

BIOGRAPHICAL SKETCH

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NAME: Oderinde M. Oluwaseyi PhD

eRA COMMONS USER NAME (credential, e.g., agency login): soderinde

POSITION TITLE: Assistant Professor in Medical Physics, School of Health Sciences, Purdue University

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Ado Ekiti (Now Ekiti State University), Nigeria	BS	07/2010	Physics
University of Ibadan, Nigeria	MS	01/2014	Radiation and Health Physics
University of the Free State, Bloemfontein, South Africa	PhD	12/2017	Medical Physics
University of the Free State, Bloemfontein, South Africa	Postdoctoral	09/2018	Medical Physics
University of California San Diego	Postdoctoral	07/2020	Radiation Medicine and Applied Sciences

A. Personal Statement

I am an Assistant Professor of Medical Physics within the Health School Sciences and a Clinical Assistant Professor of Radiation Oncology, Department of Radiation Oncology, School of Medicine, Indiana University. As a Senior Clinical Scientist at RefleXion Medical, he led several scholarly radiation physics research projects, such as the dosimetric performance of X1® radiotherapy machine, Monte Carlo modeling of X1(R) machine, biology-guided radiotherapy treatment planning and delivery. As a Faculty at Purdue, his research will focus on molecular imaging in radiation Oncology, motion management -tumor tracking, Monte Carlo simulation in radiation oncology dosimetry, novel radiotherapy systems, and Machine Learning/ Artificial intelligence in radiation oncology with the goal of optimizing patient-centric treatment.

B. Positions, Scientific Appointments and Honors

01/2023 – Date: Assistant Professor of Medical Physics, School of Health Sciences, Purdue University (50% effort)
01/2023 – Date: Clinical Assistant Professor of Radiation Oncology, School of Medicine, Indiana University (50% effort)
03/2022 – 12/2022: Manager of Clinical Science, RefleXion Medical, Inc, Hayward, California
02/2021 – 12/2022: Radiotherapy Medical Physicist, NSIA-LUTH Cancer Center, Lagos, Nigeria
08/2020 – 03/2022: Senior Clinical Research Scientist, RefleXion Medical, Inc, Hayward, California
12/2018 – Date: Honorary Researcher, Dept. of Physics, University of Witwatersrand, South Africa

Honors

2017 Full grant to attend the Joint ICTP-IAEA Workshop on Monte Carlo Radiation Transport and Associated Data Needs for Medical Applications at the ICTP from 18 September 2017 to 29 September 2017 (declined)
2016 Best oral presentation at 54th National Congress of the South Africa Association of Physicist in Medicine and Biology
2016 University of the Free State Doctoral Research Merit award

- 2015 Best poster presentation at 53rd National Congress of the South Africa Association of Physicist in Medicine and Biology
- 2015 – 2017 South Africa Medical Research Council grant through my PI for PhD program
- 2013 Outstanding Graduate student, Murli T. Chellaram Foundation Scholarship
- 2010 Outstanding Undergraduate student, O'dua Investment Scholarship Award
- 2009 Outstanding Undergraduate student, Ekiti-State Scholarship Award
- 2008 Outstanding Undergraduate student, O'dua Investment Scholarship Award
- 2008 Outstanding Undergraduate student, Ekiti-State Scholarship Award

Professional Activities/ Memberships

- American Society for Radiation Oncology (ASTRO) (2020-Present)
- American Association of Physicists in Medicine (AAPM) (2018-Present)
- South Africa Association of Physicists in Medicine and Biology (SAAPMB) (2015-Present)
- South African Medical Physics Society (SAMPS) (2015-Present)
- South African Radiation Protection Society (SARPS) (2015-Present)
- South African Institute of Physics (SAIP) (2016-Present)
- Certified Professional Physicist (South Africa) (2016-Present)

