

1. **Alonso-Ortiz E**, Levesque IR, Pike GB (2015) *MRI-based myelin water imaging: A technical review*, Magn Reson Med. 73(1) January 2015: 70-81, doi: 10.1002/mrm.25198.
2. **M.A. Renaud**, D. Roberge, J. Seuntjens (2015) *Latent uncertainties of the pre-calculated track Monte Carlo method*, Medical Physics 42: 479.
3. G. Aldosary, A. Nobah, F. Al-Zorkani, S. Devic and B. Moftah (2015) *A practical method of modeling a treatment couch using cone-beam computed tomography for intensity-modulated radiation therapy and RapidArc treatment delivery*, Med Dosim. In Press, S0958-3947; Published online: April 28, 2015.
4. **Lee S**, Ybarra N, Jeyaseelan K, Faria S, Kopek N, Brisebois P, Bradley JD, Robinson C, Seuntjens J, El Naqa I. (2015) *Bayesian network ensemble as a multivariate strategy to predict radiation pneumonitis risk*, Med Phys 42(5): 2421-2430. doi: 10.1118/1.4915284. 2015 May.
5. **Lee S**, El Naqa I. (2015) Machine Learning Methodology. In El Naqa I, Li R, Murphy MJ, Machine Learning in Radiation Oncology, (pp. 21-39), Springer International Publishing.
6. **Coates J**, Jeyaseelan AK, Ybarra N, David M, Faria S, Souhami L, Cury F, Duclos M, El Naqa I. (2015) *Contrasting analytical and data-driven frameworks for radiogenomic modeling of normal tissue toxicities in prostate cancer*, Radiother Oncol. 115(1): 107-13; 2015 Mar 25. pii: S0167-8140(15)00142-5. doi: 10.1016/j.radonc.2015.03.005.
7. Hatt M, Majdoub M, **Vallières M**, Tixier F, Le Rest CC, Groheux D, Hindié E, Martineau A, Pradier O, Hustinx R, Perdrisot R, Guillevin R, El Naqa I, Visvikis D. (2015) *18F-FDG PET uptake characterization through texture analysis: investigating the complementary nature of heterogeneity and functional tumor volume in a multi-cancer site patient cohort*, J Nucl Med. 2015 Jan;56(1): 38-44. doi: 10.2967/jnumed.114.144055. Epub 2014 Dec 11.
8. Asgharizadeh S, Bekerat H, Syme A, Aldelaijan S, DeBlois F, Vuong T, Evans M, Seuntjens J, Devic S (2015) *Radiochromic film-based quality assurance for CT-based high-dose-rate brachytherapy*. Brachytherapy 2015 Jul-Aug; 14(4) 578-85 (Epub 2015 April 9)
9. Beaulieu L, El Naqa I, Després P, Seuntjens J. (2015) *Special section: Selected papers from the Fifth International Workshop on Monte Carlo Techniques in Medical Physics*, Phys Med Biol. 2015 Jun 10;60(13):4947-4950.
10. **Collins-Fekete C-A**, Plamondon M, Martin A-G, Vigneault É, Verhaegen F, Beaulieu L. (2015) *Calcifications in low-dose rate prostate seed brachytherapy treatment: post-planning dosimetry and predictive factors*, Radiotherapy Oncology. 114(3):339-44.
11. **Poulin E**, Racine E., Binnekamp D., Beaulieu L. (2015) *Fast, automatic, and accurate catheter reconstruction in HDR brachytherapy using an electromagnetic 3D tracking system*, Med. Phys. 42(3): 1227-1232.
12. **Poulin E**, Gardi L., Fenster A., Pouliot J., Beaulieu L. (2015) *Towards real-time 3D ultrasound planning and personalized 3D printing for breast HDR brachytherapy treatment*, Radiother Oncol. 2015 Mar;114(3):335-8.
13. **M Vallières**, C R Freeman, S R Skamene and I El Naqa, (2015), *A radiomics model from joint FDG-PET and MRI texture features for the prediction of lung metastases in soft-tissue sarcomas of the extremities*, Phys. Med. Biol. 60 5471. – Editors's Choice.
14. **Collins-Fekete C-A**, Dias M.F., Doolan P., Beaulieu L., Seco J. (2015) *Developing a phenomenological model of the proton trajectory within a heterogeneous medium required for proton imaging*, Physics in Medicine and Biology 60(13): 5071-5082.
15. **D. Matenine**, Y. Goussard et P. Després, (2015) *GPU-Accelerated Regularized Iterative Reconstruction for Few-view Cone Beam CT*, Med. Phys. 42(4):1505-17.
16. D. Roberge, C. Leclerc-Champagne, R. Doucet and J. Seuntjens (2015) *How Low Should You Go: Choice of Minimum Dose Prescription in Cranial Radiosurgery*, Cureus, Journal of Medical Science 7(6): e282, June 2015.
17. **Renaud J**, Sarfehnia A, Marchant K, McEwen M R, Ross C, Seuntjens J P (2015) *Direct measurement of electron beam quality conversion factors using water calorimetry*, Med. Phys., 2015. [Accepted].
18. **A Toltz**, N Shin, C Laude, C Freeman, J Seuntjens, W Parker, D Roberge (2015) *Late radiation*

- toxicity in Hodgkin lymphoma patients; proton therapy's potential*, Journal of Applied Clinical Medical Physics (Accepted).
- 19. Piotr Pater, Gloria Backstrom Fernanda Villegas, Anders Ahnesjo, Shirin Enger, Jan Seuntjens and Issam El Naqa (2015) *Proton and light ion RBE for the induction of initial DNA double strand breaks*, submitted.
  - 20. Novosad, P., and Reader, A.J. (2015) MR-guided dynamic PET reconstruction with the kernel method and spectral temporal basis functions. Physics in medicine and biology. (Notes: submitted September 1st, 2015. 17 pages. PMB-102982).
  - 21. Papaconstadopoulos, P., and Seuntjens, J. (2015) *Direct source reconstruction of clinical linear accelerators using a maximum-likelihood expectation maximization algorithm in small photon fields*, Physics in medicine and biology (submitted)
  - 22. Yana Zlateva and Issam El Naqa (2015) *Cherenkov emission dosimetry for electron beam radiotherapy: a Monte Carlo feasibility study of relative and absolute dose prediction*, (submitted).