

APPENDIX XV.

CONFERENCE & SEMINAR PRESENTATIONS

by members of the Medical Physics Unit : 2003-04 academic year

(presenter is indicated by an asterisk *)

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

1. M. Frago, F. Verhaegen, *A comparison of MC (EGSnrc, PENELOPE) and PLATO TPS of the dose delivered by ¹³⁷Cs sources in intracavitary brachytherapy*, 2nd International Workshop on Advanced Radiation Transport with PENELOPE, Salou (Tarragona), Spain, January 08-10, 2003.
2. V. Hansen, F. Verhaegen, M. Mosleh-Shirazi, J. Bedford, P. Childs, *Using Monte Carlo simulation to generate a physics model in the Pinnacle3 planning system*, IPEM Meeting: Validation of Dosimetry for Treatment Planning Systems, London, UK, January 30, 2003.
3. G. Chen, S. Lehnert, *Mechanisms of contact-mediated radioresistance*, Gordon Research Conference on Molecular Aspects of Radiation Oncology, Ventura, CA, January 2003.
4. F. Verhaegen, *Interfaces dosimetry in electron beams: An EGSnrc study*, 9th MCNEG Meeting, Edinburgh, Scotland, March 31-April 1, 2003.
5. J. Seco, F. Verhaegen, M. Bidmead, *Development of a Monte Carlo code for dose calculation of IMRT beams*, 9th MCNEG Meeting, Edinburgh, Scotland, March 31-April 1, 2003.
6. S. Sadekova, M. Park, S. Mourad, S. Lehnert, *Genetic analysis of human ovarian tumor cell lines resistant to cis-platinum and cross-resistant to ionizing radiation*, 94th annual meeting of the American Association for Cancer Research, Toronto, ON, April 05-09, 2003.
7. M.-J. Blouin, S.J. Shiry, S. Lehnert, G. Allan, M. Pollack, *Radiosensitizing effect of recombinant IGFBP-3 on MCF-7 breast cancer cells 'in vitro'*, 94th annual meeting of the American Association for Cancer Research, Toronto, ON, April 05-09, 2003.
8. H. Palmans, R. Thomas, A. Kacperek, P. Sharpe, A. DuSautoy, F. Verhaegen, *Applying the NPL alanine dosimetry service to low-energy clinical proton beam*, 38th PTCOG Meeting, Chester, UK, May 14-16, 2003.
9. M.D.C. Evans*, G. Shenouda, C. Edelstein, M. Mansour, E.B. Podgorsak, *Episcleral choroidal melanoma therapy using Ruthenium-106 plaques*, 49th annual meeting of the Canadian Organization of Medical Physicists (COMP), Edmonton, AB, June 5-7, 2003.
10. R.A. Corns*, M.D.C. Evans, J.P. Seuntjens, E.B. Podgorsak, *A gamma survey meter calibration protocol using an HDR Ir-192 source*, 49th annual meeting of the Canadian Organization of Medical Physicists (COMP), Edmonton, AB, June 5-7, 2003.
11. G. Mawko*, C. Janicki, *Patient-specific doses for Y-90 radionuclide synovectomy treatments*, 49th annual meeting of the Canadian Organization of Medical Physicists (COMP), Edmonton, AB, June 5-7, 2003.
12. S. Oliveira†, H.J. Patrocinio*, E.B. Podgorsak, *Comparison of linac stereotactic radiosurgery techniques*, 49th annual meeting of the Canadian Organization of Medical Physicists (COMP), Edmonton, AB, June 5-7, 2003.
13. A.P. Bagshaw, C.-G. Bénar, Y. Agha Khani, C. Hawco, F. Dubeau, G.B. Pike, J. Gotman, *The effect of the haemodynamic response function on the analysis of simultaneous EEG-fMRI data in epilepsy*, Proceedings of Human Brain Mapping, New York, NY, June 18-22, 2003.
14. B. Stefanovic, G.B. Pike, *fMRI-based quantification of cerebral blood volume changes*, Proceedings of Human Brain Mapping, New York, NY, June 18-22, 2003.
15. B. Stefanovic, J.M. Warnking, G.B. Pike, *Simultaneous fMRI-based measurements of cerebral blood volume, flow and BOLD*, Proceedings of Human Brain Mapping, New York, NY, June 18-22, 2003.
16. M.D.C. Evans, G. Shenouda, C. Edelstein, M. Mansour, W. Parker*, E.B. Podgorsak, *Treatment considerations for ruthenium-106 episcleral choroidal melanoma plaque therapy*, Annual meeting of the American Association of Physicists in Medicine (AAPM), San Diego, CA, August 12-16, 2003.
17. F. Verhaegen, B. Reniers, *Monte Carlo simulations and cluster damage analysis for mammography x-ray spectra*, International Conference on Radiation Research, Brisbane, Australia, August 17-22, 2003.
18. J. Seco, F. Verhaegen, M. Bidmead, *Development and commissioning of a Monte Carlo dose calculation engine for clinical IMRT beams*, World Conference on Medical Physics, Sydney, Australia, August 24-29, 2003.

