

Publications in 2024-2025

1. Song Yue, Mychaela Coyne, Connie M Weaver, Cheryl AM Anderson, **Linda H Nie**. In vivo NAA based sodium quantification in bone and soft tissue using a two-compartment model. *Applied Radiation and Isotopes*, 2025, <https://doi.org/10.1016/j.apradiso.2025.111712>.
2. Song Yue, Sana Tabbasum, Jolie Susan, Amy Atun, Nicole N Karongo, Valerie Mercer, Natalie Sweiss, Connie M Weaver, Cheryl AM Anderson and **Linda H Nie**. Measurement of sodium in soft tissue and bone in a sodium diet intervention study using in vivo neutron activation analysis. *Physiological Measurement*, 2025, <https://doi.org/10.1088/1361-6579/ae0dee>.
3. Garmo, L. C., Herroon, M. K., Mecca, S., Wilson, A., Allen, D. R., Sayam, A.S.M., **Specht, A. J.**, Schlezinger, J. J., Petriello, M. C., & Podgorski, I. (2025). Per- and polyfluorinated substances (PFAS) promote osteoclastogenesis and bone loss through PPAR α activation. *Toxicology Reports*, 15, 102071. <https://doi.org/10.1016/j.toxrep.2025.102071>
4. **Specht, A. J.**, Zhang, X., Antipova, O. A., Sayam, A.S.M., Nguyen, V. T., Hoover, C. G., Punshon, T., Jackson, B. P., & Weisskopf, M. G. (2025). Sub-micrometer scale synchrotron x-ray fluorescence measurements of trace elements in teeth compared with laser ablation inductively coupled plasma mass spectrometry. *Journal of Exposure Science & Environmental Epidemiology*, 35, 625-629. <https://doi.org/10.1038/s41370-025-00754-6>.
5. Adesina, K. E., Burgos, C. J., Grier, T. R., Sayam, A.S.M., & **Specht, A. J.** (2025). Ways to Measure Metals: From ICP-MS to XRF. *Current Environmental Health Reports*, 12(1), 7. <https://doi.org/10.1007/S40572-025-00473-Y>.
6. Chang D*, Speth J*, and **Scarpelli M**. *Evaluating the theranostic potential of ferumoxytol when combined with radiotherapy in a mammary dual tumor mouse model*. *Medical Physics*. 2025;1–15. DOI: 10.1002/mp.17888.
7. Almutairi WM, Zheng Q-H, Langer M, **Oderinde OM**. Application of ImmunoPET Imaging to Enhance Head and Neck Squamous Cell Carcinoma Clinical Management. *Frontiers in Oncology (Cancer Imaging and Image-Directed Interventions)*. Systematic Review. 2025. doi.org/10.3389/fonc.2025.1644692.
8. Monsivais H², **Dydak U**. Subject-Specific Mapping of Excess Manganese Accumulation in the Brain of Welders Using Magnetic Resonance Imaging Relaxometry. *Toxics* 2025 Feb 25;13(3), 157. <https://doi.org/10.3390/toxics13030157>. PMID: 40137484; PMCID: PMC11945464.
9. Bozymski B², Shen X, Özen A, Chiew M, Thomas MA, Clarke WT, Sawiak S, **Dydak U**, Emir U. Feasibility and comparison of 3D modified rosette ultra-short echo time (PETALUTE) with conventional weighted acquisition in ³¹P-MRSI. *Sci Rep*. 2025 Feb 22;15(1):6465. doi: 10.1038/s41598-025-90630-y. PMCID: [PMC11846993](https://pubmed.ncbi.nlm.nih.gov/PMC11846993/)
10. *Zirui Jiang, K Huang, Y Yue, C Njeh, **Oluwaseyi Oderinde** (2025); 18F-FDG PET/CT-based deep radiomic models for enhancing chemotherapy response prediction in

breast cancer; *Medical Oncology*, IF: 3.5;
<https://pubmed.ncbi.nlm.nih.gov/40790010/>