C. Contributions to Science

1. **Oluwaseyi M. Oderinde**, Hassan Mostafavi, Daniel Simpson, James Murphy, Grace Gwe-ya Kim and Laura Cervino (2022); Assessment of fiducial motion and motion modeling in CBCT projections of the abdominal tumor using template matching and sequential stereo triangulation <https://arxiv.org/abs/2211.05380>
2. A Natarajan, S Khan, X Liang, H Nguyen, N Das, D Anders, N Malik, **O Oderinde**, F Chin, E Rosenthal, G Pratz (2023) Preclinical evaluation of ⁸⁹Zr-Panitumumab for biology-guided radiotherapy <https://pubmed.ncbi.nlm.nih.gov/36669541/>
3. T Zhuang, G Gibbard, X Duan, J Tan, Y Park, M Lin, Z Sun, **OM Oderinde**, W Lu, R Reynolds, A Godley, A Pompos, T Dan, A Garant, P Iyengar, R Timmerman, B Cai (2022) Evaluation of fan-beam kVCT image quality on a novel biological-guided radiotherapy platform – Physics and imaging in Radiation Oncology [https://phiro.science/article/S2405-6316\(23\)00029-5/fulltext](https://phiro.science/article/S2405-6316(23)00029-5/fulltext)
4. SN Seyedin, R Bassalaw, OR Mawlawi, LM Turner, RR Patel, SR Mazin, **OM Oderinde**, Y Voronenko, CA Wages, PD Olcott, JY Chang, PA Balter, JW Welsh (2022) The potential of biology-guided radiation therapy in thoracic cancer: A preliminary treatment planning study – Frontiers in Oncology <https://www.frontiersin.org/articles/10.3389/fonc.2022.921473/full>
5. Daniel Pham, Eric Simiele, D Breitzkreutz, D Capaldi, **Oluwaseyi Michael Oderinde**, Bin Han, Murat Surucu, Daniel Chang, Nataliya Kovalchuk (2022) IMRT and SBRT treatment planning study for the first clinical biology-guided radiotherapy (BgRT)- *Technology in Cancer treatment and research journal* <https://journals.sagepub.com/doi/full/10.1177/15330338221100231>
6. Zhiqiang Hu, Matthew Bieniosek, Valentina Ferri, Andrei Iagaru, Nataliya Kovalchuk, Bin Han, Lei Xing, Lucas Vitzthum, Peter Olcott, Manoj Narayanan, Thomas Laurence, Yulan Ren, **Oluwaseyi Michael Oderinde**, Shervin M Shirvani, Daniel Chang, Murat Surucu (2022) Characterization of a Positron Emission Tomography designed for biology-guided radiotherapy (BgRT)- *British Journal of Radiology* <https://doi.org/10.1259/bjr.20220387>
7. **Oluwaseyi M Oderinde**, Shervin M Shirvani, Peter Olcott, Gopinath Kuduvali, Samuel Mazin, David Larkin (2021); The technical design and concept of a PET/CT linac for biology-guided radiotherapy system *Clinical and Translational radiation Oncology April 2021* <https://doi.org/10.1016/j.ctro.2021.04.003>
8. **Oluwaseyi M. Oderinde**, Michael O. Akpochafor, Rachel I. Obed and Ramotallah Jubril (2020); Dosimetric testing of two incident electron parameters for photon beam Monte Carlo model of an Elekta Precise Linac. *African Journal of Medical Physics Vol 2(2)*, 48-56 <https://globalmedicalphysics.org/wp-content/uploads/2020/05/AJMP-22-48-56-Final.pdf>
9. Niclas Pettersson, **Oluwaseyi M Oderinde**, James Murphy, Daniel Simpson, Laura I. Cervino (2020); Intrafraction relationship changes between an external breathing signal and fiducial markers positions in pancreatic cancer patients. *Journal of Applied Clinical Medical Physics Vol 21(3)*, 153-161 <https://doi.org/10.1002/acm2.12841>
10. **Oluwaseyi M. Oderinde** and Freek du Plessis (2019); Sensitivity of the IQM and MatriXX detectors in Megavolt photon beams. *Report on Practical Oncology and Radiotherapy Vol 24*, 462-471. <https://doi.org/10.1016/j.rpor.2019.07.007>

