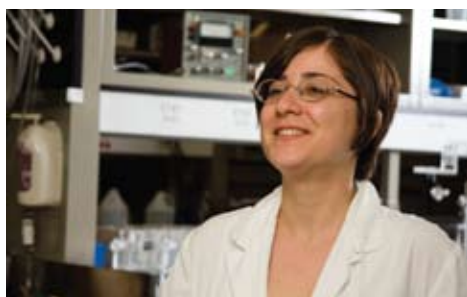


Bringing Discovery to Life



Laura Curiel, PhD.
Scientist

EDUCATION

- B.Eng. Electronic Systems, 1995, Instituto Tecnológico y de Estudios Superiores de Monterrey, Estado de Mexico, Mexico
- M.Sc. Biomedical Engineering, 1997, Université de Lyon I Claude Bernard, Lyon, France
- Ph.D. Imaging and Systems, 2001, Institut National de Sciences Appliquées, Lyon, France

APPOINTMENTS AND AFFILIATIONS

- Adjunct Professor, Department of Electrical Engineering, Lakehead University 2008 - present.

RESEARCH AREAS OF FOCUS

Dr. Curiel's research work is centered in High Intensity Focused Ultrasound (HIFU) therapy. HIFU has the potential for minimally invasive treatments that selectively destroy or interact with cells located in a targeted zone. Her research activities comprise three different directions: new therapeutic devices design, ultrasound lesion formation study and treatment monitoring.

As a scientist with the Thunder Bay Regional Research Institute, Dr. Curiel will work in the development of new therapeutic devices that will be translated into clinical reality. As a result, a collaborative work project with Philips Healthcare and Sunnybrook Health Sciences Centre has been started toward HIFU clinical trials for the ablation (elimination) of uterine fibroids under

Scientist Biography

MRI guidance at Thunder Bay Regional Health Sciences Centre.

Dr. Curiel is also working on developing further site applications for HIFU therapy. This includes the investigation of bio-effects, design of new therapeutic devices and exploration of different monitoring tools for the therapy in order to achieve the safest and most effective treatment result.

During previous research work Dr. Curiel worked in the design and testing of new HIFU probes for prostate cancer, the use of modeling to improve clinical outcomes, the clinical evaluation of elastographic imaging techniques for HIFU treatment evaluation and lesion formation control. She also taught graduate courses in Biomedical Engineering and supervised undergraduate and graduate students' research work.

Dr. Curiel is committed to the continuous improvement of HIFU as a therapeutic approach with the main goal of achieving opportune translation of research results. She intends to guide her research interests on patient needs and to offer new therapeutic options. The Thunder Bay Regional Research Institute has a complete infrastructure to perform clinical HIFU treatments in an open research environment that will allow the development of new devices within the hospital structure, multiplying collaboration opportunities that will benefit patients.

Thunder Bay Regional Research Institute

In partnership with
Thunder Bay Regional Health Sciences Centre