

## APPENDIX X.

### PUBLICATIONS

by members of the Medical Physics Unit : 2011 calendar year (x 37)  
(names of MPU staff members are underlined, students are indicated by †)

1. E.X. Huang, J.O. Deasy, M. Trovo, I. El Naqa, A.J. Hope, P.E. Lindsay, J.D. Bradley, *The impact of heart and lung irradiation on the risk of radiation pneumonitis: Modeling based on institutional data*, Acta Oncologica **50** (1), 51-60 (2011).
2. N. Palmour, W. Affleck, E. Bell, C. Deslauriers, G.B. Pike, J. Doyon, E. Racine. *Informed consent for MRI and fMRI research: Analysis of a sample of Canadian consent documents*, J. BMC Medical Ethics **12**, 1 (2011).
3. T. Paus, B. Manon, M. Chakravarty, G. Davey Smith, J. Gillis, A. Lourdasamy, M. Melka, G. Leonard, P. Pavlidis, M. Perron, G.B. Pike, L. Richer, G. Schumann, N. Timpson, R. Toro, S. Veillette, Z. Pausova, *KCTD8 gene and brain growth in adverse intrauterine environment: A genome-wide association study*, Cerebral Cortex Advance Access, December 9, 2011.
4. B. Kim, E.T. Soisson, C. Duma, P. Chen, R. Hafer, C. Cox, J. Cubelis, A. Minion, M. Plunkett, R. Mackintosh, *Treatment of recurrent high grade gliomas with hypofractionated stereotactic image-guided helical tomotherapy*, Clin. J. Neurol. Neurosurg. **113**, 509-512 (2011).
5. D.J. Shaw, M.H. Grosbras, G. Leonard, G.B. Pike, T. Paus, *Development of functional connectivity during adolescence: A longitudinal study using an action-observation paradigm*, J. Cogn. Neuroscience, [Epub, August 3, 2011.]
6. N. Etchamendy, K. Konishi, G.B. Pike, A. Marighetto, V.D. Bohbot, *Evidence for a virtual human analog of a rodent relational memory task: A study of aging and fMRI in young adults*, Hippocampus [Epub, June 2011.]
7. K. Mareckova, Z. Weinbrand, M. Chakravarty, C. Lawrence, R. Aleong, G. Leonard, M. Perron, G.B. Pike, L. Richer, S. Veillette, Z. Pausova, T. Paus, *Testosterone-mediated sex differences in the face shape during adolescence: Subjective impressions and objective features*, Hormones & Behavior **60** (5), 681-690 (2011).
8. R. Al-Wassia, A. Dal Pra, K. Shun, A. Shaban, C. Corriveau, C. Edelstein, J. Deschenes, R. Ruo, H. Patrocinio, F.L.B. Cury, F. DeBlois, G. Shenouda, *Stereotactic fractionated radiotherapy in the treatment of juxtapapillary choroidal melanoma: The McGill University experience*, Int. J. Radiat. Oncol. Biol. Phys. **81** (4) 455-462 (2011).
9. D. Wang, W. Bosch W, D.G. Kirsch, R. Al Lozi, I. El Naqa, D. Roberge, S.E. Finkelstein, I. Petersen, M. Haddock, Y.L. Chen, N.G. Saito, Y.J. Hitchcock, A.H. Wolfson, T.F. Delaney, *Variation in the gross tumor volume and clinical target volume for preoperative radiotherapy of primary large high-grade soft tissue sarcoma of the extremity among RTOG sarcoma radiation oncologists*, Int. J. Radiat. Oncol. Biol. Phys. **81** (5), 775-80 (2011).
10. S. Devic, S. Faria, S. Lehnert, *Reply: Letter to the Editor - Defining radiotherapy target volume using (18)F-Fluoro-Deoxy-Glucose Positron Emission Tomography/Computed Tomography: Still a Pandora's box?*, Int. J. Radiat. Oncol. Biol. Phys. **81** (3), 902-903 (2011).
11. S.M. Perkins, J.B. Rubin, J.R. Leonard, M.D. Smyth, I. El Naqa, J.R. Simpson, T.S. Park, D.B. Mansur, *Glioblastoma in children: A single institution experience*, Int. J. Radiat. Oncol. Biol. Phys. **15**, 80 (4), 1117-21 (2011).
12. K. Lim, W. Small, Jr., L. Portelance, D. Gaffney, B. Erickson, J. de los Santos, S. Ishikura, C. Creutzberg, W. Bosch, I. El Naqa, A. Fyles, *Consensus guidelines for delineation of clinical target volume for intensity-modulated pelvic radiotherapy for the intact cervix*, Int. J. Radiat. Oncol. Biol. Phys. (2011).
13. J.R. Olsen, C.G. Robinson, I. El Naqa, K.M. Creach, R.E. Drzymal, C. Bloch, P.J. Parikh, J.D. Bradley, *Dose-response for stereotactic body radiotherapy in early-stage non-small-cell lung cancer*, Int. J. Radiat. Oncol. Biol. Phys. [Epub Apr 6, 2011, ahead of print.]

