

APPENDIX XII.

CONFERENCE & SEMINAR PRESENTATIONS

by members of the Medical Physics Unit : 2020 calendar year (x 55)

(in multiple author entries, presenter is indicated by an asterisk *)

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

1. A. Caissie, T. Atwood, J. Burmeister, W. Beckham, T. Pawlicki, M. Popovic, J. Renaud, *Factors that are driving change in radiation oncology*, Canadian Organization of Medical Physicists (COMP) Winter School, Mont-Tremblant, Quebec, February 02-06, 2020.
2. M. Popovic*, J. Renaud, A. Caissie, *The complexity of inter-professional communication and the consequences of miscommunication*, Canadian Organization of Medical Physicists (COMP) Winter School, Mont-Tremblant, Quebec, February 02-06, 2020.
3. A. Ensworth†*, V. Fortier†, I.R. Levesque, *A comparison of locally and publicly implemented QSM pre-processing techniques*, 12th Scientific Day of the Québec Bio-imaging network (QBIN/RBIO), Montréal, Quebec, February 7, 2020. T1-02.
4. D. Patel†*, Z. Ahmed†, I.R. Levesque, *Pattern recognition algorithms to study tumour perfusion using dynamic contrast-enhanced MRI*, 12th Scientific Day of the Québec Bio-imaging network (QBIN/RBIO), Montréal, Quebec, February 7, 2020. T1-04.
5. L. Carroll†*, S.A. Enger, *Design and simulation of a positron detector to measure the AIF for dynamic PET*, 12th Scientific Day of the Québec Bio-imaging network (QBIN/RBIO), Montréal, Quebec, February 7, 2020. T1-08.
6. V. Fortier†*, I.R. Levesque, *T₁ relaxation in fat and its dependence on fat content*, 12th Scientific Day of the Québec Bio-imaging network (QBIN/RBIO), Montréal, Quebec, February 7, 2020. T1-18.
7. A. Kolokotronis†*, D. Cooper†, V. Fortier†, J. Capobianco, J. Seuntjens, I.R. Levesque, *Magnetic resonance imaging characteristics of novel lanthanide-based theranostic nanoparticles*, 12th Scientific Day of the Québec Bio-imaging network (QBIN/RBIO), Montréal, Quebec, February 7, 2020. T2-01.
8. L. Carroll†*, S.A. Enger, *Design and simulation of a novel positron detector to measure the AIF for dynamic PET*, Winter Workshop of the Radiation Research Society, Big Sky, Montana, March 04-06, 2020. Presentation.
9. S.P. Kim†*, C. Cohalan, D. Juneau, S.A. Enger, *Investigating the self-calibration factor for Yttrium-90 SPECT/CT image-based dosimetry radiation*, Workshop of the Radiation Research Society, Big Sky, Montana, March 04-06, 2020. Poater presentation.
10. A. Ensworth†*, I.R. Levesque, *Investigating QSM and T₁ mapping from magnetization-prepared multi-echo magnetic resonance imaging*, MRI Science Lab (Raucher Group), University of British Columbia, Vancouver, BC, May 11, 2020.
11. L. Carroll†*, S.A. Enger, *Monte Carlo simulations of a non-invasive positron detector for use with dynamic PET*, Society of Nuclear Medicine & Medical Imaging (SNMMI), VIRTUAL, July 11-14, 2020. Presentation.
12. G. Famulari†*, K. Sultanem, M. Duclos, S.A. Enger, *169Yb-based intensity modulated brachytherapy for head & neck cancers*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Presentation BReP-SNAP-T-1*.
13. L. Weishaupt†*, J. Torres, S. Camilleri-Broet, S. Côté-Maldonado†, S.A. Enger, *Classification and segmentation of tumor cells and nuclei on biopsy slides using deep learning for microdosimetry applications*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Presentation BReP-SNAP-M-36. **Blue Ribbon Poster Presentation.**
14. A. Andrade†*, G. Sheonuda, J. Kildea, *Exploration of potential parameters that influence when to replan head and neck cancer patients*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Presentation BReP-SNAP-M-71.
15. M. Morcos†*, T. Vuong, S.A. Enger, *Reducing dose to uninvolved rectum with dynamic shield intensity modulated brachytherapy*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Presentation BReP-SNAP-T-144.
16. F. Kesztli†*, B. Côté†, J. Bancheri†, A. Sarfehnia, J. Seuntjens, J. Renaud, *Development of a quasi-adiabatic miniature graphite calorimeter for absolute clinical dosimetry of high-energy photon beams*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Presentation MO-CD-TRACK 1-8.
17. A. Chatterjee*, M. Vallières†, J. Seuntjens, R. Forghani, *Advantages of spectral energy CT data for deep learning applications*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-M-47.
18. M. Chetvertkov*, J. Monroe, K. Boparai, T. Solberg, D. Pafundi, R. Ruo, D. Gladstone, F. Yin, I. Cheety, S. Benedict, D. Followill, Y. Xiao, S. John, *Survey on practice and technology use in SRT and SBRT delivery*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-P-77.

