

## APPENDIX XII.

### CONFERENCE & SEMINAR PRESENTATIONS

by members of the Medical Physics Unit : 2019 calendar year (x 91)

(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. P. Watson, H. Bekerat, M. Popovic, P. Papaconstadopoulos, S. Davis, J. Seuntjens, *Are the breast TARGIT protocol doses delivered by INTRABEAM accurate?*, 3<sup>rd</sup> Annual TARGIT Collaborative Group Conference, Orlando, FL, February 08-09, 2019.
2. S.X. Shu†, I. Levesque, *Investigation of tissue microstructures with diffusion weighted MRI*, 11th Scientific Day of the Québec Bio-imaging network (QBIN/RBIQ), Montreal, QC, March 29, 2019. Oral presentation.
3. J. Coates, A. Jeyaseelan, N. Ybarra, J. Tao, M. David, S. Faria, L. Souhami, F. Cury, M. Duclos, I. El Naqa, *Unified radiogenomic prediction of late radiotherapy toxicities*, ESTRO 38<sup>th</sup> Annual Meeting: Targeting optimal care, Milan, Italy, April 26-30, 2019, oral presentation SP-0641 SP-0011; J. Eur. Soc. Radiother. Oncol. **133**(1), S4 (2019).
4. M. Serban, C. Kirisits, A. De Leeuw, R. Pötter, I.M. Jürgenliemk-Schulz, N. Nesvacil, J. Swamidas, R. Hudej, G. Lowe, T.P. Hellebust, G. Menon, A. Oinam, P. Bownes, B. Oosterveld, M. De Brabandere, K. Koedooder, A.B.L. Marthinsen, D. Whitney, J. Lindegaard, K. Tanderup, *Performance of ring vs ovoids and intracavitary vs intracavitary-interstitial in the EMBRACE study*, ESTRO 38<sup>th</sup> Annual Meeting: Targeting optimal care, Milan, Italy, April 26-30, 2019, oral presentation OC-0172; J. Eur. Soc. Radiother. Oncol. **133**(1), S87 (2019).
5. Y. Zlateva†, B. Muir, I. El Naqa, J. Seuntjens, *Cherenkov emission-based dosimetry is a promising perturbation-free technique*, ESTRO 38<sup>th</sup> Annual Meeting: Targeting optimal care, Milan, Italy, April 26-30, 2019, oral presentation OC-0293; J. Eur. Soc. Radiother. Oncol. **133**(1), S146 (2019).
6. N. Ybarra, J. Seuntjens, *Radio-selective effects of natural occurring muscle-derived dipeptide in A549 and normal cell lines*, ESTRO 38<sup>th</sup> Annual Meeting: Targeting optimal care, Milan, Italy, April 26-30, 2019, oral presentation OC-0376; J. Eur. Soc. Radiother. Oncol. **133**(1), S187 (2019).
7. G. Famulari†, S. Enger, *Intensity modulated brachytherapy for prostate cancer: Plan quality, robustness and delivery time*, ESTRO 38<sup>th</sup> Annual Meeting: Targeting optimal care, Milan, Italy, April 26-30, 2019, oral presentation SP-0641 OC-0397; J. Eur. Soc. Radiother. Oncol. **133**(1), S201 (2019).
8. J. Seuntjens, E. Lartigau, *Implementation and practice of SRS and SBRT: Consensus guidelines and protocols*, ESTRO 38<sup>th</sup> Annual Meeting: Targeting optimal care, Milan, Italy, April 26-30, 2019, oral presentation SP-0641; J. Eur. Soc. Radiother. Oncol. **133**(1), S341 (2019).
9. M. Popovic, *Electronic brachytherapy*, New Avenues in Brachytherapy / Innovations en curietherapie, Montreal, QC, May 17-18, 2019. Oral presentation – Breast Cancer.
10. S. Enger, *Intensity modulated brachytherapy*, New Avenues in Brachytherapy / Innovations en curietherapie, Montreal, QC, May 17-18, 2019. Oral presentation – Technical Innovations.
11. M. Serban, C. Kirisits, K. Nkiwane, I. Dumas, J. Swamidas, A. de Leeuw, R. Hudej, G. Lowe, N. Nesvacil, R. Poetter, J. Lindegaard, K. Tanderup, *Isodose surface volumes in cervix brachytherapy: Dependence on image guided adaptation and applicator*, New Avenues in Brachytherapy / Innovations en curietherapie, Montreal, QC, May 17-18, 2019. Oral presentation - Young Investigator Session.
