

## Carleton University med phys grad student publications and presentations

(Jan 1, 2023 to June 30<sup>th</sup>, 2023)

Names of Carleton medical physics student authors of publications and presentations from MSc or PhD thesis work are in **bold**. In addition, author names are in ***bold italic*** for biomedical engineering MSc or PhD thesis work done as a graduate student in Physics.

### Journal Publications (alphabetic by first author)

**I. El Gamal**, J. Dessureault and MR. McEwen. A novel calorimeter for synchrotron produced monochromatic x-ray beams. Med. Phys. 2023; 1- 11.

<https://doi.org/10.1002/mp.16526>

**A. Jabbarpour**, S. Ghassel, J. Lang, E. Leung, G. Le Gal, R. Klein and E. Moulton. The Past, Present, and Future Role of Artificial Intelligence in Ventilation/Perfusion Scintigraphy: A Systematic Review. Seminars in Nuclear Medicine, 2023.

<https://doi.org/10.1053/j.semnuclmed.2023.03.002>

**J. R. Gagnon**, **C. H. Allen**, D. Trudel, F. Leblond, P. Stys, C. Brideau and S. Murugkar. Spectral focusing-based stimulated Raman scattering microscopy using compact glass blocks for adjustable dispersion. Biomed. Opt. Express 14(6), 2510-2522, 2023.

<https://doi.org/10.1364/boe.486753>

**M. P. Martinov**, **E. M. Fletcher** and R. M. Thomson. Multiscale Monte Carlo simulations of gold nanoparticle dose-enhanced radiotherapy I: Cellular dose enhancement in microscopic models. Med. Phys. 2023.

<https://doi.org/10.1002/mp.16454>

**M. P. Martinov**, **E. M. Fletcher** and R. M. Thomson. Multiscale Monte Carlo simulations of gold nanoparticle dose-enhanced radiotherapy II: Cellular dose enhancement within macroscopic tumor models. Med. Phys. 2023.

<https://doi.org/10.1002/mp.16460>

C. Ciobanu, **C. McNairn**, B. Nyiri, V. Chauhan, S. Subedi and S. Murugkar. Exploring the use of Raman spectroscopy and covariate-adjusted multivariate analysis for the detection of irradiated blood. Radiation Research 199(4), 396-405, 2023.

<https://doi.org/10.1667/rade-22-00149.1>

Conference Proceedings and Presentations (presenting author underlined)

*International society for optics and photonics (SPIE) Photonics West BiOS: January 28 – February 3, 2023, San Francisco*

**C. H. Allen**, R. Skilling, D. Ahmed, S. C. Sanchez, K. Altwasser, J. R. Gagnon, V. Chauhan, E. Cassol, S. Murugkar. Imaging radiobiological response of breast cancer cells in vitro using stimulated Raman scattering,  
Presentation