19. H. Palmans, S. Duane, A. DuSautoy, A. Kacperek, R. Nutbrown, R. Thomas, F. Verhaegen, *Applications of NPL graphite and water calorimeters to low-energy clinical protons*, World Congress on Medical Physics, Sydney, Australia, August 24-29, 2003.
20. H. Palmans, F. Verhaegen, *Perturbation correction factors in clinical proton beams for cylindrical ionization chambers tabulated in IAEA TRS-398 due to gradient effects and secondary electron effects*, World Congress on Medical Physics, Sydney, Australia, August-24-29, 2003.
21. H. Palmans, A. DuSautoy, A. Kacperek, R. Nutbrown, P. Sharpe, R. Thomas, F. Verhaegen, *Alanine dosimetry for low-energy clinical proton beams: Basic interaction data and perturbation correction factors*, World Congress on Medical Physics, Sydney, Australia, August 24-29, 2003.
22. B. Reiners, F. Verhaegen, S. Vynckier, *Microdosimetry study and cluster analysis of 103Pd and 125I*, World Congress on Medical Physics, Sydney, Australia, August 24-29, 2003.
23. M. Fragoso, F. Verhaegen, J. Fernandez-Varea, J.P. Seuntjens, *Comparison of EGSnrc and PENELOPE Monte Carlo codes in the brachytherapy energy range, including improved low-energy photon cross-sections*, World Congress on Medical Physics, Sydney, Australia, August 24-29, 2003.
24. F. Verhaegen, *A Monte Carlo (EGSnrc) study of dose perturbations near interfaces in photon and electron beams*, World Congress on Medical Physics, Sydney, Australia, August 24-29, 2003.
25. S. Flampouri, F. Verhaegen, P.M. Evans, M. Partridge, *Optimisation of radiotherapy beams for portal imaging and clinical protons*, World Congress on Medical Physics, Sydney, Australia, August 24-29, 2003.
26. F. Verhaegen, H. Palmans, J. Seco, *A comparison of hadron Monte Carlo transport codes (PTRAN, MCNPX, GEANT) for clinical protons*, World Congress on Medical Physics, Sydney, Australia, August 24-29, 2003.
27. F. Buffa, F. Verhaegen, *Interface dosimetry of beta emitters for targeted radionuclide therapy*, World Congress on Medical Physics, Sydney, Australia, August 24-29, 2003.
28. H. Bouchard†, J.P. Seuntjens, *Monte Carlo reassessment of ion chamber-based reference dosimetry during quality assurance of intensity modulated radiation therapy*, World Congress on Medical Physics, Sydney, Australia, August 24-29, 2003 [Paper No. 681].
29. E. Heath†, W. Parker, B. Curran, J.P. Seuntjens, *Clinical evaluation of the PEREGRINE Monte Carlo dose calculation system for 6 MV photon beams*, World Congress on Medical Physics, Sydney, Australia, August 24-29, 2003 [Paper No. 1800].
30. C. Janicki, *VMDOSE: A multi-purpose dose calculation software for electron and photon emitters based on the MIRD formalism with S values evaluated at the voxel level*, World Congress on Medical Physics, Sydney, Australia, August 24-29, 2003.
31. C. Janicki, P. Leblanc, J. Raymond, *Dosimetry of P-32 coated detachable platinum coils for endovascular treatment of intracranial aneurysms*, World Congress on Medical Physics, Sydney, Australia, August 24-29, 2003.
32. E. Heath†, J.P. Seuntjens, *A new component module for modeling the Varian millennium 120 leaf collimator using BEAMnrc*, World Congress on Medical Physics, Sydney, Australia, August 24-29, 2003 [Paper No. 2603].
33. T. Vuong*, M. David, P. Szego, R.A. Corns, S. Devic, M.D.C. Evans, S. Mayrand, J. Parent, *Safe integration of high dose rate endoluminal brachytherapy in the conservative treatment of patients with esophagus cancer and external beam radiation with or without chemotherapy*, ECCO meeting, Copenhagen, Denmark, September 2003.
34. I. Levesque†, J.G. Sled, S. Narayanan, A.C. Santos, S.D. Brass, S.J. Francis, D.L. Arnold, G.B. Pike, *A quantitative magnetization transfer study of edema and demyelination in chronic T1 black holes*, Proceedings of ISMRM Workshop on MR Technology to Assess MS Pathology in vivo, San Servolo, Italy, October 09-11, 2003.
35. N. Khaouam*, G. Shenouda, M.D.C. Evans, C. Edelstein, M. Mansour, *Therapy for choroidal melanoma using ruthenium-106 plaque*, Annual meeting of the Radiological Society of North America (RSNA), Chicago, IL, November 30-December 05, 2003.
36. A.P. Bagshaw, C.-G. Bénar, Y. Agha Khani, C. Hawco, F. Dubeau, G.B. Pike, J. Gotman, *Analysis of intrictal EEG-fMRI data using a range of haemodynamic response functions*, Proceedings of American Epilepsy Society Meeting, Boston, MA, December 05-10, 2003.
37. Y. Li, S. Lehnert, *Treatment of high grade gliomas by external beam irradiation with radiosensitization by incorporated halogenated pyrimidines: Methods to optimize response*, Canadian Neuro-oncology Meeting, Montreal, QC, 2003.
38. K. Al-Yahya, D. Hristov, F. Verhaegen, J. Seuntjens, *"Inverse Monte-Carlo-based modulated electron beam treatment planning"*, Current Topics in Monte Carlo Treatment Planning, Advanced Workshop, Montreal, Canada, May 2-5, 2004.
39. J. Seuntjens, J. Dai, E. Heath, K. Al-Yahya, W. Parker, *"Retrospective Monte Carlo study of conformal lung cancer treatment plans"*, Current Topics in Monte Carlo Treatment Planning, Advanced Workshop, Montreal, Canada, May 2-5, 2004.
40. H. Palmans, F. Verhaegen, *"Importance of nonelastic nuclear interactions in Monte Carlo treatment planning for proton beams"*, Current Topics in Monte Carlo Treatment Planning, Advanced Workshop, Montreal, Canada, May 2-5, 2004.
41. F. Verhaegen, S. Devic, *"Sensitivity study for CT image use in Monte Carlo Treatment Planning"*, Current Topics in Monte Carlo Treatment Planning, Advanced Workshop, Montreal, Canada, May 2-5, 2004.

