

Molly Shoichet

**Co-inventors: Dimpy Gupta, Charles Tator,
Jordan Wosnick and Ryan Wylie**

Dr. Molly Shoichet holds the Tier 1 Canada Research Chair in Tissue Engineering and is Professor of Chemical Engineering & Applied Chemistry, Chemistry and Biomaterials & Biomedical Engineering at the University of Toronto. She is an expert in the study of Polymers for Drug Delivery & Regeneration which are materials that promote healing in the body. She is the recipient of many prestigious distinctions including: the Canada Council for the Arts' Killam Research Fellowship, NSERC's Steacie Fellowship, CIFAR's Young Explorer's Award (to the top 20 scientists under 40 in Canada), Canada's Top 40 under 40. In 2011, Dr. Shoichet was appointed to the Order of Ontario, Ontario's highest honour, and recognized as a Fellow of the American Association for the Advancement of Science. In 2012, she received the United States Society for Biomaterials' Clemson Award and in 2013, Dr. Shoichet's contributions to Canada's innovation agenda and the advancement of knowledge were recognized with the QEII Diamond Jubilee Award

Professor Shoichet's nomination is related to three inventions, which were created in collaboration with co-inventors, Dimpy Gupta, Charles Tator, Jordan Wosnick and Ryan Wylie. The family of patents related to hyaluronan/methylcellulose (HAMC) has garnered great interest both from industry and academia worldwide. Molly's group has patented three variations of the HAMC formulations, in addition to the composition of matter patent: one to deliver biological cells, one for polymeric particles and finally, one to deliver hydrophobic drugs. All four have been optioned to development partners and are currently being advanced through industry sponsored research collaborations. A separate patent related to 3D hydrogel chemical patterning has also attracted collaboration and industry interest.