12. M. Serban, C. Kirisits, A. De Leeuw, R. Pötter, I.M. Jürgenliemk-Schultz, N. Nesvacil, J. Swamidas, R. Huydej, G. Lowe, T.P. Hellebust, G. Menon, A. Oinam, P. Bownes, B. Oosterveld, M. De Brabandere, K. Koedooder, A.B.L. Marthinsen, D. Whitney, J. Lindegaard, K. Tanderup, *Ring versus ovoids and intracavitary versus intracavitary-interstitial applicators in cervical cancer brachytherapy: Results from the EMBRACE I study*, New Avenues in Brachytherapy / Innovations en curietherapie, Montreal, QC, May 17-18, 2019. Poster presentation.
13. M. Morcos†, S. Enger, *MR-compatible intensity modulated brachytherapy for the treatment of locally advanced cervical cancer*, New Avenues in Brachytherapy / Innovations en curietherapie, Montreal, QC, May 17-18, 2019. Oral presentation - Young Investigator Session.
14. G. Famulari†, *Urethra-sparing with intensity modulated brachytherapy for prostate cancer*, New Avenues in Brachytherapy / Innovations en curietherapie, Montreal, QC, May 17-18, 2019. Oral presentation - Young Investigator Session.
15. J. Kildea, *The Opal patient portal*, e-Health Conference & Tradeshow, Toronto, ON, May 26-29, 2019. Oral presentation.
16. M.D.C. Evans, *Cradle-to-grave radiation safety management of neutrons produced by linear accelerators in the radiation oncology department*, CRPA/ACRP Annual Meeting - Connecting with Communities / Tisse des liens avec les communautés, Ottawa, ON, May 27-30, 2019. Oral presentation.

17. S. Beard†, J. Kildea, *Data donation via a multi-institutional patient portal*, Canadian Research Software Conference, digital event, May 28-29, 2019. Oral-poster presentation.
18. J. Glusko, C. Lambert, O. Yu, S.D. Davis, J. Kildea, M. Serban, *Development and implementation of an online educational module for the deep inspiration breath-hold technique*, RTI3 Workshop, Toronto, ON, May 31-June 01, 2019. Oral presentation.
19. J. Kildea, *Integrating patient flow, patient-reported outcomes, and big data in cancer care*, Atlantic Radiotherapy Symposium, Halifax, NS, June 13-14, 2019. Oral presentation.
20. A. Diamant†, A. Chatterjee†, M. Vallières†, G. Shenouda, J. Seuntjens, *Deep learning in head & neck cancer prediction*, ICCR-MCMA, Montreal, QC, June 17-21, 2019, Session 2A: Deep Learning (I) Outcomes, Diagnosis, Prediction.
21. A. Chatterjee†, M. Vallières†, J. Seuntjens, *Correlation coefficient: A poor metric for multi-class classification*, ICCR-MCMA, Montreal, QC, June 17-21, 2019, Session 4E: Poster Session I - Radiomics I, P033.
22. A. Chatterjee†, *Educational lecture: Statistical pitfalls in clinical research and how to avoid them*, ICCR-MCMA, Montreal, QC, June 18, 2019, Session 6A: Educational Session I. Oral presentation.
23. J. Kildea, *Educational lecture: An introduction to patient-reported outcomes in radiation oncology*, ICCR-MCMA, Montreal, QC, June 17-21, 2019, Session 6B: Educational Session II. Oral presentation.
24. C. Bélanger†, S. Cui, A. Cunha, L. Beaulieu, P. Després, *Simulated annealing and quasi-Newton algorithms on GPU architecture for multi-criteria optimization for HDR brachytherapy*, ICCR-MCMA, Montreal, QC, June 18, 2019, Session 7B: Optimization II. Oral presentation.
25. M. Vallières†, A. Chatterjee†, Y. Zhao, Z. Zhang, M. Soulen, A. Silva, H.X. Bai, O. Morin, J. Seuntjens, S.W. Stavropoulos, *Radiomics-based decision-support system in renal cell carcinomas*, ICCR-MCMA, Montreal, QC, June 18, 2019, Session 8A: Radiomics and Machine Learning I. Oral presentation.
