

## APPENDIX XVI.

### CONFERENCE & SEMINAR PRESENTATIONS

by members of the Medical Physics Unit : 2005-06 academic year

(presenter is indicated by an asterisk \*)

(the names of staff members of the MPU are underlined, students are indicated by †)

1. B. Stefanovic, J.M. Warnking, K.M. Rylander, G.B. Pike, *Dependence of the hemodynamic response to functional activation on the CO<sub>2</sub>-induced vasodilation*, Brain'05/PET'05 Symposium, Amsterdam, The Netherlands, June 7-11, 2005.
2. V. Gracco, P. Tremblay, G.B. Pike, *Corticostriatal contributions to speech movement sequencing*, Organization for Human Brain Mapping 2005, Toronto, Ontario, June 12-16, 2005.
3. A.P. Bagshaw, L. Torab, E. Kobayashi, C. Hawco, F. Dubeau, G.B. Pike, J. Gotman, *EEG-fMRI using Z-shimming in patients with temporal lobe epilepsy*, Organization for Human Brain Mapping 2005, Toronto, Ontario, June 12-16, 2005.
4. M.D.C. Evans\*, F. DeBlois, W. Abdel-Rahman, R. Corns, E.B. Podgorsak, *Boxes, locks and talks: Making class II compliance in a regulated environment*, 51<sup>st</sup> Annual Scientific Meeting of the Canadian Organization of Medical Physicists, Hamilton, Ontario, July 7-9, 2005.
5. K. Stewart\*†, N. Klassen, C. Ross, J.P. Seuntjens, *Design and testing of a new sealed water calorimeter for electron beams*, 51<sup>st</sup> Annual Scientific Meeting of the Canadian Organization of Medical Physicists, Hamilton, Ontario, July 7-9, 2005.
6. W. Abdel-Rahman\*, E.B. Podgorsak, *Neutron-activation revisited: The depletion and depletion-activation models*, 51<sup>st</sup> Annual Scientific Meeting of the Canadian Organization of Medical Physicists, Hamilton, Ontario, July 7-9, 2005.
7. M. Lemire\*†, G. Hegyi, J.P. Seuntjens, F. Verhaegen, *Accurate surface dose measurements in CT exam using isotropic high sensitivity MOSFET dosimeters calibrated by Monte Carlo simulations*, 51<sup>st</sup> Annual Scientific Meeting of the Canadian Organization of Medical Physicists, Hamilton, Ontario, July 7-9, 2005.
8. C.J. Thompson, *30 years ago: The first PET scanner in Canada*, 51<sup>st</sup> Annual Scientific Meeting of the Canadian Organization of Medical Physicists, Hamilton, Ontario, July 7-9, 2005.
9. S. St-James†, C.J. Thompson, *Spatial resolution in PET and the effect of gamma-ray depth of interaction in block detectors*, 51<sup>st</sup> Annual Scientific Meeting of the Canadian Organization of Medical Physicists, Hamilton, Ontario, July 7-9, 2005.
10. E. Klepousniotou, G.B. Pike, V. Gracco, *An ERP investigation of meaning activation patterns of homonymous and polysemous words*, 15<sup>th</sup> Annual Meeting of the Canadian Society for Brain, Behavior & Cognitive Science (BBCS), Montreal, Québec, July 14-17, 2005.
11. S. Devic\*, W. Abdel-Rahman, J.P. Seuntjens, E.B. Podgorsak, T. Vuong, C. Soares, *Skin Dose Measurement with Radiochromic Film*, Reviewer's choice, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.
12. F. Verhaegen, B. Reniers, F. DeBlois, S. Devic, J.P. Seuntjens, D. Hristov, *Photo-electric effect with a vengeance: Dosimetric and microdosimetric characterization of contrast-enhanced radiation therapy using kilovolt x-rays*, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.
13. K. Jabbari†, E.B. Podgorsak, J.P. Seuntjens, *Feasibility study of orthogonal bremsstrahlung beams for improved radiation therapy imaging*, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.

