

## APPENDIX XIII.

### PUBLICATIONS

by members of the Medical Physics Unit : 2006 calendar year  
(names of MPU staff members are underlined, students are indicated by †)

1. C. Janicki, Dose delivery accuracy from (32)P-oligodeoxynucleotide-coated coils and associated risks of usage in humans, *Am. J. Neuroradiol.* **27**(1), 7-8 (2006).
2. M.D.C. Evans, R-X Larouche, M. Olivares, P. Léger, J. Larkin, C.R. Freeman, E.B. Podgorsak, Total body irradiation with a reconditioned cobalt teletherapy unit, *J. Appl. Clin. Med. Phys.* **7**, 42-51 (2006).
3. O. Ballivy, W. Parker, T. Vuong, G. Shenouda, H.J. Patrocinio, Impact of geometric uncertainties on dose distribution during intensity modulated radiotherapy of head and neck cancer: The need for a planning target volume and a volume at risk volume, *Current Oncology* **13**(3), 108-115 (2006).
4. B. Aubert-Broche, M. Griffin, G.B. Pike, A.C. Evans, D.L. Collins, 20 new digital brain phantoms for creation of validation image data bases, *IEEE Trans. Med. Imag.*, Special issue on Validation in Medical Imaging Processing **25**(11), 1410-1416 (2006).
5. W. Moses, C.J. Thompson, Timing calibration in PET using a time alignment probe, *IEEE Trans. Nucl. Sci.* **53**(5), 2660-2065 (2006).
6. 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, *J. Magn. Reson. Imag.* **24**(5), 1025-1032 (2006).
7. J.M. Warnking, G.B. Pike, Reducing contamination while closing the gap: BASSI RF pulses in PASL, *Magn. Reson. Imag. Med.* **55**, 865-873 (2006).
8. P. Savadjiev, J.S.W. Campbell, G.B. Pike, K. Siddiqi, 3D curve inference for diffusion MRI regularization and fibre tractography, *Med. Image Anal.*, Special issue on the best papers of MICCAI 2005 **10**(5), 799-813 (2006).
9. S. St-James, C.J. Thompson, Image degradation due to light sharing in PET detectors, *Med. Phys.* **33**:2, 405-410 (2006).
10. S. Devic, J. Seuntjens, W. Abdel-Rahman, M.D.C. Evans, M. Olivares, E.B. Podgorsak, T. Vuong, C.G. Soares, Accurate skin dose measurements using radiochromic film in clinical applications, *Med. Phys.* **33**, 1116-1124 (2006).
11. W. Abdel-Rahman, J. Seuntjens, F. Verhaegen, E.B. Podgorsak, Radiation induced currents in parallel plate ionization chambers: Measurement and Monte Carlo simulation for megavoltage photon and electron beams, *Med. Phys.* **33**, 3094-3104 (2006).
12. S. Devic, Y-Z. Wang, N. Tomic, E.B. Podgorsak, Sensitivity of linear CCD array based film scanners used for film dosimetry, *Med. Phys.* **33**, 3993-3996 (2006).
13. J.F. Williamson, S. Li, S. Devic, B.R. Whiting, F.A. Lerma, On two-parameter models of photon cross sections: Application to dual-energy CT imaging, *Med. Phys.* **33**, 4115-4129 (2006).
14. E. Poon†, B. Reniers, S. Devic, T. Vuong, F. Verhaegen, Dosimetric characterization of a novel intracavitary mold applicator for <sup>192</sup>Ir high dose rat eendorectal brachytherapy treatment, *Med. Phys.* **33**, 4515-4526 (2006).
15. S. Narayanan, S.J. Francis, J.G. Sled, A.C. Santos, S. Antel, I. Levesque†, S. Brass, Y. Lapierre, D. Sappey-Mariniere, G.B. Pike, D.L. Arnold, Axonal injury in the cerebral normal-appearing white matter of patients with multiple sclerosis is related to concurrent demyelination in lesions but not to concurrent demyelination in normal-appearing white matter, *NeuroImage* **29**, 637-642 (2006).

16. Brain Development Cooperative Group (G.B. Pike et al.), *The NIH MRI study of normal brain development*, *NeuroImage* **30**, 184-202 (2006).
17. A.P. Bagshaw, E. Kobayashi, F. Dubeau, G.B. Pike, J. Gotman, *Correspondence between EEG-fMRI and EEG dipole localization of interictal discharges in focal epilepsy*, *NeuroImage* **30**(2), 417-425 (2006).
18. J. Stefanovic, J.M. Warnking, K. Rylander, G.B. Pike, *The effect of global cerebral vasodilation on focal activation hemodynamics*, *NeuroImage* **30**, 736-744 (2006).
19. D. Gagnon, T. Paus, M-H. Grasbras, G.B. Pike, G.A. O'Driscoll, *Transcranial magnetic stimulation of frontal oculomotor regions during smooth pursuit*, *J. Neuroscience* **26**(2), 458-466 (2006).
20. C.J. Thompson, *Instrumentation for Positron Emission Mammography*, *PET Clinics in Breast Cancer* **1**:1, 33-38 (2006). Invited paper.
21. W. Parker, C.R. Freeman, *A simple technique for craniospinal radiotherapy in the supine position*, *Radiother. Oncol.* **78**(2), 217-222 (2006).
22. B. Reniers, F. Verhaegen, *The microdosimetry of low energy photons in radiotherapy*, *Radiat. Prot. Dosim.* **122**(1-4), 401-403 (2006).
23. J. Raymond, C. Mounayer, I. Salazkin, A. Metcalfe, G. Gevry, C. Janicki, S. Roorda, P. Leblanc, *Safety and effectiveness of radioactive coil embolization of aneurysms: Effects of radiation on recanalization, clot organization, neointima formation, and surrounding nerves in experimental models*, *Stroke* **37**(8), 2147-2152 (2006).
24. K. Al-Yahya†, F. Verhaegen, J. Seuntjens, *Planning and automatic delivery of energy modulated electron therapy (EMET): A novel technique*, *Proceedings of the 52nd Annual Scientific Meeting of the Canadian Organization of Medical Physicists (COMP)*, Saskatoon, Saskatchewan, May 31-June 02, 2006, pp. 163-166.
25. A. Sarfehnia†, K. Jabbari†, J. Seuntjens, E.B. Podgorsak, *High contrast imaging using orthogonal bremsstrahlung beams: An experimental study of radiation quality*, *Proceedings of the 52nd Annual Scientific Meeting of the Canadian Organization of Medical Physicists (COMP)*, Saskatoon, Saskatchewan, May 31-June 02, 2006, pp. 170-172.
26. A. Elliott†, K. Stewart†, J. Seuntjens, *Study of characteristics of a new liquid ionization chamber*, *Proceedings of the 52nd Annual Scientific Meeting of the Canadian Organization of Medical Physicists (COMP)*, Saskatoon, Saskatchewan, May 31-June 02, 2006, pp. 255-257.
27. M.D.C. Evans, M. Olivares, J. Seuntjens, W. Parker, S. Devic, E. Poli, C.R. Freeman, E.B. Podgorsak, *A rotational total skin electron irradiation technique using a linear accelerator with a commercially available high dose rate total body electron mode*, *Proceedings of the 52nd Annual Scientific Meeting of the Canadian Organization of Medical Physicists (COMP)*, Saskatoon, Saskatchewan, May 31-June 02, 2006, pp. 261-264.