11. **Oluwaseyi M. Oderinde** and Freek du Plessis (2019); Sensitivity evaluation of two commercial QA systems to organ-dose variation of IMRT/VMAT plans. *Journal of Radiation Research and Applied Sciences Vol 12(1)*, 132-139. <https://www.tandfonline.com/doi/full/10.1080/16878507.2019.1618080>
12. I. Setilo, **Oluwaseyi M. Oderinde** and Freek du Plessis (2019); The effect of SSD, Field size, Energy, and detector type for relative output factor measurement in small photon beams as compared with Monte Carlo simulation. *Polish Journal of Medical Physics and Engineering*, 25(2), 101-110 <https://doi.org/10.2478/pjmpe-2019-0014>
13. Nicholas Ade, **Oluwaseyi M. Oderinde** and Freek du Plessis (2018); Monte Carlo dose in a prosthesis phantom based on exact geometry vs. streak artefact contaminated CT data as benchmarked against Gafchromic film. *Physica Medica*; 5494-102. <https://doi.org/10.1016/j.ejmp.2018.09.124>
14. **Oluwaseyi M. Oderinde** and Freek du Plessis (2017); Sensitivity analysis of the integral quality monitoring system using Monte Carlo simulation. *Computational and Mathematical Methods in Medicine; Vol 2017, Article ID: 7025281*, pp 1-12. <https://doi.org/10.1155/2017/7025281>
15. **Oluwaseyi M. Oderinde** and Freek du Plessis (2017); Technical note: A new wedge-shaped ionization chamber component module for BEAMnrc to model the integral quality monitoring system®. *Radiation Physics and Chemistry; Vol 141*, pp 346-351. <http://www.sciencedirect.com/science/article/pii/S0969806X17301949>
16. **Oluwaseyi Michael Oderinde** and Rachel Obed (2015); Variation of dose distribution with depth and incident beam using EGSnrc Monte Carlo simulation method. *IOSR Journal of Applied Physics (IOSR-JAP) 2278-4861; 7: (2); 33-40* <http://www.iosrjournals.org/iosr-jap/papers/Vol7-issue2/Version-1/E07213340.pdf>
17. Isinkaye M.O., Shitta M.B.O. and **Oderinde M.O** (2013); Determination of radionuclide and elemental composition of clay soil by gamma and x-ray spectroscopic methods; *Journal of Environmental Monitoring and Assessment (SpringerPlus) 2:74* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3601256/>

UNDER REVIEW

1. **Oluwaseyi M Oderinde** and Grace Gwe-ya Kim (2020); Response characteristics of DMI and Machine Learning algorithm prediction of Halcyon machine performance check -*internal review*

OTHER PUBLICATION

2023

1. **Oluwaseyi M. Oderinde**, Gregory Bartlett, Omar Ishaq, Ke Colin Huang, Yong Yue, Christopher Njeh (2023) Intrafraction motion in prostate patients with implanted SpacerOAR Hydrogel during hypofractionated radiotherapy: A single-site experience *Submitted to AAPM conference*
2. **Oluwaseyi M. Oderinde**, Chunhui Han, An Liu, Karine Al Fagheli, Arjun Maniyedath, Shervin Shirvani (2023) Dosimetric evaluation of breast cancer bgrt plans using a novel ring-gantry PET/CT radiotherapy system. *Submitted to AAPM conference*
3. Chunhui Han, **Oluwaseyi M. Oderinde**, Arjun Maniyedath, Terence Williams, An Liu (2023) Dosimetric evaluation and workflow analysis of adaptive planning based on daily Kvct images from a novel BgRT-capable machine with an integrated fan-beam Kvct scanner. *Submitted to AAPM conference*
4. Michael Owens, **Oluwaseyi M. Oderinde**, Srinath Maganti, Ayan Mitra, Sibio Tan, Xiaofeng Yang, Kristin Higgins, Ling Shao, Shervin Shirvani (2023) Dosimetric effects of dose grid resolution on dose calculation for lung SBRT using a novel ring gantry radiotherapy system. *Submitted to AAPM conference*
5. **Oluwaseyi M. Oderinde**, Manoj Narayanan, Nataliya Kovalchuk, Bin Han, Murat Surucu (2023) Demonstration of in-silico biology-guided radiotherapy delivery using data acquired on the first installation of O-ring gantry PET/CT radiotherapy system *Submitted to AAPM conference*
6. Chunhui Han, Carson Wong, **Oluwaseyi M. Oderinde**, Tyler Watkins, Kun Qing, Bo Liu, Terence Williams, An Liu (2023) Comparison of AI-based auto-segmentation quality with different daily IGRT imaging modality for adaptive radiotherapy treatment planning. *Submitted to ASTRO conference*
7. **OM Oderinde**, KA Al Feghali, A Maniyedath, SM Shirvani (2023) Stereotactic radiation therapy boost for patients with breast cancer in the prone position using a novel fast ring-gantry radiotherapy system: A treatment planning study. *To be presented at RSS conference, Orlando, Florida*
8. **OM Oderinde**, KA Al Feghali, A Maniyedath, SM Shirvani (2023) A treatment planning study: Definitive radiotherapy with stereotactic radiation therapy boost for patients with breast cancer in the prone position using a novel fast iterative shrinkage-thresholding algorithm. *Submitted to ASTRO conference*

