Queen's School of Computing

Queen's University

Distinguished Seminar Series

2013-2014

Professor Ron Kikinis M.D.

Surgical Planning Laboratory, Department of Radiology

Brigham and Women's Hospital

Harvard Medical School, Boston, USA

Light Refreshments

Thursday, May 1, 2014

2:30-3:30 pm

Dupuis Hall 215

Medical Image Computing in the Procedure Room

In this seminar, the following points are discussed:

- What is Medical Image Computing (MIC)?
- Use of MIC for pre-procedure image analysis
- Use of MIC for intra-procedure guidance with pre-computed results
- Use of MIC in combination with intra-procedure imaging
- Technological foundations of MIC

Dr. Kikinis is the founding Director of the Surgical Planning Laboratory, Department of Radiology, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, and a Professor of Radiology at Harvard Medical School. On February 24, 2010 he was appointed the Robert Greenes Distinguished Director of Biomedical Informatics in the Department of Radiology at Brigham and Women's Hospital. Dr. Kikinis is the Principal Investigator of the National Alliance for Medical Image Computing (NA-MIC, a National Center for Biomedical Computing, an effort which is part of the NIH Roadmap Initiative), and of the Neuroimage Analysis Center (NAC, a Biomedical Technology Resource Center funded by NIBIB). He is also the Research Director of the National Center for Image Guided Therapy (NCIGT), which is jointly sponsored by NIBIB and NCI and co-Director of the IGT program at CIMIT. During the mid-80's, Dr. Kikinis developed a scientific interest in image processing algorithms and their use for extracting relevant information from medical imaging data.

His activities include technological research (segmentation, registration, visualization, high performance computing), software system development, and biomedical research in a variety of biomedical specialties. The results of his research have been reported in a variety of peer-reviewed journal articles. He is the author and co-author of more than 290 peer-reviewed articles.