2013
Inventors
of the
Year

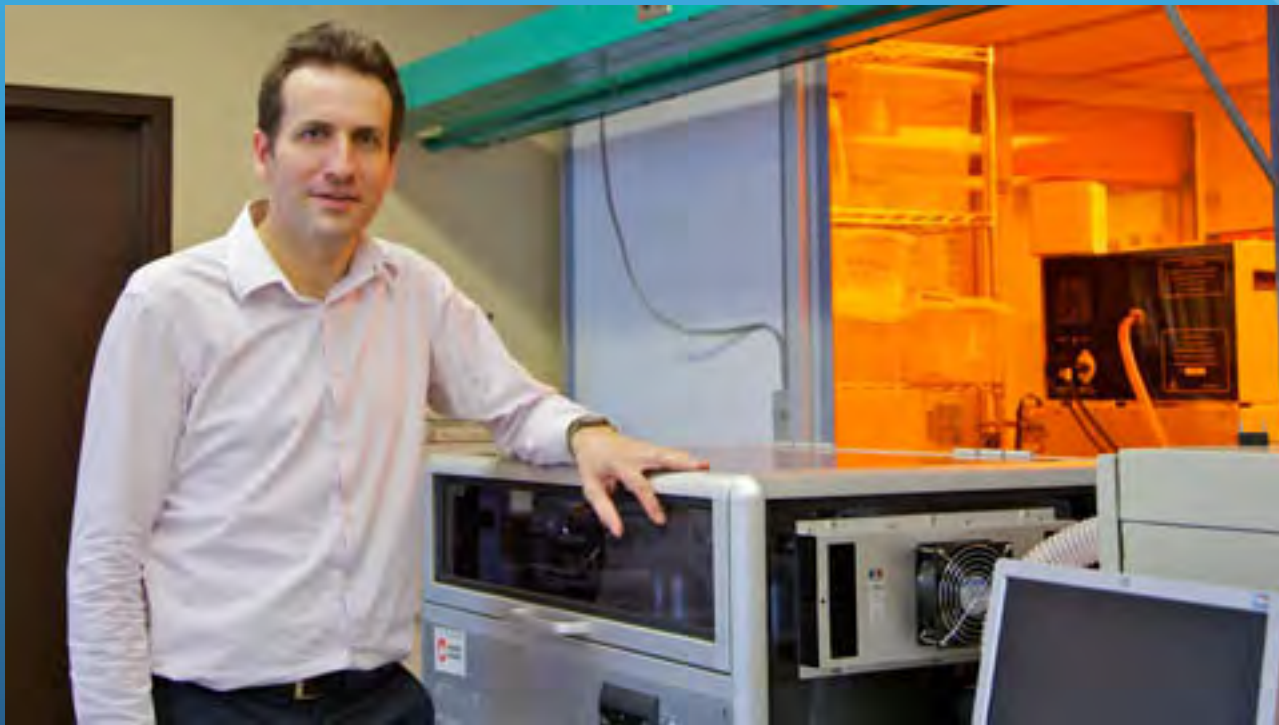


Ahmed El-Soheemy



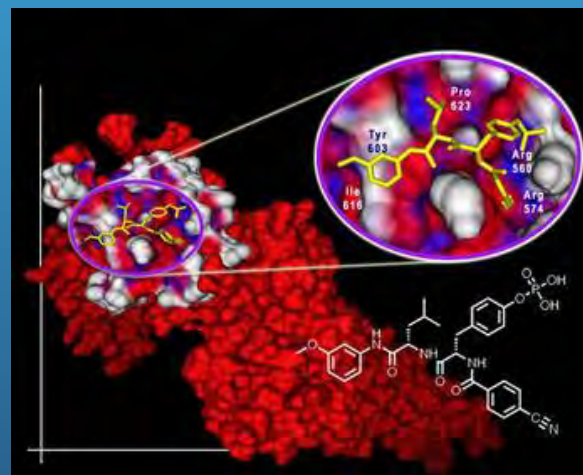
*Improving Health Through
Personalized Nutrition Assessment*

Axel Guenther Milica Radisic, Lian Leng,
Arianna McAllister, Andrew Woollard and
Boyang Zhang



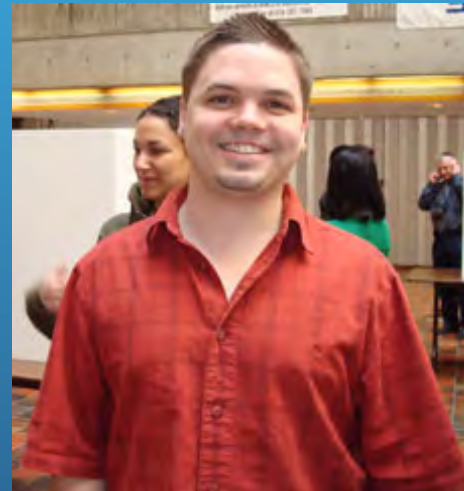
3D Bio Printer for Tissue Engineering Applications

Patrick Gunning



Drug Discoveries for Cancer Treatment

Steve Joordens Dwayne Pare



Innovative Cloud-Based eLearning Tools

Peter Lehn

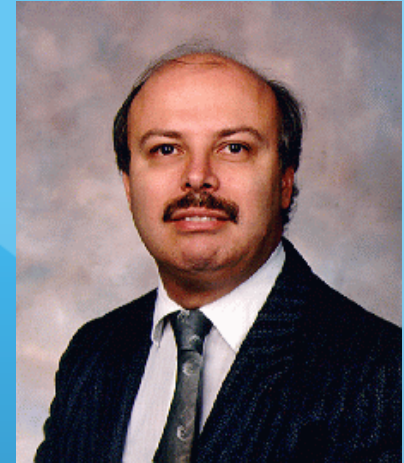
Energy Systems Group @

*The Edward S. Rogers Sr. Department of Electrical and Computer Engineering
University of Toronto*