9. **OM Oderinde**, D Seely, T Cornwell, K Fagehli, A Amini, S Sampath, SM Shrivani (2022); Mastication muscle-sparing during Head and Neck radiotherapy in a fast ring-gantry radiotherapy system. *To be presented at American Radium Society Annual Meeting, Lahaina, HI.*

2022

10. **OM Oderinde**, C Shuman, M Owens, M Surucu, A Da Silva, SM Shirvani (2022) Feasibility of single fraction brain metastases radiotherapy in a novel ring gantry treatment system. *Presented at the American Radium Society Annual Meeting, Scottsdale, Arizona*
11. C Han, **O Oderinde**, Z Sun, A Maniyedath, S Shirvani, A Liu (2022) Feasibility study of using a built-in kVCT imaging system on a novel radiotherapy machine with integrated dual-imaging systems for radiotherapy treatment planning. *Medical Physics Vol 49, Issue 6, p e722-e722*
12. D Pham, E Simiele, D Breitreutz, D Capaldi, **O Oderinde**, B Han, M Surucu, L Vitzthum, M Gensheimer, H Bagshaw, A Chin, D Chang, N Kovalchuk (2022) IMRT and SBRT Treatment Planning Study for the First Clinical Installation of Biology-guided Radiotherapy System. *Medical Physics Vol 49, Issue 6, p e432-e432*
13. M Shi, S Cui, C Chuang, **O Oderinde**, N Kovalchuk, K Bush, M Surucu, L Xing, B Han (2022) Investigation of computation time and storage saving using Generative Adversarial Network (GAN) source models for dose simulation of a binary MLC Linac. *Medical Physics Vol 49, Issue 6, p e220-e221*
14. G Bal, P Olcott, D Zaks, S Khan, J Burns, J Schmall, L Shao, T Laurence, **O Oderinde**, M Surucu, M Narayanan, G Kuduvalli (2022) Evaluating Accuracy of Biology-guided Radiotherapy Using QUASAR 4D Motion Phantom. *Medical Physics Vol 49, Issue 6, p e808-e808*
15. A Natarajan, S Khan, D Anders, N Malik, H Nguyen, **O Oderinde**, F Chin, E Rosenthal, G Prax (2022) Feasibility of biology-guided radiation therapy using a long-lived antibody PET tracer. *Medical Physics Vol 49, Issue 6, p e560-e560*
16. D Pham, E.A. Simele, D Breitreutz, D.P Capaldi, B Han, **O.M Oderinde**, L. Vitzthum, M.F Gensheimer, A.L Chin, H.P Bagshaw, L Xing, D.T Chang, N Kovalchuk (2022) IMRT and SBRT treatment planning study for the first clinical biology-guided radiotherapy system; *Accepted for ASTRO Conference, San Antonio, USA*
17. C Shuman, **O.M Oderinde**, T Cornwell, B Cai, A Da Silva, S.M Shirvani (2022) Dosimetric comparison of treatment planning from two commercial ring-gantry based radiotherapy systems for common IMRT and SBRT cases; *Submitted to conference, Adelaide, Australia*
18. P. Olcott, S Khan, G Bal, J Schmall, S Xu, Y Voronenko, L Shao, **O.M Oderinde**, M Surucu, M Narayanan, G Kuduvalli (2022) BgRT motion managements maintain target dose coverage for respiratory and non-respiratory motion; *Accepted for ASTRO Conference, San Antonio, USA*
19. S Khan, M Narayanan, P. Olcott, **O.M Oderinde**, G Bal, J Schmall, S Xu, Y Voronenko, L Shao, G Kuduvalli, M Surucu (2022) Robustness of biology-guided radiotherapy delivery to PET distribution changes within the target; *Accepted for ASTRO Conference, San Antonio, USA*
20. **O.M Oderinde**, C Han, Z Sun, T Cornwell, K Fagehli, A Amini, S Sampath, A Liu, S.M Shrivani (2022); Feasibility and dosimetric benefits of adaptive planning in prostate cancer radiotherapy using a novel treatment planning machine with integrated dual kVCT/PET imaging system, *Accepted for ASTRO Conference, San Antonio, USA*
21. S Khan, M Surucu M Narayanan, M Haytmyradov, S Xu, Y Voronenko, P Olcott, L Shao, **OM Oderinde**, SM Shrivani, G Kuduvalli, (2022) assessment of biology-guided radiotherapy accuracy using emulated delivery technique. *Accepted for European Society for Radiation Oncology (ESTRO) Conference, Copenhagen, Denmark*
22. **OM Oderinde**, D Seely, SM Shrivani (2022); IMRT head and Neck cancer treatment plans with a novel fast ring-gantry radiotherapy system. *Multidisciplinary Head and Neck Cancers Symposium- Phoenix, Arizona, USA*