14. I.O. Jelescu, I.R. Leppert, S. Narayanan, D. Araujo, D.L. Arnold, G.B. Pike, *A dual-temporal resolution DCE-MRI protocol for BB permeability measurement in enhancing Multiple Sclerosis lesions*, J. Magn. Reson. Imag. **33** (6), 1291-1300 (2011).
15. I. Levesque, J. Sled, G.B. Pike, *An iterative optimization method for design of quantitative magnetization transfer imaging experiments*, Magn. Reson. Med., doi: 10.1002/mm.23071 (2011).
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19. S. Aldelaijan†, H. Mohammed†, N. Tomic, L-H Liang, F. DeBlois, A. Sarfehnia†, W. Abdel-Rahman, J. Seuntjens, S. Devic, *Radiochromic film dosimetry of HDR 192Ir source radiation fields*, Med. Phys. **38**, 6074-6083 (2011). [http://online.medphys.org/resource/1/mphya6/v38/i11/p6074\\_s1?view=fulltext](http://online.medphys.org/resource/1/mphya6/v38/i11/p6074_s1?view=fulltext)
20. C.I. Mark, J.A. Fisher, G.B. Pike, *Improved fMRI calibration: Precisely controlled hyperoxic versus hypercapnic stimuli*, NeuroImage **54** (2), 1102-1111 (2011). [Epub, September 2010.]
21. C. La Fougère, S. Grant, A. Kostikov, R. Schirrmacher, P. Gravel, H. Schipper, A.J. Reader, A.C. Evans, A. Thiel, *Where in-vivo imaging meets cytoarchitectonics: The relationship between cortical thickness and neuronal density measured with high-resolution [18F]flumazenil-PET*, NeuroImage **56**, 951-960 (2011).
22. G.B. Pike, *Quantitative functional MRI: Concepts, issues and future challenges*, NeuroImage, [eEub ahead of print, 2011 - PMID: 22056462.]
23. S. Lehnert, Y. Li, E. Bump, W. Riddoch, A. Chenite, M. Shive, *125I-Iododeoxyuridine for the treatment of a brain tumor model: Selection of conditions for optimal effectiveness*, Open Nuc. Med. J. **3**, 19-24 (2011).
24. M.M. Chakravarty, R. Aleong, G. Leonard, M. Perron, G.B. Pike, L. Richer, S. Veillette, Z. Pausova, T. Paus, *Automated analysis of craniofacial structures using magnetic resonance images*, PLoS ONE (Public Library of Science) **6** (5), (2011).
25. C. Gao, J. Seuntjens, G.N. Kaufman, N. Tran-Khan, A. Butler, A. Li, H. Wang, M.D. Buschmann, E.J. Harvey, J.E. Henderson, *Mesenchymal stem cell transplantation to promote bone healing*, J. Orth. Res., accepted (2011) JOR-11-0230.R1.
26. P.J. Markiewicz, G.I. Angelis, F. Kotasidis, M. Green, W.R. Lionheart, A.J. Reader, J.C. Matthews, *A custom-built PET phantom design for quantitative imaging of printed distributions*, Phys. Med. Biol. **56** (21), 247-261 (2011).
27. J. Moroz, J. Turner, C. Slupsky, G. Fallone, A. Syme, *Tumour xenograft detection through quantitative analysis of the metabolic profile of urine in mice*, Phys. Med. Biol. **56**, 535-556 (2011).
28. J.H. Oh, J. Craft, R. Al-Lozi, M. Vaidya, Y. Meng, J.O Deasy, J.D. Bradley, I. El Naqa, *A Bayesian network approach for modeling local failure in lung cancer*, Phys. Med. Biol. **56**, 1635-1651 (2011).
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30. F.A. Kotasidis, J.C. Matthews, G.I. Angelis, P.J. Noonan, A. Jackson, P. Price, W.R. Lionheart, A.J. Reader, *Single scan parameterization of space-variant point spread functions in image space via a printed array: The impact for two PET/CT scanners*, Phys. Med. Biol. **56**, 2917-2942 (2011).
31. G.I. Angelis, A.J. Reader, F.A. Kotasidis, W.R. Lionheart, J.C. Matthews, *Performance of monotonic and new non-monotonic gradient ascent reconstruction algorithms for high resolution neuroreceptor PET imaging*, Phys. Med. Biol. **56**, 3895-3917 (2011).
32. J.H. Oh, J.M. Craft, R. Townsend, J.O. Deasy, J.D. Bradley, I. El Naqa, *A bioinformatics approach for biomarker identification in radiation-induced lung inflammation from limited proteomics data*, J. Proteomics Res. **10** (3), 1406-15 (2011).
33. D. Luck, L. Buchy, Y. Czechowska, M. Bodnar, G.B. Pike, J. Campbell, A. Achim, A. Malla, R. Joobar, M. Lepage, *Fronto-temporal disconnectivity and clinical short-term in first episode psychosis: A DTI-tractography study*. J. Psychiatric Res. **45** (3), 369-377 (2011). [Epub, August 11, 2010.]
34. L.K. Schubert, V. Gondi, E. Sengbusch, D.C. Westerly, E.T. Soisson, B.R. Paliwal, T.R. Mackie, M.P. Mehta, R.R. Patel, W.A. Tomé, G.M. Cannon, *Dosimetric comparison of left-sided whole breast irradiation with 3DCRT, forward-planned IMRT, inverse-planned IMRT, helical tomotherapy, & tomotherapy*, Radiother. Oncol. **100**, 241-246 (2011).

