the reversal of oral sensitivity and more.

With a view to advancing these new technologies and getting them to patients as quickly as possible, DMRF was pleased to fund a new research position in Dr. Boyd's lab in 2019, and is thrilled to extend this support for another year term as this lab continues to build exceptional and world-leading momentum.

“This type of work is entirely unique in the global context, and I want to thank DMRF donors for making it all possible. With this exciting, advanced technology, we hope to improve the lives of people around the world who are suffering from medical conditions such as osteoarthritis.”

– Dr. Tsanka Todorova, DMRF Research Fellow in Osteoarthritis



Thanks to support from DMRF donors, Dr. Tsanka Todorova is currently working alongside Dr. Boyd to rapidly develop an exciting new technology for the treatment of osteoarthritis. A theoretical chemist with international training, Dr. Todorova’s extensive experience includes work with CEA-Leti (France), one of the world’s largest organizations for applied research in micro and nanotechnologies, as well as work on projects funded by Boeing, conducting multi-scale computational modelling to help develop new aluminum-based alloys for the aerospace industry.

Over the past year, Dr. Todorova has been working in close collaboration with Dr. Boyd to develop new material compounds in relation to osteoarthritis. To date, they’ve developed 16 promising compositions, and are currently in the process of working through regulatory compliance and patenting, with a view to commercializing this technology as quickly as possible.

“Glass is one of the most underrated materials on the planet when it comes to its applications for health and healthcare.”

– Dr. Daniel Boyd, Professor of biomedical engineering at Dalhousie University; Co-Founder, ABK Biomedical

As a result of Dr. Boyd’s research to date, three spin-off companies have been established, with operations in Canada and the US, including:

Covina Biomedical – developing unique approaches to knee replacement stabilization

IR Scientific – developing breakthrough technology for dental care; to treat dental hypersensitivity

ABK Biomedical – developing new technologies for liver cancer treatments, selective internal radiation, and hypervascular tumors