26. L. Montgomery†, A. Landry†, F. Mathew†, J. Kildea, *A novel MLEM stopping criterion for unfolding neutron fluence spectra in radiotherapy*, ICCR-MCMA, Montreal, QC, June 18, 2019, Session 10A: Algorithms. Oral presentation.
27. H. Naseri†, J. Kildea, *Feasibility of using natural language processing to extract cancer pain score from clinical notes*, ICCR-MCMA, Montreal, QC, June 18, 2019, Session 11D: Poster Session II - Outcomes-driven Planning. Poster presentation PO63.
28. H. Patrick†, K. Agnew†, L. Souhami, J. Kildea, *Evaluation of analysis methods for dose monitoring in patients undergoing prostate radiotherapy*, ICCR-MCMA, June 18, 2019, Montreal, QC, Session 11D: Poster Session II - Outcomes-driven Planning. Poster presentation PO64.
29. A. Chatterjee†, M. Vallières†, J. Seuntjens, *Monte Carlo qualification of statistical risk when using a surrogate radiomic marker*, ICCR-MCMA, June 18, 2019, Montreal, QC, Session 12A: Radiomics and Machine Learning II. Oral presentation.
30. A. Chatterjee†, M. Vallières†, J. Seuntjens, *Adapting classifiers to work imbalanced data in machine learning*, ICCR-MCMA, Montreal, QC, Session 12A: Radiomics and Machine Learning II. Oral presentation.
31. M. Vallières†, *Educational lecture: Radiomics - the Image Biomarker Standardisation Initiative (IBSI)*, ICCR-MCMA, Montreal, QC, June 19, 2019, Session: 13A: Educational Session III. Oral presentation.
32. A. Diamant†, *Educational lecture: Deep learning – a brief introduction*, ICCR-MCMA, Montreal, QC, June 19, 2019, Session 13B: Educational Session IV. Oral presentation.
33. Y. Zlateva†, B. Muir, I. El Naqa, J. Seuntjens, *Cherenkov emission-based dosimetry: Detection angle and aperture study*, ICCR-MCMA, Montreal, QC, June 17-21, 2019, Session 16: MCMA Rising Stars Competition - SECOND PLACE.
34. S. Enger, *Monte Carlo based treatment planning in brachytherapy*, ICCR-MCMA, Montreal, QC, June 17-21, 2019, Session 17: Machine Learning and Monte Carlo I. Oral presentation.
35. J. Kildea, *Systematic collection of patient-reported outcomes and patient data donation*, ICCR-MCMA, Montreal, QC, June 18, 2019, Session: Big Data I. Oral presentation.
36. L.M.T. Wang†, N. Ybarra, S. Jung, M. Serban, A. Chatterjee†, J. Seuntjens, *Comparison of automated and pathologist assessment of radiation induced pulmonary fibrosis for Masson's trichome*, ICCR-MCMA, Montreal, QC, June 19, 2019, Session 18D: Poster Session III – Outcomes and radiobiology. P099.
37. L.M.T. Wang†, A. Semionov, A. Chatterjee†, S. Lee, J. Tsui, I. Yang, Y. Al Bulushi, J. Seuntjens, N. Ybarra, *Comparing the efficacy of SBRT and IMRT in reducing radiation induced pulmonary fibrosis*, ICCR-MCMA, Montreal, QC, June 19, 2019, Session 18D: Poster Session III – Outcomes and radiobiology. PO100.
38. G. Couture†, P. Despres, *Data pipelines in radiation oncology lessons from software engineering*, ICCR-MCMA, Montreal, QC, June 19, 2019, Session 18E: Poster Session III – Workflow and QA III. P111.
39. X.J. Wang†, B. Miguel, J. Seuntjens, J-M. Fernandez-Varea, *Quantifying differences between theoretical models in calculations of Compton mass energy-transfer coefficients*, ICCR-MCMA, Montreal, QC, June 20, 2019, Session 24B: Monte Carlo Codes, Physics and Data II). Oral presentation.
40. L. Mirzakhanian†, R. Bassalow, D. Zaks, C. Huntzinger, J. Seuntjens, *IAEA-AAPM TRS483 based reference dosimetry for the new biology guided radiotherapy system*, ICCR-MCMA, Montreal, QC, June 20, 2019, Session 27A: Dosimetry I. Oral presentation.

41. J. Bancherit<sup>†</sup>, S. Ketelhut, L. Buermann, J. Seuntjens, *Monte Carlo determination of chamber correction factors for medium energy X-ray beams between 50 and 300 kV*, ICCR-MCMA, Montreal, QC, June 20, 2019, Session 27B: Dosimetry II. Oral presentation.