35. A. Alexander†, E. Soisson, T. Hijal, A. Sarfehnia†, J. Seuntjens, *Comparison of modulated electron radiotherapy to conventional electron boost irradiation and volumetric modulated photon arc therapy for treatment of tumour bed boost in breast cancer*, *Radioth. Oncol.*, in press, doi:10.1016/j.radonc.2011.05.
36. M. Vaidya, K.M. Creach, J. Frye, F. Dehdashti, J.D. Bradley, I. El Naqa, *Using FDG-PET/CT image characteristics for predicting radiotherapy response in lung cancer*, *Radioth. Oncol.*, Nov 16, 2011.
37. D. Shaw, M-H. Grosbras, G. Leonard, G.B. Pike, T. Paus, *Development of the action-observation networking during early adolescence: A longitudinal study*, *Social Cognitive & Affective Neuroscience*, [Epub, January 28, 2011.]

## CONSORTIUM PUBLICATIONS

**by members of the Medical Physics Unit : 2011 calendar year (x 4)**  
(names of MPU staff members are underlined, students are indicated by †)

38. V. Fonov, A.C. Evans, K. Botteron, C.R. Almli, R.C. McKinsty, D.L. Collins, G.B. Pike, **Brain Development Cooperative Group**, *Unbiased average age-appropriate atlases for pediatric studies*, *NeuroImage* **54** (1), 313-27 (2011). [Epub July 23, 2010.]
39. S. Karama, R. Colom, W. Johnson, I.J. Deary, R. Haier, D.P. Waber, C. Lepage, H. Ganjavi, R. Jung, A.C. Evans, G.B. Pike, **Brain Development Cooperative Group**, *Cortical thickness correlates of specific cognitive performance accounted for by the general factor of intelligence in healthy children aged 6 to 18*, *NeuroImage* **55** (4), 1443-53 (2011). [Epub January 15, 2011.]
40. S. Ducharme, J.J. Hudziak, K.N. Botteron, H. Ganjavi, C. Lepage, D.L. Collins, M. Albaugh, A.C. Evans, S. Karama, G.B. Pike, **Brain Development Cooperative Group**, *Right anterior cingulate cortical thickness and bilateral striatal volume correlate with CBCL aggressive behavior scores in healthy children*, *Biological Psychiatry*, Epub April 29, 2011.
41. G.B. Pike, **Brain Development Cooperative Group**, *Total and regional brain volumes in a population-based normative sample from 4 to 18 Years: The NIH MRI study of normal brain development*, *Cereb. Cortex*, Epub May 25, 2011.