

Canadian Foundation for Innovation funds a new research facility on image guided therapy and surgery

Saturday, November 1, 2008

A new research facility on image guided therapy and surgery techniques

An OMPI researcher, Dr. Tong Xu, just received funding from Canada Foundation for Innovation (CFI) to establish a research facility on image guided therapy and surgery techniques. The facility will include a state-of-the-art x-ray imaging system and 3D real-time tracking system based on a novel technology called PeTrack (Positron Emission based Tracking).

The PeTrack system is developed in the Imaging Laboratory at the Department of Physics, Carleton University. The principle is to use positron emitting isotopes to label the target that is interested. The positron emitted from the isotope annihilates with electrons and produce a pair of gamma ray. By detecting these gamma rays, the position of the positron source, i.e. the target, can be determined by a special algorithm developed in this lab. The advantage of this technique is that positron emitting isotope can be label on different targets without constrains of size or shape.

The first application of the PeTrack is to provide real-time tracking of tumour location during radiation therapy. One of the limiting factor of external beam radiation therapy is that may tumour moves constantly during the treatment, for example, lung tumours. It is impossible to focus the radiation on the tumour if the real-time location of the tumour is unknown. Using PeTrack, positron labeled marker(s) will be implemented in to the tumour. The size of the marker is much smaller than the current x-ray marker or EM markers that currently used in the clinic.

Young member won Ontario Postdoctoral Fellowship

Monday, September 1, 2008

Rowan Thomson, a young member of OMPI, won an Ontario Postdoctoral Fellowship award for two years starting in Sept 2008.

Kiwanis Club of Ottawa Medical Foundation and Dr. Kanta Marwah Scholarship in Medical Physics announced!

Friday, May 23, 2008

The **Kiwanis Club of Ottawa** has announced funding to establish the Kiwanis Club of Ottawa Medical Foundation and Dr. Kanta Marwah Scholarship in Medical Physics at Carleton University. Carleton will provide matching funding to establish the \$100,000 endowment.

“Medical physics research at Carleton University is critical to developing solutions to human health issues, ranging from diagnosing and understanding diseases to applying technology in patient care,” says Paul Johns, chair, department of physics. “We are grateful for the Kiwanis Club of Ottawa and Dr. Marwah’s commitment to help Carleton continue its research in this important field.”

The \$50,000 gift from the Kiwanis Club of Ottawa includes \$20,000 from Club member Dr. Kanta Marwah, a professor emeritus in the department of economics at Carleton University, \$20,000 from the Kiwanis Medical Foundation through the Kiwanis Bed Race at Winterlude, and \$10,000 from members of the Club.

“The motto for Kiwanis is ‘One Can Make a Difference’, and our Bed Race Committee and member Kanta Marwah have stepped forward to help make a difference,” said President Bill Gosewitz, Kiwanis Club of Ottawa.

The funds will be used to support M.Sc. and PhD students conducting research in medical physics: in cancer therapy physics including radiation therapy and thermal therapy, in medical imaging physics including MRI, nuclear medicine, and X-ray, and in medical biophysics. Through the Ottawa Medical Physics Institute, a city-wide network of medical physicists, students from Carleton’s department of physics do their research not only at the university, but at several health care and government institutions across the city.

The Kiwanis Club of Ottawa is celebrating 90 years of active fund raising and community involvement as a not-for-profit organization. The largest Kiwanis Club in Canada, the Kiwanis Club of Ottawa is one of the most active and dynamic service clubs in the world. Each year the Kiwanis Club of Ottawa provides thousands of hours of community service and raises \$300,000 for the local community. One of the 8,000 Clubs in Kiwanis International, the Club has met every Friday since 1917 at the Chateau Laurier Hotel in Ottawa. Projects carried on by Kiwanis in the Ottawa area include the Kiwanis Read-a-thon, the Kiwanis Music Festival, the "Precious Minds" educational video, the "Never Shake a Baby" educational video, and the "Reading is Fundamental" project running at Connaught Public School.