

Techna Institute

2017 Research Fact Sheet

About the Techna Institute for the Advancement of Technology for Health (Techna)

Launched in 2011, Techna's vision is to shorten the time interval from technology discovery to application for the benefit of patients and the health care system. The Techna model combines translational research with clinical, productization, engineering, software development and management expertise.



Research Areas



Techna is focused on advancing guided therapeutics, informatics and communications technologies, nanotechnology and radiochemistry, photonics and design, and engineering for health.

Foundations



Techna was launched with the help of The Princess Margaret Cancer Foundation through a \$10 million funding commitment. The Toronto General & Western Hospital Foundation also supports selected Techna projects.

Selected Research Advancements



Monitoring Heart Health Dr. Bernd Wintersperger developed a new way to monitor the early stages of heart damage due to iron overload in people who receive blood transfusions. *Hanneman K, et al. Radiology. 2016.*



Treating Hand Tremors A new, more accurate way to target the brain region responsible for essential tremor—the most common movement disorder—was developed by Dr. Mojgan Hodaie. *Sammartino F, et al. Mov Disord. 2016.*



Cancer's Chemical Fingerprint By combining two techniques, known as polarized light imaging and mass spectrometry, Dr. Arash Zarrine-Afsar found a way to rapidly identify aggressive tumours. *Tata A, et al. Sci Rep. 2016.*



Robotic Surgery Helps Dr. James Drake increased the accuracy of focused ultrasound surgery using a computer-guided system so that it can be used to help stop brain bleeding in premature infants. *Price KD, et al. Med Phys. 2016.*

Researchers



9 Core Leads
4 Scientists
37 Affiliated Faculty
50 Total Researchers

Trainees



24 Fellows
39 Graduate Students
63 Total Trainees

Support



95 Support Staff

Research Funding



\$12,492,230

Research Space



12,484 sq. ft.

Peer-Reviewed Publications



279