14. D. Sheikh-Bagheri, C. Cochechi, E. Heath†, J.P. Seuntjens, *Dosimetric evaluation of PEREGRINE IMRT treatment planning system at 6 MV for small fields in heterogeneous media*, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.
15. W. Abdel-Rahman, J.P. Seuntjens, F. Verhaegen, E.B. Podgorsak, *Monte Carlo simulation of radiation induced currents in parallel plate ionization chambers*, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.
16. K. Al-Yahya†, M. Schwartz, G. Shenouda, F. Verhaegen, C.R. Freeman, J.P. Seuntjens\*, *Dosimetric Evaluation of Inverse Monte Carlo-Based Modulated Electron Beam Treatment Planning and Delivery Using a Few Leaf Electron Collimator*, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.
17. R. Zakikhani†, J.P. Seuntjens, A. DuSautoy, R. Shipley, G. Bostock, F. Verhaegen\*, *Perturbation factors for the plane-parallel NACP02 ionixation chamber in electron beams*, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.
18. P. Dunscombe\*, C. Arsenault, G. Mawko, J-P. Bissonnette, H. Johnson, J.P. Seuntjens, *Standardizing standards: The development of quality control criteria for Canadian radiation therapy equipment*, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.
19. E. Heath\*†, J.P. Seuntjens, *Direct Voxel Tracking Method for Calculating Dose in Deforming Anatomy*, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.
20. G. Stroian\*†, E. Heath†, D. Collins, J.P. Seuntjens, *Novel 4D CT scanning protocol using a helical single-slice CT scanner*, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.
21. G. Jarry\*†, D. Moseley, D. Jaffray, F. Verhaegen, *Monte Carlo Investigation of Scatter Contribution to Kilovoltage Cone-Beam Computed Tomography Images*, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.
22. S. Devic\*, T. Vuong, F. DeBlois, M.D.C. Evans, F. Verhaegen, *Dose Conformity Improvement Using Lead-Shielded Intracavitary Mould Applicator for Patients with Rectal Carcinoma*, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.
23. E. Sham\*†, S. Devic, J.P. Seuntjens, E.B. Podgorsak, *The diode volume average effect and corrections in very small photon fields*, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.
24. K. Stewart\*†, N. Klassen, C. Ross, J.P. Seuntjens, *Development of a Sealed Water Calorimeter for Clinical Electron Beams*, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.
25. G. Jarry\*†, F. Verhaegen, *Electron Beam Treatment Verification Using Measured and Monte Carlo Predicted Portal Images*, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.
26. D. Fraser\*†, J.P. Seuntjens, W.A. Parker, *A Comparison of Three Ionization Chambers for IMRT Patient Specific Quality Assurance*, 47<sup>th</sup> annual meeting of the American Association of Physicists in Medicine (AAPM), Seattle, Washington, July 24-28, 2005.
27. J.P. Seuntjens, E. Heath†, G. Stroian†, K. Al-Yahya†, J. Dai, L. Souhami, *Retrospective Monte Carlo Verification and Post-Treatment Evaluation of Conformal Lung Cancer Radiotherapy Deliveries*, Canadian Association of Radiation Oncologists, Victoria, British Columbia, September 7-10, 2005.

28. K. Al-Yahya†, M. Schwartz, H. Patrocinio, W.A. Parker, G. Shenouda, F. Verhaegen, C. Freeman, J.P. Seuntjens, *Monte Carlo-Based Inverse Planning of Modulated Electron Beam Therapy using a Few-Leaf Electron Collimator Provides Highly Conformal Treatment and Decreases whole Body Dose*, Canadian Association of Radiation Oncologists, Victoria, British Columbia, September 7-10, 2005.
29. J. Seco\*, L. Adams, M. Partridge, P. Evans, F. Verhaegen, *Evaluation of Pencil Beam, Collapsed Cone and Monte Carlo IMRT dose calculation algorithms for dual target sites*, 8<sup>th</sup> Biennial ESTRO Meeting on Physics and Radiation Technology For Clinical Radiotherapy, Lisboa, Portugal, September 24-28, 2005.
30. J.P. Seuntjens\*, E. Heath†, G. Stroian†, K. Al-Yahya†, J. Dai, *Comparison of physical and biological plan evaluation parameters of Monte Carlo and conventional dose calculations in lung cancer treatment planning*, 8<sup>th</sup> Biennial ESTRO Meeting on Physics and Radiation Technology For Clinical Radiotherapy, Lisboa, Portugal, September 24-28, 2005.
31. E. Poon\*†, F. DeBlois, S. Devic, T. Vuong, F. Verhaegen, *Monte Carlo modeling of a novel brachytherapy applicator for rectal cancer treatment using GEANT4*, 8<sup>th</sup> Biennial ESTRO Meeting on Physics and Radiation Technology For Clinical Radiotherapy, Lisboa, Portugal, September 24-28, 2005.
32. K. Al-Yahya\*†, F. Verhaegen, J.P. Seuntjens, *The implementation of automated few-leaf electron collimator used in inverse Monte Carlo-based energy modulated electron therapy*, 8<sup>th</sup> Biennial ESTRO Meeting on Physics and Radiation Technology For Clinical Radiotherapy, Lisboa, Portugal, September 24-28, 2005.
33. E. Heath\*†, L. Collins, J.P. Seuntjens, *Monte Carlo dose calculations in deforming anatomy using direct voxel tracking*, 8<sup>th</sup> Biennial ESTRO Meeting on Physics and Radiation Technology For Clinical Radiotherapy, Lisboa, Portugal, September 24-28, 2005.
34. G. Stroian\*†, E. Heath†, L. Collins, L. Souhami, J.P. Seuntjens, *Linear registration as a tool for the evaluation of post radiotherapy complocations in lung cancer*, 8<sup>th</sup> Biennial ESTRO Meeting on Physics and Radiation Technology For Clinical Radiotherapy, Lisboa, Portugal, September 24-28, 2005.
35. G. Jarry\*†, F. Verhaegen, *Monte Carlo simulations of electron beam portal images for treatment verification purposes*, 8<sup>th</sup> Biennial ESTRO Meeting on Physics and Radiation Technology For Clinical Radiotherapy, Lisboa, Portugal, September 24-28, 2005.
36. K. Stewart\*†, J.P. Seuntjens, C. Ross, N. Klassen, *Water calorimeter-based beam quality conversion factors for clinical electron beams*, 8<sup>th</sup> Biennial ESTRO Meeting on Physics and Radiation Technology For Clinical Radiotherapy, Lisboa, Portugal, September 24-28, 2005.
37. A.L. Goertzen, C. Janicki, P. Rosa-Neto, *Dosimetry of PET tracers in mice using microPET scans as input function*, IEEE Nuclear Science Symposium & Medical Imaging Conference, San Juan, Puerto Rico, October 23-29, 2005.
38. T. Vuong, R. Ruo, S. Devic, *New radiation technical options for patients with anal canal cancer: A comparative dose volume histogram study*, ECCO13 - The European Cancer Conference, Paris, France, October 30- November 3, 2005.
39. P. Fava, T. Vuong, S. Devic, W.A. Parker, *Impact on radiation oncology department workload of daily application of IMPRT in patients with head and neck cancer: results from a comparative study*, ECCO13 - The European Cancer Conference, Paris, France, October 30-November 3, 2005.
40. N. Kopek, T. Vuong, L. Portelance, B. Bahoric, S. Devic, *The impact of conformal therapy in the treatment of patients with anal canal cancer*, ECCO13 - The European Cancer Conference, Paris, France, October 30- November 3, 2005.
41. S. Devic, S. Faria, G.W. Dean, R. Lisbona, N. Tomic, W.A. Parker, C. Kaufman, E.B. Podgorsak, *Can 18 FDG-PET/CT scan be used to define a biological target volume (BTV) for IMRT treatment planning of non-small cell lung cancer patients?*, ECCO13 - The European Cancer Conference, Paris, France, October 30- November 3, 2005.