19. A. Chatterjee*, H. Woodruff, M. Lobbes, Y. van Wijk, M. Beuque, J. Seuntjens, P. Lambin, *Effectiveness of simple data imputation for missing feature values in binary classification*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-M-181.
20. D. Patel†*, Z Ahmed†, I.R. Levesque, *Using pattern recognition to assess tumour perfusion in high grade soft tissue sarcoma*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-I-225*.
21. H. Naseri†*, J. Kildea, *The feasibility of using radiomics to detect T-spine lytic bone metastases in simulation-CT images*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-M-398.
22. B. Behmand†*, Y. Kamio†, M.D.C. Evans, S.A. Enger, *Correlation between radiation-induced foci and tumor nuclei size distribution*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-T-247.
23. P. Watson*, E. Poon, *Investigation of partial-arc CBCT protocols for imaging extremities*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-M-273.
24. V. Turgeon†*, B. Bahoric, M. Morcos†, S.A. Enger, *Dosimetric impact of TG43 formalism versus Monte Carlo in HDR breast cancer brachytherapy*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-T-347.
25. L. Montgomery†*, A. Landry, C.M. Lund†, J. Kildea, *Estimation of neutron RBE for mutagenesis by simulating clustered DNA damage*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-T-389.
26. F. Mathew†*, G. Almkaddesi, L. Montgomery†, J. Kildea, *Investigating how various parameters influence secondary neutron spectra produced during high-energy electron-beam treatments*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-T-531.
27. V.J. Heng†*, M-A. Renaud†, M. Serban, J. Seuntjens, *Mixed electron-photon radiation therapy delivery and quality assurance*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-T-580.
28. J. Bancher†*, S. Ketelhut, L. Bueermann, J. Seuntjens, *Monte Carlo and water calorimeter determination of ionization chamber correction factors for medium energy x-ray beams*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-T-588.
29. D. Aramburu Nunez*, M. Antaki†, M. Morcos†, S. Huang, S.A. Enger, C. Barker, A. Damato, G. Cohen, *Pre-clinical assessment of HDR eye plaque treatment using a Monte Carlo-based treatment planning system*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-T-648.
30. S. Aldelaijan†*, Y. Khouj, M. Khosravi, T. Harris, D. O'Farrell, M. Jacobson, J. Seuntjens, S. Devic, I. Buzurovic, *Quantitative analysis and quality assurance (QA) of gynecological brachytherapy applicators using radiochromic film dosimetry*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-T-679.
31. L. Liang*, N. Tomic, S. Devic, F. Piccolo, L. Kelley, T. Furtado, T. Vuong, *Radiochromic film-based dosimetry of novel rectal electronic-brachytherapy applicator*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-T-687.
32. H.M. Patrick†*, L. Souhami, J. Kildea, *Reduction of interobserver contouring variations through a retrospective, evidence-based intervention*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-T-700.
33. E. Sepulveda†*, H.M. Patrick†, J. Kildea, *Standardization of CSI treatment planning and its evaluation using a DVH registry*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster presentation PO-GeP-T-736.
34. Y. Zlateva*, B. Muir, I. El Naqa, J. Seuntjens, *Step-size dependence of Monte Carlo simulations for Cherenkov emission (CE)-based dosimetry calculations*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Poster PO-GeP-T-738.
35. S. Aldelaijan†*, S. Devic, H. Bekerat, P. Papaconstadopoulos, J. Schneider†, J. Seuntjens, R. Cormack, I. Buzurovic, *Implementation of a novel HDR sources tracking model for source quality assurance using radiochromic film dosimetry*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Presentation TH-A-TRACK 3-3.
36. J. Seuntjens, *Multimodality radiomics and deep learning for outcome modeling: application in head & neck cancer*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Presentation TH-B-TRACK 5-03.
37. M. Morcos†*, A. Viswanathan, S.A. Enger, *A novel minimally invasive dynamic shield system for cervix brachytherapy*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Presentation TU-C-TRACK3-1.
38. J.J.W. Yeo†*, R. Li, Y.C. Wang, N. Ybarra, J. Kildea, I. Ragoussis, *An examination of the mutational signature of x-ray irradiation using single-cell whole genome sequencing*, Joint AAPM/COMP Meeting, VIRTUAL, July 12-16, 2020. Presentation WE-D-TRACK 3-3.
39. D.S. Ayala Alvarez†*, P.G. Watson, M. Popovic, J. Seuntjens, *Brachytherapy dosimetry characterization of the INTRABEAM source*, European Society for Radiotherapy & Oncology (ESTRO) – World Congress of Brachytherapy, July 31-August 02, 2020.
40. T. Lefebvre†*, L. Petitclerc, L. Bilodeau, G Sebastiani, J.M. Giard, M.R. Sylvestre, B.N. Bguyen, G. Gilbert, G. Cloutier, A. Tang, *Prospective comparison of MR elastoplasty with MRI cine-tagging of cardiac-induced motion for non-invasive staging of liver fibrosis*, Proc. 28th Scientific Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), Sydney, Australia, August 08-14, 2020. #309.