2021

23. Dumela KE, Usman IT and **Oderinde OM** (2021); Validation of the Monte Carlo Model for 6 and 15 MV photon beams of Varian Clinac IX Linac. *Bull. of South Africa Institute of Physics Conference, South Africa.*
24. **OM Oderinde**, T Cornwell, Arya Amini, Sagus Sampath, SM Shrivani (2021) Hippocampal avoidance in whole-brain radiotherapy using an O-ring gantry radiotherapy system: A planning study. *Engineering and Physical Sciences in Medicine (EPSM) Conference- Australia*

25. **OM Oderinde**, Daniel Zaks, Cal Huntzinger, SM Shrivani, Thomas Laurence, Gopinath Kuduvalli, Minghiu Lu (2021) Monte Carlo simulation of the RefleXion™ X1 radiotherapy machine *Engineering and Physical Sciences in Medicine (EPSM)Conference- Australia*
26. **OM Oderinde**, T Cornwell, S Tian, X Yang, KA Higgins, A Da Silva, SM Shrivani (2021) Feasibility of normal lung sparing in single-dose biology-guided radiotherapy treatments of lung cancer *Engineering and Physical Sciences in Medicine (EPSM)Conference- Australia*
27. **OM Oderinde**, Y Voronenko, S Tian, X Yang, KA Higgins, A Da Silva, SM Shrivani (2021) Dosimetric comparison of single-isocenter and multiple-isocenter techniques for two-lesion lung SBRT using the RefleXion high-speed ring-gantry system *American Society for Radiation Oncology (ASTRO) Conference, Chicago, USA*. International Journal of radiation oncology biology and physics 111(3) E139-E140
[https://www.redjournal.org/article/S0360-3016\(21\)01452-8/fulltext](https://www.redjournal.org/article/S0360-3016(21)01452-8/fulltext)
28. **OM Oderinde**, T Cornwell, M Owens, S Tian, X Yang, KA Higgins, P Olcott, A Da Silva, SM Shrivani (2021) Utilizing biology-guided radiotherapy for coronary artery avoidance during free-breathing external beam radiotherapy delivery *American Society for Radiation Oncology (ASTRO) Conference, Chicago, USA*. International Journal of radiation oncology biology and physics 111(3) E542-E543
[https://www.redjournal.org/article/S0360-3016\(21\)02346-4/fulltext](https://www.redjournal.org/article/S0360-3016(21)02346-4/fulltext)
29. B Han, N Kovalchuk, DP Capaldi, E Simiele, J White, A Purwar, T Yeung, S Maganti, A Mitra, Y Voronenko, **OM Oderinde**, SM Shrivani, G Kuduvalli, L Vitzthum, DT Chang, L Xing, M Surucu (2021) First beam commissioning report of a novel medical linear accelerator designed for biologically guided radiotherapy *American Society for Radiation Oncology (ASTRO) Conference, Chicago, USA*. International Journal of radiation oncology biology and physics 111(3) E512 [https://www.redjournal.org/article/S0360-3016\(21\)02274-4/fulltext](https://www.redjournal.org/article/S0360-3016(21)02274-4/fulltext)
30. M Narayanan, D Zaks, P Olcott, Y Voronenko, J Burns, S Xu, D Rigie, M Haytmyradov, L Shao, **OM Oderinde**, SM Shrivani, M Surucu, G Kuduvalli, (2021) Physical validation of biology-guided radiotherapy for delivering a tracked dose distribution to a moving PET-avid target *American Society for Radiation Oncology (ASTRO) Conference, Chicago, USA*. International Journal of radiation oncology biology and physics 111(3) S22