42. D.S. Ayala Alvarez<sup>†</sup>, P. Watson, M. Popovic, J. Seuntjens, *Monte Carlo calculation of the TG-43 dosimetry parameters for the INTRABEAM electronic brachytherapy source*, ICCR-MCMA, Montreal, QC, June 20, 2019, Session 30A: Brachytherapy I. Oral presentation.
43. G. Famulari<sup>†</sup>, S. Enger, *Monte Carlo dosimetry of a custom-made <sup>169</sup>Yb source for intensity modulated brachytherapy*, ICCR-MCMA, Montreal, QC, June 20, 2019, Session 30A: Brachytherapy I. Oral presentation.
44. M. Morcos<sup>†</sup>, S. Enger, *Monte Carlo dosimetry study of novel rotating MRI-compatible shielded tandems for intensity modulated cervix brachytherapy*, ICCR-MCMA, Montreal, QC, June 20, 2019, Session 30A: Brachytherapy I. Oral presentation.
45. P. Watson, M. Popovic, J. Seuntjens, *Effect of spherical applicator size on delivered dose during INTRABEAM intraoperative radiotherapy*, ICCR-MCMA, Montreal, QC, June 20, 2019, Session 30B: Brachytherapy II. Oral presentation.
46. V.J. Heng<sup>†</sup>, A. Diamant<sup>†</sup>, M-A. Renaud<sup>†</sup>, D. Beliveau, R. Doucet, F. DeBlois, J. Seuntjens, *Large-scale dosimetric comparison of ray tracing and Monte Carlo recalculated doses for lung robotic SBRT plan*, ICCR-MCMA, Montreal, QC, June 20, 2019, Session 33A: Treatment Planning and Evaluation, radiation Sources and Beams I. Oral presentation.
47. C. Lund<sup>†</sup>, G. Famulari<sup>†</sup>, L. Montgomery<sup>†</sup>, F. Mathew<sup>†</sup>, J. Kildea, *A microdosimetric analysis of the interactions of mono-energetic neutrons with human tissue*, ICCR-MCMA, Montreal, QC, June 20, 2019, Session 35A: Microdosimetry and Applications in Radiotherapy I. Oral presentation.
48. J. DeCunha<sup>†</sup>, F. Villegas Navaro, M. Vallières<sup>†</sup>, S. Camilleri-Broet, S. Enger, *Towards patient specific microdosimetry*, ICCR-MCMA, Montreal, QC, June 20, 2019, Session 35B: Microdosimetry and Applications in Radiotherapy II. Oral presentation.
49. F. Mathew<sup>†</sup>, L. Montgomery<sup>†</sup>, C. Lund<sup>†</sup>, J. Kildea, *Generation of the response matrix of a passive nested neutron spectrometer system for use in radiotherapy environments*, ICCR-MCMA, Montreal, QC, June 20, 2019, Session 36: Microdosimetry and Medical Imaging. Poster session VI, P162.
50. J.A. Fragoso Negrin<sup>†</sup>, L. Arazi, S. Enger, *A Monte Carlo study on the possibility of using bremsstrahlung and gamma emissions to determine seed positions in diffusing alpha-emitter radiation therapy using a gamma camera*, ICCR-MCMA, Montreal, QC, June 20, 2019, Session 36: Microdosimetry and Medical Imaging. Poster session VI, P163.
51. A. Chatterjee<sup>†</sup>, M. Vallières<sup>†</sup>, A. Dohan, I. Levesque, Y. Ueno, S. Saif, C. Reinhold, J. Seuntjens, *Using dataset-specific feature standardization to improve predictive performance of radiomic models*, AAPM 61st Annual Meeting & Exhibition, San Antonio, TX, July 14-18, 2019. SU-J400-CAMPUS-F2-5, oral presentation.
52. A. Chatterjee<sup>†</sup>, M. Vallières<sup>†</sup>, G. Romero-Sanchez, A. Perez-Lara, R. Forghani, J. Seuntjens, *Multi-energy study of impact of CT Hounsfield unit range in Gray level discretization on radiomic feature stability*, AAPM 61st Annual Meeting & Exhibition, San Antonio, TX, July 14-18, 2019. MO-C930-GePD-F5-4, oral presentation.