41. V. Fortier^{†*}, I.R. Levesque, *T₁ relaxation in fat and its dependence on fat content*, Annual meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), VIRTUAL, August 08-14, 2020.
42. V. Fortier^{†*}, I.R. Levesque, *Fat DESPOT for MR-oximetry validated by STEAM MRS*, Annual meeting of the International Society for Magnetic Resonance in Medicine (ISMRM), VIRTUAL, August 08-14, 2020.
43. M. Bernier, B. Toscani, I. Gerard, J. Alfieri, G. Stroian, P. Pater, N. Kopek, J. Stosky, T. Hijal, *Stereotactic errhythmia radioablation for ventricular tachycardia (StAR-VT)*, Annual meeting of Canadian Association of Radiation Oncology (CARO-ACRO), VIRTUAL, September 23-25, 2020. Education session.
44. S. Skamene, G. Almakdessi, M.D.C. Evans, R. Ruo, W. Parker, T. Hijal, C.R. Freeman, *Lung dose evaluation using TBI island-blocks*, Annual meeting of the International Society of Pediatric Oncology (SIOP), VIRTUAL, October 14-17, 2020. Poster.
45. M. Serban^{*}, A. de Leeuw, K. Tanderup, I. Jürgenliemk-Schulz, *Vaginal dose surface maps and morbidity in cervical cancer brachytherapy*, Annual Meeting of the American Society for Radiation Oncology (ASTRO), VIRTUAL, October 24-November 30, 2020. Poster presentation.
46. H.J. Patrocinio, *Stereotactic ablative radiotherapy for treatment of upper urinary tract urothelial carcinomas*, Annual Meeting of the American Society for Radiation Oncology (ASTRO), VIRTUAL, October 24-November 30, 2020. Poster presentation.
47. A. Bui^{†*}, *Developing a hydrated electron dosimeter and determining the G-value of hydrated electrons*, Annual Meeting of the Association Québécoise des Physicien(ne)s Clinique Médicaux (AQPMC), VIRTUAL, November 02-06, 2020. Presentation.
48. A. Thibodeau-Antonacci^{†*}, *Development of a dynamic-shielding intensity modulated brachytherapy applicator for the treatment of rectal cancer*, Annual Meeting of the Association Québécoise des Physicien(ne)s Clinique Médicaux (AQPMC), VIRTUAL, November 02-06, 2020. Presentation.
49. G. Famulari^{†*}, S.A. Enger, *La curiethérapie avec modulation d'intensité par blindage dynamique pour le cancer de la prostate*, Annual Meeting of the Association Québécoise des Physicien(ne)s Clinique Médicaux (AQPMC), VIRTUAL, November 02-06, 2020. Presentation.
50. L. Carroll^{†*}, S.A. Enger, *Optimization of a non-invasive positron detector to measure the AIF for dynamic PET*, Annual meeting of the McGill Initiative in Computational Medicine (MiCM), VIRTUAL, November 27, 2020. Presentation.
51. A. Diamant[†], A. Chatterjee, M. Vallières, M. Serban, Y. Zou^{†*}, R. Forghani, G. Shenouda, J. Seuntjens, *Multi-modal deep learning framework for head & neck cancer outcome prediction*, Annual meeting of the McGill Initiative in Computational Medicine (MiCM), VIRTUAL, November 27, 2020. Presentation.
52. M. Serban^{*}, L. Fokdal, S.K. Nielsen, S.B. Hokland, A. Traberg Hansen, H. Spejlbord, S. Rylander, P. Petric, J. Lindegaard, K. Tanderup, *Intracavitary/interstitial brachytherapy using oblique needles in cervix cancer*, 39th Annual Meeting of the European Society for Radiotherapy & Oncology (ESTRO), VIRTUAL, November 28-December 01, 2020. Presentation.
53. M. Serban^{*}, A. de Leeuw, K. Tanderup, I. Jürgenliemk-Schultz, *Dose to vaginal wall in cervical cancer brachytherapy and associated morbidity*, 39th Annual Meeting of the European Society for Radiotherapy & Oncology (ESTRO), VIRTUAL, November 28-December 01, 2020. Presentation.
54. V. Turgeon^{†*}, M. Morcos[†], M. Antaki[†], B. Bahoric, S.A. Enger, *Impact of choices in dosimetric calculation method for high dose rate brachytherapy of breast cancer*, 39th Annual Meeting of the European Society for Radiotherapy & Oncology (ESTRO), VIRTUAL, November 28-December 01, 2020. Presentation.
55. J.T. Dana, T. Lefebvre[†], P. Savadjiev, S. Bodard, O. Helenon, C. Reinhold, *Complex cystic renal lesions: CT imaging-based radiomics model for preoperative malignancy risk stratification in comparison with Bosniak classification*, 106th Annual Meeting of the Radiological Society of North America (RSNA), VIRTUAL, November 29-December 05, 2020. #20005433.