[https://www.redjournal.org/article/S0360-3016\(21\)00948-2/fulltext](https://www.redjournal.org/article/S0360-3016(21)00948-2/fulltext)
31. M Narayanan, D Zaks, P Olcott, Y Voronenko, J Burns, S Xu, D Rigie, M Haytmyradov, L Shao, **OM Oderinde**, SM Shrivani, M Surucu, G Kuduvalli, (2021) Physical confirmation of biology-guided radiotherapy directed at static targets with varying shapes and background contrast environments *American Society for Radiation Oncology (ASTRO) Conference, Chicago, USA*. International Journal of radiation oncology biology and physics 111(3) E513 [https://www.redjournal.org/article/S0360-3016\(21\)02276-8/fulltext](https://www.redjournal.org/article/S0360-3016(21)02276-8/fulltext)
32. **O Oderinde**, S Khan, M Narayanan, A Maniyedath, SM Shrivani, G Kuduvalli (2021) Quantification of peripheral dose in the new ring-gantry RefleXion X1 radiotherapy machine. *American Association of Physicist in Medicine (AAPM) 2nd Virtual Annual Meeting. Medical Physics Vol 48, Issue 6, p e599*
<https://doi.org/10.1002/mp.14316>
33. **O Oderinde**, S Khan, A Da Silva, S Tian, X Yang, KA Higgins, A Da Silva, SM Shrivani, G Kuduvalli (2021) Characterization of single-dose radiotherapy (SDRT) performance in a new high-speed ring gantry-based LINAC system. *American Association of Physicist in Medicine (AAPM) 2nd Virtual Annual Meeting. Medical Physics Vol 48, Issue 6, p e629* <https://doi.org/10.1002/mp.14316>
34. P Olcott, Y Voronenko, A Da Silva, **O Oderinde** (2021) New dosimetric standard for radiotherapy: Bounded dose volumetric histogram derived from Gamama criteria. *American Association of Physicist in Medicine (AAPM) 2nd Virtual Annual Meeting. Medical Physics Vol 48, Issue 6, p e418* <https://doi.org/10.1002/mp.14316>
35. **O Oderinde**, D Zaks, C Huntzinger, S shrivani, T Laurence, M Lu (2021) Focal spot size effect of the RefleXion X1 radiotherapy machine: A Monte Carlo simulation study. *American Association of Physicist in Medicine (AAPM) 2nd Virtual Annual Meeting. Medical Physics Vol 48, Issue 6, p e578* <https://doi.org/10.1002/mp.14316>
36. **O Oderinde**, D Zaks, C Huntzinger, S shrivani, A Maniyedath, T Laurence, M Lu (2021) Evaluating backscattered radiation into the Dose monitor chamber in the RefleXion X1 using Monte Carlo simulation. *American Association of Physicist in Medicine (AAPM) 2nd Virtual Annual Meeting. Medical Physics Vol 48, Issue 6, p e578* <https://doi.org/10.1002/mp.14316>
37. M Narayanan, P Olcott, Y Voronenko, J Burns, D Zaks, S Xu, D Rigie, M Haytmyradov, RH Gong, L Shao, **OM Oderinde**, SM Shrivani, G Kuduvalli, (2021) Performance evaluation of BgRT delivery directed at multiple PET-avid targets *European SocieTy for Radiotherapy and Oncology [ESTRO]Conference, Madrid, Spain 2021*). *Radiotherapy and Oncology*, 161, S213-S214

