

APPENDIX IX.

PUBLICATIONS

by members of the Medical Physics Unit: 2024 calendar year (x 25*)
(names of MPU staff members are underlined, students are indicated by †)

1. S. Pecic, I. Belca, S. Stojadinovic, B. Nidzovic, M. Vivic, S. Devic, *Dynamic range and optimization strategies for radiochromic film calibration using gradient radiation fields*, J. Appl. Clin. Med. Phys. **25**(10) (2024). DOI: 10.1002/acm2.14481.
2. M. Robitaille†, C. Menard, G. Famulari, D. Beliveau-Nadeau, S.A. Enger, *169Yb-based high dose rate intensity modulated brachytherapy for focal treatment of prostate cancer*, Brachytherapy **23**(5), S523-S534 (2024).
3. M. Rahbaran†, B.A. Bergmark, K.J. Croce, J.M.G. Tsui, P.M. Devlin, S.A. Enger, *PO0310: Assessing Dose Inhomogeneity in Intravascular Brachytherapy with Optical Coherence Tomography Images*, Brachytherapy **23**(6), S126-S127 (2024).
4. V. Fortier, A. Mohamed, E. McNabb, R. Zakarian, I.R. Levesque, C. Reinhold, *Impact of R2* relaxation on liver fat quantification with a commercial high-speed T2-corrected multi-echo single voxel technique*, J. Can. Assoc. Radiologists **75**(4), 838-846 (2024). <https://doi.org/10.1177/08465371241255896>.
5. N. Octave, M. Mahert†, S. Aubert, M. Koo, *CARO-COMP Recap: Women in Radiation Medicine luncheon*, Can. Med. Phys. Newsletter, 2024 Jan, **70**(1), 14-16. <https://console.virtualpaper.com/canadian-organization-of-medical-physicists/interactions-january-2024/#14/>.
6. S. Aubert, M. Mahert†, R. Barta, *Better together: Embracing Sexual Orientation and Gender Diversity in Radiation Oncology, Radiation Therapy, Medical Physics, and Allied Health*, Can. Med. Phys. Newsletter, 2024 Jan, **70**(1), 18-20. <https://console.virtualpaper.com/canadian-organization-of-medical-physicists/interactions-january-2024/#18/>.
7. M. Koo, S. Aubert, M. Mahert†, C. Thomas, *CWC-IDEA Conference Engagement*, Canadian Association of Radiation Oncology-Canadian Organization of Medical Physics (CARO-COMP) Joint Scientific Meeting, CUPC, CUMPC, Can. Med. Phys. Newsletter, 2024 Jan, **70**(1), 21-22. <https://console.virtualpaper.com/canadian-organization-of-medical-physicists/interactions-january-2024/#21/>.
8. A. Khalifa, M. Mahert†, D. Cecchi, E. Lee, O Nusrat, P. Pasricha, S. Ouellet, S. Collins, C. Park, *COMP Student Council: Achievements and reflections on the 2023 Joint Scientific Meeting in Montreal*, Can. Med. Phys. Newsletter, 2024 Jan, **70**(1), 37-39. <https://console.virtualpaper.com/canadian-organization-of-medical-physicists/interactions-january-2024/#37/>.
9. C.S. Miller, M. Lecavalier-Barsoum, K. Ma, M. Santos Dutra, Y. Kaitoukov, B. Bahoric, N. Tomic, F. Dinelle, S.A. Enger, G. Batist, S. Yang, D. Laporta, P. Kavan, A. Sahai, D. Roberge, D. Donath, *Feasibility and safety of endoscopic ultrasound guided diffusing alpha emitter radiation therapy for advanced pancreatic cancer: Preliminary data*, D. Endosc. Int. Open. **12**(10), E1085-E1091 (2024). doi: 10.1055/a-2379-1591. eCollection 2024 Oct. PMID: 39398444. Free PMC article.
10. K. Rayn, A. Magliari, R. Clark, R. Doucet, L. Comeau, A. Nichol, R. Ruo, D. Roberge, *Dosimetric scorecards express precise clinical intent: Alternate hippocampal-sparing whole-brain RapidPlan models favoring target coverage and homogeneity at 30 and 20 Gy*, Front Oncol. 2024 Nov 27, **14**:1465171. Doi: 10.3389/fonc.2024.1465171. PMID: 39664187; PMCID: PMC11632126.
11. I.R. Levesque, Editorial for *Mapping the pH of glioma using the proton exchange rate calculated by QUASS-based, spillover-, and MT-corrected omega plot analysis*, J. Magn. Reson. Med. **60**(4), 1456-1457 (2024). <https://doi.org/10.1002/jmri.29254>.
12. M. Boudreau, A. Karakuzu, J. Cohen-Adad, E. Bozkurt, M. Carr, M. Castellaro, C. Luis, M. Doneva, S.A. Dual, A. Ensworth†, A. Foias, V. Fortier, R.E. Gabr, G. Gilbert, C.K. Glide-Hurst, M. Grech-Solalrs, S. Hu, O. Jalnefjord, J. Jovicich, K. Keskin, P. Koken, A. Kolokotronist†, S. Kukran, N.G. Lee, I.R. Levesque, B. Li, D. Ma, B. Mädler, N.G. Maforo, J. Near, E. Pasaye, A. Ramirez-Manzanares, B. Statton, C. Stehning,

