

Biography- Dr. Milos R. Popovic, Toronto Rehabilitation Institute's new Chair in Spinal Cord Injury Research

Dr. Milos R. Popovic, respected biomedical engineer, Senior Scientist at Toronto Rehabilitation Institute (Toronto Rehab), and Associate Professor in the Institute of Biomaterials and Biomedical Engineering at the University of Toronto was awarded the Toronto Rehabilitation Institute Chair in Spinal Cord Injury Research in April of this year.

The new spinal cord research chair, established as part of Toronto Rehab Foundation's multi-million dollar capital campaign, is one of five endowed research chairs created to support Toronto Rehab's growing rehabilitation research enterprise, now one of the largest in North America.

Head of iDAPT's Rehabilitation Engineering Laboratory (www.toronto-fes.ca) at Toronto Rehab's Lyndhurst Centre, Dr. Popovic's research focus is to understand how the human nervous system and muscles work together to control body movement. His specific research interests are in developing neuroprostheses for stroke and spinal cord injury patients, brain-machine interfaces, assistive technology and neurorehabilitation. Dr. Popovic's research is part of an exciting new discipline known as neuroprosthetic systems - designing devices that help to restore or replace functions of the human neuromuscular system when it is damaged.

Dr. Popovic has already had promising results with his research. He has been able to help some people who are paralyzed as a result of spinal cord injury or stroke, regain at least some function by "retraining" their nervous systems with the use of a system called FES, or functional electrical stimulation. Studies have shown that FES can help patients with spinal cord injuries or stroke learn to pick up and hold objects.

In his new role, one of Dr. Popovic's research goals over the next five years will be to create a centre for development and implementation of advanced, implanted neuroprosthetic and neuromodulation systems for patients with Parkinson's disease, epilepsy, dystonia, essential tremor and spinal cord injury. The CRANIA (Centre for Research in Advanced Neural Implant Applications) Project will be the first such research enterprise in the world.

Dr. Popovic received his PhD in mechanical engineering from the University of Toronto, and holds a diploma in electrical engineering from the University of Belgrade. He has published extensively in his areas of specialization.