11. *Rashmi Bhaskara, **Oluwaseyi Oderinde** (2025); Enhancing synthetic pelvic CT generation from CBCT using vision transformer with adaptive Fourier neural operators; *Biomedical Physics & Engineering Express*, IF: 1.6;
<https://iopscience.iop.org/article/10.1088/2057-1976/adf4ee/meta>
12. *Ramotallah Jubril, Maya Ataya, Mark Tann, Michael Koch, Ronald Boris, Clint Bahler, **Oluwaseyi Oderinde** (2025) 68Ga- PSMA-11 PET/CT imaging for detecting biochemical recurrence after radical prostatectomy in a racial diverse population with low PSA levels: Preliminary findings; *Journal of Racial and Ethnic Health Disparities*, IF 2.4; Revision submitted

Abstracts (Presentations) in 2024-2025

1. Zaugg C, Veenstra J, Coon M, Geise J, Rivera J, **Scarpelli M**. Modulation of the Tumor Microenvironment by Radiation Therapy to Enhance Immune Activity in Glioblastoma. American Association of Physicists in Medicine Annual Meeting; July 2025.
2. Veenstra J, Zaugg C, Geise J, Speth J, Riffell J, Ames-Majeski T, Schwartz S, Clapper C, Rodriguez V, **Scarpelli M**. Ferumoxytol Can Increase Tumorigenicity and Induce Poor Outcomes in Glioblastoma Mouse Model. Radiation Research Society Annual Meeting; September 2025.
3. Zaugg C, Veenstra J, Coon M, Geise J, Rivera J, **Scarpelli M**. Modulation of the Tumor Microenvironment by Radiation Therapy to Enhance Immune Activity in Glioblastoma. IU Simon Comprehensive Cancer Center Cancer Research Day; May 2025.
4. Song Yue, **Linda H Nie**. Development, clinical application of an in vivo neutron activation analysis system for Na storage and hypertension study. Oral presentation. 13th International Conference on Methods and Applications of Radioanalytical Chemistry (MARC) annual meeting. March 23-28, 2025, Kailua-Kona, Hawaii.
5. Sayam, A.S.M., Garmo, L., Lin, J., Petriello, M., Podgorski, I., Lippert, F., Martinez Mier, E.A., Weisskopf, M., **Specht, A.J.** XRF applications in Fluoride and PFAS assessment in biological samples. ISES-ISEE 2025, August 17-20, 2025. Atlanta, GA.
6. Sayam, A.S.M., Park, J.H., Lee, C.G., **Specht, A.J.** Enhanced Exposure Assessment using Micro-XRF for Spatial Analysis of Metal Deposition on Air Filters. HPS 2025, July 13-17, 2025. Madison, WI.
7. Chang D* and **Scarpelli M**. *Evaluating the theranostic potential of ferumoxytol when combined with radiotherapy in a mammary dual tumor mouse model*. Poster presentation at the AAPM Annual Meeting.
8. WM Almutairig, V Mukundan, K Huang, Y Yue, C Njeh, **OM Oderinde**; Machine learning model for early prediction of chemoradiotherapy response in oropharyngeal cancer patients; AAPM 67th Annual Meeting & Exhibition.
9. Hsu C-T, Monsivais H, Mizimakoski C, Lee CG, Park JH, **Dyda U**. Imaging of Mn Washout in the Individual Welder Brain after wearing Powered Air-Purifying

Respirators (PAPRs). 67th Annual Meeting of the AAPM, Washington, DC. July 27-30, 2025