38. **Oluwaseyi M. Oderinde**, Hassan Mostafavi, Daniel Simpson, James Murphy, Laura Cervino and Grace Kim (2020); Evaluating patient setup accuracy using a subset of CBCT projections in fiducial tracking of abdominal SBRT. *AAPM 1st Virtual Annual Meeting. Medical Physics Vol 47, Issue 6, p e768*
<https://doi.org/10.1002/mp.14316>
39. **Oluwaseyi M Oderinde** and Grace Gwe-ya Kim (2020); Characterization of DMI response and prediction of Halcyon machine performance check using machine learning algorithms. *American Society for Radiation Oncology (ASTRO), Maimi, USA. International Journal of radiation oncology biology and physics 108 (3) E328*
[https://www.redjournal.org/article/S0360-3016\(20\)32202-1/fulltext](https://www.redjournal.org/article/S0360-3016(20)32202-1/fulltext)
40. **Oluwaseyi M. Oderinde**, Grace Kim, Laura Cervino and Hassan Mostafavi (2020); Abdominal tumor tracking of CBCT projections using template matching and sequential stereo triangulation. *2020 Radiosurgery Society Scientific Meeting, Washington DC.* <https://www.cureus.com/abstracts/503>

2019

41. **Oluwaseyi M. Oderinde**, Michael O. Akpochafor, Rachel I. Obed, and Ramotallah Jubril (2019); Monte Carlo investigation into dosimetry of two electron-source parameters. *Nigeria Association of Medical Physics Conference, Lagos, Nigeria 2019.*
42. Dumela KE, Usman IT and **Oderinde OM** (2019); Preliminary study on the design of a novel pelvic prosthesis spiral phantom for advanced radiotherapy verification. *Bull. of South Africa Congress on Oncology, Cape Town, South Africa 2019.*
43. **Oluwaseyi M. Oderinde**, Hassan Mostafavi, Daniel Simpson, James Murphy and Laura Cervino (2019); Tumor tracking and motion modeling in SBRT of abdominal tumors with implanted fiducials using pre-treatment CBCT projections and template matching and sequential stereo triangulation. *AAPM 61st Annual Meeting, Houston, Texas. Medical Physics Vol 46, Issue 4, p e165.* <https://doi.org/10.1002/mp.13589>
44. **Oluwaseyi M. Oderinde**, Hassan Mostafavi, Daniel Simpson, James Murphy and Laura Cervino (2019); Motion tracking for pancreatic cancer stereotactic body radiation therapy using template matching and triangulation. *AAPM 61st Annual Meeting, Houston, Texas. Medical Physics Vol 46, Issue 4, p e165.*
<https://doi.org/10.1002/mp.13589>
45. **Oluwaseyi M. Oderinde**, Hassan Mostafavi, and Laura Cervino (2019); CBCT Projections: A substitute for fluoroscopic imaging in respiratory-induced tumor motion modeling in pancreatic cancer SBRT. *Varian research partnership Symposium, Chicago, USA.*
46. **Oluwaseyi M. Oderinde**, Michael O. Akpochafor and Omoniyi M. Isinkaye (2019); Monte Carlo source model of a high energy accelerator x-ray beam. *Bull. of International Oncology and Medical Physics Symposium, Penang, Malaysia (IOMPS 2019)*

