



PROFILES



Dr. Mark Poznansky, C.M., O.Ont.

Chief Research Officer, Thunder Bay Regional Research Institute

Dr. Mark Poznansky is the former President and Scientific Director of Robarts Research Institute in London, Ontario. A native of Montreal, Dr. Poznansky was educated at McGill University, receiving his PhD in Physiology in 1970 and completing postdoctoral training in Biophysics at Harvard Medical School, where he held the position of Lecturer in Biophysics before coming to Canada as Associate Professor of Physiology at the University of Alberta in Edmonton in 1976. He went on to become Associate Dean of Medicine in charge of Research.

As President and Scientific Director of Robarts Research Institute, Dr. Poznansky presided over an impressive period of growth in funding, employment and technology transfer between 1993 and 2007. Under his guidance, employment rose from just over 100 jobs to over 600. Annual research funding increased from \$10M/year to over \$40M/year and the Institute generated seven different companies, including one that was sold to GE Healthcare.

In addition to his role at Robarts, Dr. Poznansky is a founder of London Biotechnology Incubator Inc., and a founding member and past chair of the Council for Health Research in Canada, a research advocacy group in Ottawa. He also chaired the Scientific Advisory Board of the Canadian Medical Discoveries Fund, is Vice-Chair of the Ontario Genomics Institute and sits on numerous biotechnology-industry related boards.



Dr. Alla Reznik

Scientist, Thunder Bay Regional Research Institute

Dr. Alla Reznik holds a PhD in Solid State Physics from the Department of Physics, Technion – Israel Institute of Technology. She has been investigating the properties of wide band-gap semiconductors for more than 15 years. She is an expert in photoconducting materials for x-ray and gamma-ray detector application.

In the last five years Dr. Reznik has been actively collaborating with NHK Science & Technical Laboratories (Japan) on the development of the solid state technology for a new generation of Positron Emission Tomography (PET) imagers based on amorphous selenium avalanche photosensors.

The goal of this research is to improve sensitivity for cancer detection, enabling diagnosis in the early stages of cancer. As part of the MMRC team Dr. Reznik will continue to work on the development of advanced radiation imaging detectors for a variety of biomedical applications, beginning with breast cancer.



Dr. Laura Curiel

Scientist, Thunder Bay Regional Research Institute

Dr. Laura Curiel was born in Mexico City in 1973. In 2001 she received her PhD in Images and Systems from the Institut National de Sciences Appliquées (INSA) de Lyon in France.

She has been working for the past five years as a postdoctoral fellow specializing in High Intensity Focused Ultrasound (HIFU) therapy, working at Sunnybrook Health Sciences Centre since 2006. Her research interest is incisionless surgery which is accomplished using high intensity focused ultrasound.

As a scientist with the MMRC, Dr. Curiel, in collaboration with Philips Medical Systems, will be engaged in HIFU clinical trials for the ablation (elimination) of uterine fibroids and will subsequently develop further disease site applications for this type of image-guided incisionless technique using Magnetic Resonance Imaging (MRI).



Dr. Samuel Pichardo

Scientist, Thunder Bay Regional Research Institute

Dr. Samuel Pichardo's research activity is centered on the use of ultrasound to propose minimally invasive therapeutic applications. He was born in Hermosillo, Sonora, Mexico, and received his PhD in 2005 in Images and Systems from the Institut National de Sciences Appliquées (INSA) de Lyon in France.

Dr. Pichardo has two years of postdoctoral experience at Sunnybrook Health Sciences Centre working with Dr. Kullervo Hynynen on two projects involving High-Intensity Focused Ultrasound (HIFU). The first project investigates using HIFU to treat brain tumours while leaving the skull intact. The second non-invasive approach using HIFU is to treat otherwise intractable electrical disturbances in the heart without surgery.

As Scientist with the MMRC program, Dr. Pichardo will conduct activities for the design of new therapeutic devices and for the treatment planning involved with the installation of a new MRI-guided ultrasound therapy system at Thunder Bay Regional Health Sciences Centre. He aims to establish a multidisciplinary environment where he will work alongside clinicians so that his basic research can be translated to clinical reality in a timely fashion.