10. Ooms N², Bozymski B², Hamelink TL, **Dydak U**. Establishing a Renal Biomarker Portfolio to Determine Transplant Outcomes: Phosphorous-31 Magnetic Resonance Spectroscopy. ISMRM and ISMRT Joint Annual Meeting, Honolulu, Hawai'i, USA May 10-15, 2025.
11. George JA², Bozymski B², Nossa G², Mizimakoski C, Lee CG, Park JH, Harold R, Foti D, **Dydak U**. MRS Insights into Cerebellar Alterations and Motor Variations in Welders Exposed to Manganese. Submitted to 2025 ISMRM & ISMRT Annual Meeting, Honolulu, Hawai'i, USA, May 10-15, 2025.
12. Aguiar L¹, George JA², Bozymski B², Nossa G², Mizimakoski C, Lee CG², Park JH, **Dydak U**. Neuroimaging of the Anterior Cingulate Cortex in Welders. Purdue Undergraduate Research Conference, West Lafayette, IN, USA, April 8, 2025.
13. Hsu CT², Monsivais H², Mizimakoski C, Lee CG², Park JH, **Dydak U**. Imaging of Mn washout in the individual welder brain after wearing powered air-purifying respirators (PAPRs). *Society of Toxicology 64th Annual Meeting, Orlando, Florida, March 16-20, 2025. (SOT OPHSS Best Abstract Award)*
14. George JA², Bozymski B², Nossa G², Lee CG², Mizimakoski C, Harold R, Foti D, Park JH, **Dydak U**. Cerebellar Alterations in Glutathione (GSH) and Motor Variations in Welders Exposed to Manganese. *Society of Toxicology 64th Annual Meeting, Orlando, Florida, March 16-20, 2025.*
15. Aguiar L¹, George JA², Bozymski B², Nossa G², Mizimakoski C, Lee CG², Park JH, **Dydak U**. Elevated Oxidative Stress in the Anterior Cingulate Cortex of Welders Exposed to Manganese. *Society of Toxicology 64th Annual Meeting, Orlando, Florida, March 16-20, 2025.*
16. Harold R, Kamat R, Nossa G², Monsivias H², Durham P¹, Zhou XP, **Dydak U**, Berry-Kravis E, Kelleher B, Foti D. Women with the FMR1 premutation exhibit disruptions in the neuronal network involved in performance monitoring. Women's Health Research Symposium, Purdue University, March 3, 2025
17. George JA², Nossa G², Mizimakoski C, **Dydak U**. Cerebellar Alterations in Glutathione (GSH) and Motor Variations in Welders Exposed to Manganese. *6th Annual HSCI Research Retreat, West Lafayette, Indiana, Feb 28th, 2025.*
18. Hsu C-T², Monsivais H², Mizimakoski C², Lee CG², Park JH, **Dydak U**. Imaging of Mn washout in the individual welder brain after wearing powered air-purifying respirators (PAPRs). 6th Annual HSCI Research Retreat. Feb 28, 2025 (3rd Price for Oral Presentation)
19. Bozymski B², George J², Mizimakoski C, Lee CG², Park JH, **Dydak U**. Edited MRS of Mn Neurotoxicity in Welders. *8th International Symposium on GABA & Advanced MRS*. Playa Del Carmen, MX November 21, 2024.

20. *Rashmi Bhaskara, Shravan Bhavsar, Shourya Verma, Anath Grama, **O Oderinde**; Generating synthetic positron emission tomography from computed tomography using lightweight diffusion model for head and neck cancer.
21. *Zirui Jiang, J Alan, K Huang, Y Yue, C Njeh, **OM Oderinde**; 18F-FDG PET/CT-based deep radiomic models for enhancing chemotherapy response prediction in breast cancer.
22. *Ramotallah Jubril, Maya Ataya, Mark Tann, Michael Koch, Ronald Boris, Clint Bahler, **Oluwaseyi Oderinde**; Investigating racial differences in 68-Ga-PSMA-11 PET/CT imaging for patients with biochemical recurrence after radical prostatectomy: Preliminary findings.
23. *Rashmi Bhaskara, **Oluwaseyi Oderinde** Enhancing synthetic pelvis CT images from CBCT using vision transformer with adaptive fourier neural operators.