

## APPENDIX IX.

### PUBLICATIONS

by members of the Medical Physics Unit : 2014 calendar year (x 61)  
(names of MPU staff members are underlined, students are indicated by †)

1. S. Belleville, C. Fouquet, S. Duchesne, D.L. Collins, C. Hudon, *Detecting early preclinical Alzheimer's disease via cognition, neuropsychiatry, and neuroimaging: Qualitative review and recommendations for testing*, J. Alzheimer's Disease **42**(4), S375-82 (2014).
2. E. Conneely, A. Alexander, R. Ruo, E. Chung, J. Seuntjens, M.J. Foley, (2014) *Monte Carlo investigation of collapsed versus rotated IMRT plan verification*, J. Appl. Clin. Med. Phys. **8**:15(3), 4681 (2014). doi: 10.1120/jacmp.v15i3.4681.
3. M.A. Hobson, E.T. Soisson, S. Davis, W. Parker, *Using the ACR CT accreditation phantom for routine image quality assurance on both CT and CBCT imaging systems in a radiotherapy environment*, J. Appl. Clin. Med. Phys. **15**, 226-239 (2014).
4. A. Nobah, S. Aldelaijan, S. Devic, N. Tomic, J. Seuntjens, M. Al-Shabanah, B. Mofteh, *Radiochromic film based dosimetry of image-guidance procedures on different radiotherapy modalities*, J. Appl. Clin. Med. Phys. **15**(6), 229-239 (2014).
5. S-T. Chiu-Tsao, J.J. Napoli, S.D. Davis, J. Hanley, M.J. Rivard, *Dosimetry for <sup>131</sup>Cs and <sup>125</sup>I seeds in solid water phantom using radiochromic EBT film*, Appl. Radiat. Isot. **92**, 102–114 (2014).
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8. P.A. MacDonald, H. Ganjavi, D.L. Collins, A.C. Evans, S. Karama, *Investigating the relation between striatal volume and IQ*, Brain Imaging Behav. **8**(1), 52-9 (2014).
9. Y. Xiao, V.S. Fonov, S. Beriault, F. Al Soubaie, M.M. Chakravarty, A.F. Sadikot, G.B. Pike, D.L. Collins, *Multi-contrast unbiased MRI atlas of a Parkinson's disease population*, Intl. J. Comput. Assist. Radiol. Surg. (2014) [Epub ahead of print] PMID: 24841147.
10. Y. Xiao, V.S. Fonov, S. Beriault, I. Gerard, A.F. Sadikot, G.B. Pike, D.L. Collins, *Patch-based label fusion segmentation of brainstem structures with dual-contrast MRI for Parkinson's disease*, Intl. J. Comput. Assist. Radiol. Surg. (2014) PMID 25249471.
11. H. Rivaz, D.L. Collins, *Deformable registration of pre-operative MR, pre-resection ultrasound and post-resection ultrasound: Comparing three approaches*, Intl. J. Comp. Assis. Radiol. Surg. [Epub ahead of print] (2014) PMID: 25373447.
12. M.A. Mujica-Mota, S. Lehnert, S. Devic, K. Gasbarrino, S.J. Daniel, *Mechanisms of radiation-induced sensorineural hearing loss and radioprotection*, Hearing Research **312**, 60-68 (2014).
13. S. Hu, P. Coupé, J.C. Pruessner, D.L. Collins, *Nonlocal regularization for active appearance model: Application to medial temporal lobe segmentation*, Human Brain Mapping **35**(2), 377-95 (2014).
14. M. Derakhshan, Z. Caramanos, S. Narayanan, D.L. Arnold, D.L. Collins, *Surface-based analysis reveals regions of cortical magnetization transfer ratio in patients with multiple sclerosis: A proposed method for imaging subpial demyelination*, Human Brain Mapping **35**(7), 3402-13 (2014).
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25. K. Jabbari, J. Seuntjens, *A fast Monte Carlo code for proton transport in radiation therapy based on MCNPX*, J. Med. Phys. **39**(3), 156-163 (2014).
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38. M. Hatt, M. Majdoub, M. Vallières, F. Tixier, D. Groheux, M. Espié, A. Martineau, O. Pradier, R. Hustinx, C. Cheze Le Rest, I. El Naqa, D. Visvikis, *FDG PET uptake characterization through texture analysis: Investigating the complementary nature of heterogeneity and functional tumor volume in a multi-cancer model patient cohort*, *J. Nuc. Med.* pii: jnumed.114.144055. [Epub ahead of print]. (2014)
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44. J. Coates†, N. Ybarra, I. El Naqa, *Novel non-invasive plethysmograph for robust assessment and prediction of radiation-induced lung injury*, *Physiol. Meas.* **35**, 1737 (2014). Featured article.
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