53. A. Diamant<sup>†</sup>, A. Chatterjee<sup>†</sup>, M. Vallières<sup>†</sup>, G. Shenouda, J. Seuntjens, *Multi-branch convolutional neural network combines unregistered PET and CT images for head & neck cancer outcome prediction*, AAPM 61st Annual Meeting & Exhibition, San Antonio, TX, July 14-18, 2019. TU-AB-SAN2-4, oral presentation.
54. S. Aldelaijan<sup>†</sup>, P. Papaconstadopoulos, H. Bekerat, M. Khosravi, M. Bhagwat, J. Seuntjens, S. Devic, I. Buzurovic, *Multichannel normalized pixel value as a response function for radiochromic film dosimetry enables simultaneous dose response linearization and scanner response correction*, AAPM 61st Annual Meeting & Exhibition, San Antonio, TX, July 14-18, 2019. WE-AB-303-9, oral presentation.
55. B. Muir<sup>\*</sup>, J. Seuntjens, M. McEwen, D. Followill, W. Culbersson, S. Davis, *Multichannel normalized pixel value as a response function for radiochromic film dosimetry enables simultaneous dose response linearization and scanner response correction*, AAPM 61st Annual Meeting & Exhibition, San Antonio, TX, July 14-18, 2019. WE-H-SAN4-0\*, oral presentation.
56. G. Famulari<sup>†</sup>, S. Enger, *Evaluation of the intershield attenuation effect for a new intensity modulated brachytherapy system for prostate cancer*, AAPM 61st Annual Meeting & Exhibition, San Antonio, TX, July 14-18, 2019. TH-A-301-11\*, oral presentation.
57. L. Carroll<sup>†</sup>, G. Kertzsch, E. Croteau, O. Sarrhini, R. Lecomte, S. Enger, *Validation of a non-invasive position detector for use with dynamic PET under clinical conditions*, AAPM 61st Annual Meeting & Exhibition, San Antonio, TX, July 14-18, 2019. SU-KL-304-09, oral presentation.
58. Y. Xu, S. Aldelaijan<sup>†</sup>, I. Buzurovic, M. Czerminska, *Electron backscatter from internal lead shielding for superficial facial electron treatments*, AAPM 61st Annual Meeting & Exhibition, San Antonio, TX, July 14-18, 2019. MO-C930-GePD-F3-03, oral presentation.
59. J. Mégrouèche<sup>†</sup>, L. Childress, J. Sankey, S. Enger, *Development of a hydrated electron dosimeter for radiotherapy applications*, AAPM 61st Annual Meeting & Exhibition, San Antonio, TX, July 14-18, 2019. WE-AB-303-04, oral presentation.
60. H. Glickman<sup>†</sup>, M. Antaki<sup>†</sup>, S. Enger, *RapidBrachyMCTPS: Addition of contouring tools to the Monte Carlo-based treatment planning system for brachytherapy applications*, AAPM 61st Annual Meeting & Exhibition, San Antonio, TX, July 14-18, 2019. PO-GePV-T-31, poster.

61. L. Mirzakhania<sup>†</sup>, R. Bassalow, D. Zaks, C. Huntzinger, J. Seuntjens, *Reference dosimetry of a new biology-guided radiotherapy (BgRT) system following the IAEA TRS-483 CoP*, IDOS, Vienna, Austria - organized by IAEA, June 18-21, 2019. Book of Extended Synopses: 20-22, paper/oral presentation.
62. X.J. Wang<sup>†</sup>, B. Miguel, J. Seuntjens, J.M. Fernandez-Varea, *Impact of different theoretical models in the calculation of Compton mass energy-transfer coefficients*, IDOS, Vienna, Austria - organized by IAEA, June 18-21, 2019. Book of Extended Synopses: 33-34, paper/oral presentation.
63. B. Côté<sup>†</sup>, J. Seuntjens, A. Sarfhenia, J. Renaud, *Aerrow-Mini: A probe-format graphite calorimeter for absolute dosimetry of small high-energy photon fields*, IDOS, Vienna, Austria - organized by IAEA, June 18-21, 2019. Book of Extended Synopses: 59-61, paper/oral presentation.
64. J. Bancheri<sup>†</sup>, S. Ketelhut, L. Buermann, J. Seuntjens, *Monte Carlo determination of chamber correction factors for medium energy X-ray beams between 50 and 300kV*, IDOS, Vienna, Austria - organized by IAEA, June 18-21, 2019. Book of Extended Synopses: 166-167, paper/oral presentation.