42. J. Seco, M. Bidmead, E. Adams, M. Partridge, F. Verhaegen, "*Head and neck IMRT treatments assessed with a Monte Carlo dose calculation engine*," Current Topics in Monte Carlo Treatment Planning, Advanced Workshop, Montreal, Canada, May 2-5, 2004.
43. G. Jarry, F. Verhaegen, "*Modelling of an ASi EPID using Forward and Inverse Monte Carlo Techniques*," Current Topics in Monte Carlo Treatment Planning, Advanced Workshop, Montreal, Canada, May 2-5, 2004.
44. C. Albaret, F. DeBlois, F. Verhaegen, J. Seuntjens, "*Automated system for Monte Carlo calculation of cut-out factors for clinical electron beams*", Current Topics in Monte Carlo Treatment Planning, Advanced Workshop, Montreal, Canada, May 2-5, 2004.
45. B. Reniers, F. Verhaegen, S. Vynckier, "*Comparison of calculations with the EGSnrc and MCNP4C Monte Carlo codes and measurements for the determination of radial function for brachytherapy seeds*", Current Topics in Monte Carlo Treatment Planning, Advanced Workshop, Montreal, Canada, May 2-5, 2004.
46. C. Boudreau, E. Heath, W. Parker, O. Ballivy, J. Seuntjens, "*IMRT head and neck treatment planning with a commercially available Monte Carlo based planning system*", Current Topics in Monte Carlo Treatment Planning, Advanced Workshop, Montreal, Canada, May 2-5, 2004.
47. J. Belec, H. Patrocinio, F. Verhaegen, "*Development and validation of a Monte Carlo component model for a micro multileaf collimator used for conformal beam stereotactic radiosurgery treatment*", Current Topics in Monte Carlo Treatment Planning, Advanced Workshop, Montreal, Canada, May 2-5, 2004.
48. V. Huang, J. Seuntjens, M. Olivares, M.D.C. Evans, S. Devic, F. Verhaegen, "*Experimental determination of electron source parameters for accurate Monte Carlo calculation of large field electron therapy*", Current Topics in Monte Carlo Treatment Planning, Advanced Workshop, Montreal, Canada, May 2-5, 2004.
49. E. Poon, F. Verhaegen, "*Validation of the Geant4 MC code for radiotherapy fluence and dose calculations*", Current Topics in Monte Carlo Treatment Planning, Advanced Workshop, Montreal, Canada, May 2-5, 2004.