Till 2018

47. **Oluwaseyi M. Oderinde** and Freek du Plessis (2018); A virtual model of an Elekta Synergy linac for verification of treatment planning system photon beam. Conference proceeding of South African Institute of Physics Conference, Bloemfontein (2018).
48. **Oluwaseyi M. Oderinde** PhD Thesis (2017): Sensitivity analysis of the Integral Quality Monitoring (IQM) system for radiotherapy verification using Monte Carlo Simulation
<http://www.medphys.org/PhDAbstracts/oderindephd.pdf>
49. **Oluwaseyi M. Oderinde** and Freek du Plessis (2017); On the sensitivity of the integral quality monitoring system to MLC positional error using BEAMnrc Monte Carlo simulation *Physica Medica European Journal of Medical Physics Vol 41, Suppl 1, S12.* <http://www.sciencedirect.com/science/article/pii/S1120179717303058>
50. **Oluwaseyi Oderinde** and Freek du Plessis (2016) Variance-based sensitivity analysis study of a prototype beam delivery check system using Monte Carlo simulation. *Conference proceeding of Engineering and Physical Science in Medicine Conference (EPSM 2016); Sydney, Australia. Australas Phys Eng Sci Med (2016) 39:1045–1190*
51. **Oluwaseyi M. Oderinde** and Freek du Plessis (2016); Monte Carlo modelling of a prototype beam delivery check system for Intensity Modulated Radiation therapy plan. *Physica Medica European Journal of Medical Physics; Vol 32, Suppl 32, p32.*
<http://www.sciencedirect.com/science/article/pii/S1120179716301454>

52. **Oluwaseyi M. Oderinde** and Freek du Plessis (2016); Accurate Monte Carlo modelling of an Elekta Synergy linac equipped with an Agility 160-leaf MLC. *Physica Medica European Journal of Medical Physics*; Vol 32, Suppl 32, pp 31-31.
<http://www.sciencedirect.com/science/article/pii/S1120179716301442>
53. **Oluwaseyi M. Oderinde** and Freek du Plessis (2015); Monte Carlo study of an integral quality monitoring system. *Physica Medica European Journal of Medical Physics*; Vol 31;Suppl 1; p s18.
[http://www.physicamedica.com/article/S1120-1797\(15\)00225-2/abstract](http://www.physicamedica.com/article/S1120-1797(15)00225-2/abstract)
54. Oluwaseyi Michael Oderinde (2014) Mammography and thyroid cancer risk: A Literature review. Seminar presentation at the Department of Physics, University of Ibadan; Nigeria. Available in ResearchGate; DOI: 10.13140 / RG.2.1.1574.6400

INVITED TALK

1. April 14th, 2023, Guest Speaker at The University of Chicago Medical Physics Research Retreat
2. May 16-May 18, 2022, **Oluwaseyi M. Oderinde**: Conference of Radiation Control Program Directors, Tucson, Arizona, AAPM
3. Nov 12, 2021, **Oluwaseyi M. Oderinde**: The Ohio River Valley Chapter of the AAPM meeting
4. Nov 4- Nov 7, 2021, **Oluwaseyi M. Oderinde**: National Society of Black Physicists, 2021 Conference

UNPUBLISHED PRESENTATION AND WORKSHOP ATTENDED

- CANSA Community mobilization training (2017)
- CANSA induction and orientation training for volunteers, Bloemfontein, South Africa (2017)
- Oderinde Michael Oluwaseyi (2017) Testing the Integral Quality Monitoring System with random positional errors. Faculty Forum Presentation at University of the Free State, South Africa.
- Three Minutes Ph.D. competition (2016): University of the Free State, South Africa.
- Oderinde Michael Oluwaseyi (2016) Monte Carlo simulation benchmarked against measurement for an Elekta Synergy linac equipped with an Agility 160-leaf MLC. Faculty Forum Presentation at University of the Free State, South Africa.
- Interdisciplinary Research (2016); Summer School; University of the Free State, Bloemfontein, South Africa.
- Ph.D. Winter School, Centre for African Studies JEF CAS, University of the Free State (2016).
- SPSS training workshop at the University of the Free State, Bloemfontein Campus (2015)