- S. Tambalo, Y. Tian, C. Wang, K. Weizz, N. Zakariaei, S. Zhang, Z. Zhao, N. Stikov, *Repeat it without me: Crowdsourcing the T1 common ground via the ISMRM t1 mapping challenge*, *J. Magn. Reson. Med.* **92**(3), 1115-1127 (2024). <http://doi.org/10.1002/mrm.30111>.
13. M.A. Hobson, Y. Hu, B.S. Caldwell, G.N. Cohen, C.K. Glide-Hurst, L. Huang, P. Jackson, S. Jang, U. Langner, H.J. Lee, I.R. Levesque, S. Narayanan, J.C. Park, J. Steffen, O-R.J. Wu, Y. Zhou, *Report of TG334: A guidance document to using radiotherapy immobilization devices and accessories in an MZR environment*, *Med. Phys.* **51**(6), 3822-3849 (2024). <http://doi.org/10.1002/mp.17061>.
 14. P.G.F. Watson, S. Davis, W.S. Culberson, *Technical note: Determination of CO for a miniature x-ray source using a soft x-ray ionization chamber calibrated in NIST reference beam qualities*, *Med. Phys.* **51**, 8597-8601 (2024). <https://doi.org/10.1002/mp.17345>.
 15. V. Diaz Martinez†, M. Cyr†, S. Devic, N. Tomic, D.F. Lewis, S.A. Enger, *Investigation of dosimetric characteristics of radiochromic film in response to alpha particles emitted from Americium-241*, *Med. Phys.* **51**(9), 6305-6316 (2024). doi: 10.1002/mp.17133. Epub 2024 May 20. PMID: 38767310.
 16. A. Esmaelbeigi†, J. Kalinowski†, N. Tomic, M.J. Rivard, T. Vuong, S. Devic, S.A. Enger, *E-Brachy: New dosimetry package for electronic brachytherapy sources*, *Med. Phys.* 2024 Oct 26. doi: 10.1002/mp.17462. Online ahead of print. PMID: 39460996.
 17. M. Rahbaran†, J. Kalinowski†, J.M. DeCunha, K.J. Croce, B.A. Bergmark, J.M.G. Tsui, P.M. Devlin, S.A. Enger, *RapidBrachyIVBT: A dosimetry software for patient-specific intravascular brachytherapy dose calculations on optical coherence tomography images*, *Med. Phys.* 2024 Nov 19. doi: 10.1002/mp.17525.
 18. S. Konermann†, I.J. Gerard, M.L. Bernier, T. Hijal, G. Stroian, N. Kopek, J. Alfieri, L. El-Hamedi, P. Pater, *The conversion of electroanatomic maps for compatibility with treatment planning systems in cardiac radioablation target volume definition*, *Med. Phys.* 2024 Nov 29. Doi: <https://doi.org/10.1002/mp.17531>.
 19. C. Notte†, C. Alionte, C.D. Strubakos, *The efficacy and methodology of using near-infrared spectroscopy to determine resting-state brain networks*, *J. Neurophysiol.* **131**(4), 668-677 (2024). doi: 10.1152/jn.00357.2023.
 20. J. Li, N. Chabaytah†, J. Babik, B. Behmand, H. Bekerat, T. Connell, M. Evans, R. Ruo, T. Vuong, S.A. Enger, *Relative biological effectiveness of clinically relevant photon energies for the survival of human colorectal, cervical, and prostate cancer cell lines*, *Phys. Med. Biol.* **69**(20), p.205008 (2024).
 21. S. Pecic, M. Vivic, L. Kurij, I. Belca, S. Stojadinovic, S. Devic, *Spectroscopic parametrization of dose-dependent changes in EB3 film*, *Radiat. Phys. Chem.* **223** (111893) (2024). DOI: 10.1016/j.radphyschem.2024.111893.
 22. M. Rahbaran†, J. Kalinowski†, J.M. DeCunha, K.J. Croce, B.A. Bergmark, P.M. Devlin, J.M.G. Tsui, S.A. Enger, *2076: RapidBrachyIVBT: A dosimetry software for personalized image-guided intravascular brachytherapy*, *Radioth. Oncol.* **194**, S370-S373 (2024).
 23. M. Rahbaran†, B.A. Bergmark, K.J. Croce, J.M.G. Tsui, P.M. Devlin, S.A. Enger, *290 Patient-specific Intravascular Brachytherapy Dosimetry and the Guidewire Cold-Spot Effect*, *Radioth. Oncol.* **197**, S60-S63 (2024).
 24. J. Bancherit†, A. Currell, A. Krasnykh, M. Mahert†, C. Lund†, A.G. Bui, J. Seuntjens, *Evaluation of DSRD-based pulsers for a Dielectric Wall Accelerator*, *MIN A* 2024, 1069, 169935. <https://doi.org/10.1016/j.nima.2024.169935>.
 25. K. O'Sullivan-Steben et al, *A pipeline for generating longitudinal head and neck cancer radiotherapy datasets for machine learning*, *Proceedings of International Conference on the use of Computers in Radiation therapy (ICCR)*, Lyon, France, July 08-11, 2024. <hal-04720234>

(* pending notification – additional publications / 2024 calendar year)