Power Circuit Topologies for Power Conversion

Andreas Mandelis Jose Garcia
Jinseok Jeon Lena Nicolaides
Anna Matvienko



Stephen Abrams



Technology for the Early Detection of Dental Caries

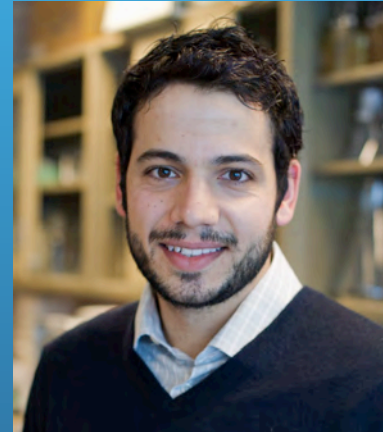
Milos Popovic

Santa Huerta Olivares

Massimo Tarulli

Peter Lehn

Aleksandar Prodic



MyndTec

Neuroprosthetic Systems

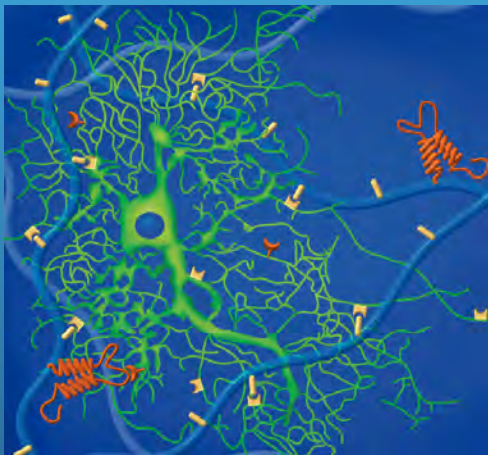
Molly Shoichet

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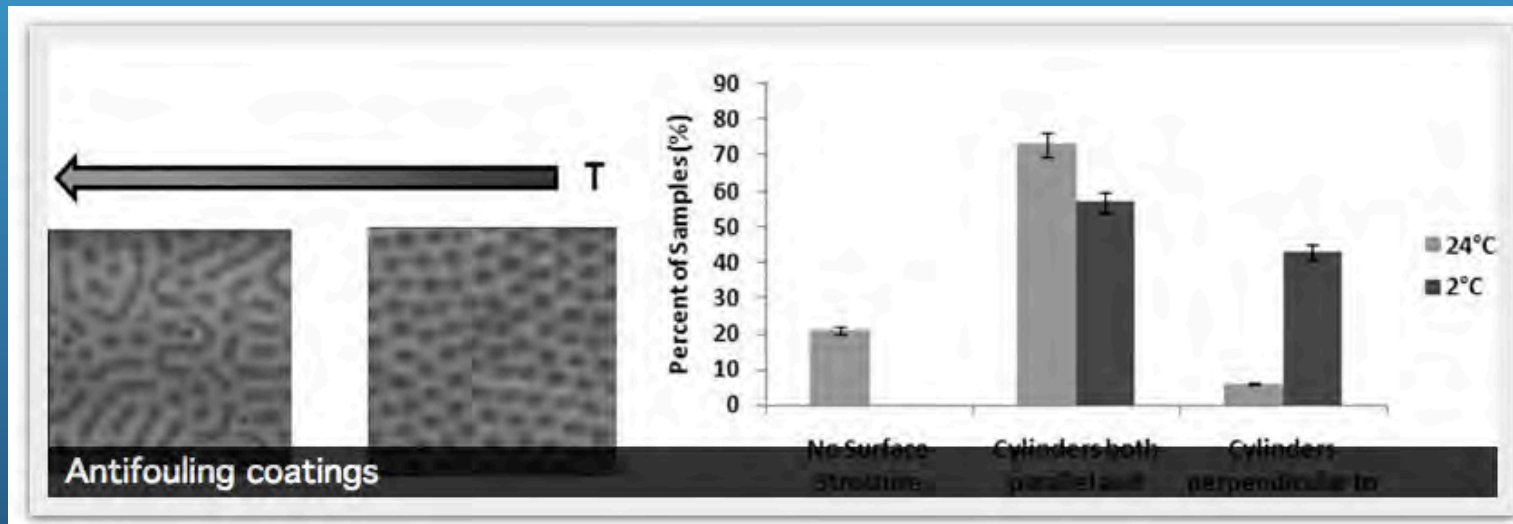


Polymers for Drug Delivery and Regeneration

Gilbert Walker



Nikhil Gunari

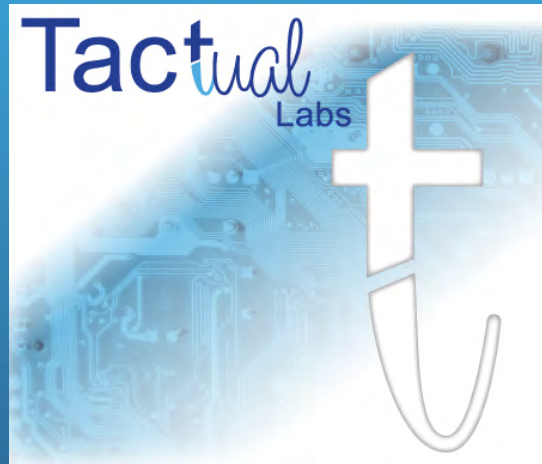
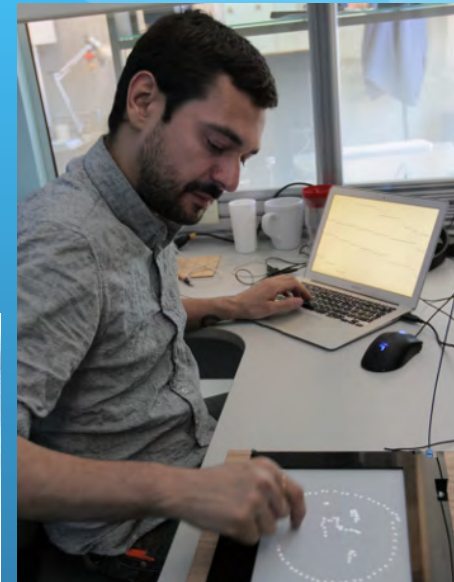


Technologies to Prevent Marine Biofouling

Daniel Wigdor



Ricardo Jota



Clifton Forlines Steven Sanders

Inventions for Human Computer Interaction

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Inventors
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Year