65. S. Ketelhut, L. Buermann, J. Bancheri<sup>†</sup>, J. Seuntjens, *Measurement of chamber correction factors K<sub>ch</sub> for medium-energy therapeutic X-rays between 70 kV and 300 kV generating voltage*, IDOS, Vienna, Austria - organized by IAEA, June 18-21, 2019. Book of Extended Synopses: 170-171, paper/oral presentation.
66. J. Renaud, A. Sarfhenia, J. Bancheri<sup>†</sup>, J. Seuntjens, *Calorimetry-based clinical reference dosimetry of a 1.5 T MRI-linac in water and solid phantoms using Aerrow*, IDOS, Vienna, Austria - organized by IAEA, June 18-21, 2019. Book of Extended Synopses: 234-235, paper/oral presentation.
67. L. Carroll<sup>†</sup>, E. Croteau, G. Kertzscher, O. Sarrhini, R. Lecomte, S. Enger, *Cross-validation of a non-invasive position detector to measure the arterial input function for pharmacokinetic modelling in dynamic PET imaging*, SNMMI Annual Meeting, Anaheim, California, June 22-25, 2019. Oral presentation.
68. H. Patrocino, *Kidney motion during respiration: Implications for SABR treatments*, ICMP 24<sup>th</sup> Annual Meeting, Santiago, Chile, September 08-11, 2019. Poster presentation.
69. A. Chatterjee<sup>†</sup>, M. Serban, S. Faria, L. Souhami, J. Seuntjens, *Knowledge-based prostate radiotherapy planning: An innovative model for hypofractionation with simultaneous integrated boost*, ICMP 24<sup>th</sup> Annual Meeting, Santiago, Chile, September 08-11, 2019. Oral presentation.
70. J. Kildea, *Neutron-induced carcinogenic effects research program*, ICMP 24<sup>th</sup> Annual Meeting, Santiago, Chile, September 08-11, 2019. Oral presentation.
71. J. Kildea, *Actual dose delivered and patient-reported outcomes*, ICMP 24<sup>th</sup> Annual Meeting, Santiago, Chile, September 08-11, 2019. Oral presentation.
72. S. Enger, *Use of artificial intelligence in dosimetry*, COMP-OCPM 65th Annual Scientific Meeting, Kelowna, BC, September 24-27, 2019. Oral presentation.
73. J. Mégrourèche<sup>†\*</sup>, L. Childress, J. Sankey, A. Bui<sup>†</sup>, S. Enger, *Development of a hydrated electron dosimeter for in vivo applications in radiotherapy: A proof of concept*, COMP-OCPM 65th Annual Scientific Meeting, Kelowna, BC, September 24-27, 2019. Oral presentation.
74. A. Diamant<sup>†\*</sup>, A. Chatterjee<sup>†</sup>, M. Vallières<sup>†</sup>, G. Shenouda, J. Seuntjens, *Multi-modal deep learning framework for head & neck cancer outcome prediction*, COMP-OCPM 65th Annual Scientific Meeting, Kelowna, BC, September 24-27, 2019. Oral presentation.
75. Y. Kamio<sup>†\*</sup>, M. Bavoux, K. Zerouali Boukhal, J-F. Carrier, F. DeBlois, P. Wong, S. Enger, *Validation of an orthovoltage based high-throughput microfluidic lab-on-a-chip radiobiological platform using EBT3 Gafchromic<sup>TM</sup> film multichannel dosimetry*, COMP-OCPM 65th Annual Scientific Meeting, Kelowna, BC, September 24-27, 2019. Oral presentation.
76. A. Chatterjee<sup>†\*</sup>, H. Woodruff, M. Lobbes, M. Vallières<sup>†</sup>, J. Seuntjens, *Univariate feature selection on imbalanced data*, COMP-OCPM 65th Annual Scientific Meeting, Kelowna, BC, September 24-27, 2019. Oral presentation.
77. A. Chatterjee<sup>†\*</sup>, H. Woodruff, M. Vallières<sup>†</sup>, J. Seuntjens, *Simple data imputation for missing feature values in binary classification*, COMP-OCPM 65th Annual Scientific Meeting, Kelowna, BC, September 24-27, 2019. Oral presentation.