42. S. Faria, L. Souhami, M. Duclos, L. Portelance, J. Guerra, S. Devic, F. DeBlois, D. Small, J. Gruber, C.R. Freeman, *Accelerated hypofractionation for early stage non-small cell lung cancer (NSCLC): results of patients treated with 3D conformal radiotherapy alone*, ECCO13 - The European Cancer Conference, Paris, France, October 30- November 3, 2005.
43. C.J. Thompson, A. Labuda, J-Y. Suk†, *Improving the spatial resolution of the MicroPET scanner by wobbling the bed*, Annual Meeting of the Institute of Electrical & Electronics Engineers, October 2005.
44. D.P. McElroy, C.J. Thompson, Spanoudaki, S.I. Ziegler, *Use of a central positron emitting reference source to improve the timing alignment of a singles list-mode small animal PET scanner*, Annual Meeting of the Institute of Electrical & Electronics Engineers, October 2005.
45. S. St-James†, C.J. Thompson, *Blurring of spatial resolution LSO block detectors*, Annual Meeting of the Institute of Electrical & Electronics Engineers, October 2005.
46. V. Sossi, H. de Jong, W.C. Barker, P. Bloomfield, Z. Burbar, M-L. Camborde, R.E. Carson, C. Comtat, L.A. Eriksson, S. Houle, D. Keator, K. Christof, R. Kraiss, A.A. Lammertsma, A. Rahmim, O. Rousset, M. Sibomana, M. Ters, C.J. Thompson, R. Trébossen, J. Votaw, K. Wienhard, *The second generation HRRT in a multi-centre scanner performance investigation*, Annual Meeting of the Institute of Electrical & Electronics Engineers, October 2005.
47. S. Lehnert, A. Owusu, Y. Li, E. Bump, B. Riddoch, *Intra-tumoral delivery of radiolabeled iododeoxyuridine*, Radiation Research Society, Annual Meeting of the American Society for Therapeutic Radiation Oncology (ASTRO), Denver, Colorado, October 2005.
48. S. Sadekova, M. Park, S. Mourad, T. Hudson, J. Novak, S. Lehnert, *Genetic analysis of human ovarian tumor cell line resistant to cis-platinum and cross-resistant to ionizing radiation*, Radiation Research Society, Annual Meeting of the American Society for Therapeutic Radiation Oncology (ASTRO), Denver, Colorado, October 2005.
49. B. Reniers, F. Verhaegen, *The microdosimetry of low energy photons in radiotherapy*, 14<sup>th</sup> Annual Conference on Microdosimetry, Venice, Italy, November 13-18, 2005. [Travel award, B. Reniers]
50. P. Savadjiev, J.S.W. Campbell, G.B. Pike, K. Siddiqi, *3D curve inference for diffusion MRI regularization*, International Conference on Medical Image Computing & Computer Assisted Intervention (MICCAI), Palm Springs, California, October 26-29, 2005. [Best Student Paper Award.]