78. F. Mathew<sup>†\*</sup>, C. Chilian, L. Montgomery<sup>†</sup>, J. Kildea, *Evaluation of the secondary neutron fluence spectra, during high energy radiation therapy, using a passive Nested Neutron Spectrometer (NNS) with gold activation foil*, COMP-OCPM 65th Annual Scientific Meeting, Kelowna, BC, September 24-27, 2019. Oral presentation.
79. H. Patrick<sup>†\*</sup>, K. Agnew<sup>†</sup>, L. Souhami, M. Kanagalingham<sup>†</sup>, J. Kildea, *The impact of rectal gas content on rectal dose during prostate cancer radiotherapy*, COMP-OCPM 65th Annual Scientific Meeting, Kelowna, BC, September 24-27, 2019. Oral presentation.
80. J. Kildea, *Neutron activation in the radiotherapy bunker: strategies for managing radiation safety*, COMP-OCPM 65th Annual Scientific Meeting, Kelowna, BC, September 24-27, 2019. Oral presentation.
81. J. Mullins<sup>†\*</sup>, L. Mirzakhania<sup>†</sup>, A. Sarfhenia, J. Seuntjens, *Comparison of the recommendations of the AAPM TG-21, TG-51 and IAEA-AAPM TRS-483 with updated correction factors for calibration of Leksell Gamma Knife*, COMP-OCPM 65th Annual Scientific Meeting, Kelowna, BC, September 24-27, 2019. Oral presentation.
82. A. Diamant<sup>†\*</sup>, V.J. Heng<sup>†</sup>, A. Chatterjee<sup>†</sup>, S. Faria, H. Bahig, R. Doucet, I. El Naqa, J. Seuntjens, *Differences in distant recurrence between coplanar and non-coplanar lung stereotactic body radiation therapy*, COMP-OCPM 65th Annual Scientific Meeting, Kelowna, BC, September 24-27, 2019. Oral presentation.

83. A. Diamant†\*, Y. Zlateva†, B. Muir, I. El Naga, J. Seuntjens, *Recommendations on the step-size artifact of Monte Carlo-calculated photon and electron beam Cherenkov-to-dose conversion factors*, COMP-OCPM 65th Annual Scientific Meeting, Kelowna, BC, September 24-27, 2019. Oral presentation.
84. C. Lund†\*, G. Famulari†, L. Montgomery†, J. Kildea, *An investigation of neutron weighting factors using a Geant4-based microdosimetry pipeline*, COMP-OCPM 65th Annual Scientific Meeting, Kelowna, BC, September 24-27, 2019. Oral presentation.
85. J. Mullins†\*, M-A. Renaud†, M. Serban, J. Seuntjens, *Development of a simultaneous trajectory and volumetric modulated arc therapy optimization algorithm*, COMP-OCPM 65th Annual Scientific Meeting, Kelowna, BC, September 24-27, 2019. Oral presentation.
86. H. Patrick†\*, L. Souhami, J. Kildea, *Retrospective evaluation of the effects of Interobserver contouring practices in clinical practice*, CARO-ACRO Annual Scientific Meeting: Ablative Radiation Therapy - Mastering the Art, Halifax, NS, October 2-5, 2019. Oral presentation.
87. J. Mégrouèche†\*, J. Sankey, L. Childress, S. Enger, *Development of an in vivo radiation dosimeter for radiotherapy*, CARO-ACRO Annual Scientific Meeting: Ablative Radiation Therapy - Mastering the Art, Halifax, NS, October 2-5, 2019. Oral presentation.
88. H. Naseri†\*, J. Kildea, *Feasibility of using natural language processing to extract cancer pain score from clinical notes*, CARO-ACRO Annual Scientific Meeting: Ablative Radiation Therapy - Mastering the Art, Halifax, NS, October 2-5, 2019. Oral presentation.
89. H. Patrocínio, *Small bowel tolerance in stereotactic ablative radiotherapy (SABR)*, CARO-ACRO Annual Scientific Meeting: Ablative Radiation Therapy - Mastering the Art, Halifax, NS, October 2-5, 2019. Poster presentation.
90. J. Kildea, *Canadian big radiotherapy data initiative*, CARO-ACRO Annual Scientific Meeting: Ablative Radiation Therapy - Mastering the Art, Halifax, NS, October 2-5, 2019. Oral presentation.
91. J. Kildea, *PARTAGE: A prototype system for patient data donation to power real-world evidence cancer research in Quebec*, Canadian Cancer Research Conference, Ottawa, ON, November 03-05, 2019. Oral presentation.