

ROBIN OligoMET Center

Monthly Research Update: July 2025

Publications

JULY AT A GLANCE TOTALS

Publications	7
Grants and contracts	
New awards	0
Submitted	2
Oral Presentations	3
Abstracts	1
Clinical trials	
TERPS	4
Awards/Honors	0

Please submit all monthly updates to Jadyne Stewart at jadynewstewart@som.umaryland.edu by second Wednesday of each month.

1. Khani F, Beg S, Park K, Kawaguchi K, Chiu YL, Robinson BD, Lis R, Stack EC, Scherr DS, Rosenberg JE, Loda M, Chinnaiyan AM, Rubin MA, Mosquera JM. [SPINK1 immunohistochemistry: An ancillary tool to diagnose urothelial carcinoma in situ and urothelial dysplasia](#). *Pathol Res Pract*. 2025 Jul 28;273:156148. doi: 10.1016/j.prp.2025.156148. Epub ahead of print. PMID: 40743580.
2. Moradmamand H, Molitoris J, Ling X, Schumaker L, Allor E, Thomas H, Arons D, Ferris M, Krc R, Mendes WS, **Tran P**, **Sawant A**, Mehra R, Gaykalova DA, Ren L. [Graph feature selection for enhancing radiomic stability and reproducibility across multiple institutions in head and neck cancer](#). *Sci Rep*. 2025 Jul 31;15(1):27995. doi: 10.1038/s41598-025-12161-w. PMID: 40744964; PMCID: PMC12313853.
3. Omar M, Fanelli GN, Socciarelli F, Ullanat V, Reddy Puchala S, Wen J, Chowdhury A, Valencia I, Scatena C, **Marchionni L**, Umeton R, **Loda M**. [Antibody-Based Multiplex Image Analysis: Standard Analytical Workflows and Tools for Pathologists](#). *Lab Invest*. 2025 Jul 29:104220. doi: 10.1016/j.labinv.2025.104220. Epub ahead of print. PMID: 40744223.
4. Phillips RM, Proudfoot JA, Davicioni E, Liu Y, Spratt DE, Simko JM, Den RB, Pollack A, Rosenthal SA, Sartor AO, Sweeney CJ, Attard G, Longoria L, Patel S, Straza MW, Efstathiou JA, Shah AB, Hoffman KE, Rodgers JP, Sandler HM, Feng FY, **Tran PT**. [Transcriptomic Analysis of Localized High-risk Prostate Cancer Improves Prognostication and Identifies Benefit from Adding Docetaxel to Definitive Radiotherapy with Androgen Suppression in the NRG Oncology/RTOG 0521 Phase 3 Trial](#). *Eur Urol Oncol*. 2025 Jul 16:S2588-9311(25)00103-8. doi: 10.1016/j.euo.2025.04.009. Epub ahead of print. PMID: 40675873; PMCID: PMC12370384.
5. Sherry AD, Siddiqui BA, Haymaker C, Fellman BM, Medina-Rosales MN, Bathala TK, Wang S, Liu S, Seo A, Hara K, Lu H, Troncso P, Chun SG, Ha CS, Mayo LL, Mok H, Park RJ, Chapin BF, Phillips RM, Deek MP, Kovitz CA, Aparicio A, Zurita AJ, Pilie PG, Cohen L, Choi SL, Reuben A, **Tran PT**, Corn PG, Subudhi SK, Tang C. [Continuous Androgen Deprivation Therapy with or Without Metastasis-directed Therapy for Oligometastatic Prostate Cancer: The Multicenter Phase 2 Randomized EXTEND Trial](#). *Eur Urol*. 2025 Jul 31:S0302-2838(25)00396-3. doi: 10.1016/j.eururo.2025.07.006. Epub ahead of print. PMID: 40750497.
6. **Simone NL**, Burke S, Hamade K, Leader A, McNair C. [Mapping disparities: identifying cancer care gaps in sexual and gender minority patients](#). *J Natl Cancer Inst Monogr*. 2025 Jul 1;2025(69):153-160. doi: 10.1093/jncimonographs/lgaf030. PMID: 40671549; PMCID: PMC12268168.
7. Simone-Soule CA, Burke SE, Abul-Enin D, Kunta C, Adekeye A, **Tran P**, Leader A, Dicker AP, **Simone NL**. [Enhancing Radiation Oncology Training through Patient Advocate Integration](#). *medRxiv [Preprint]*. 2025 Jul 28:2025.07.28.25332319. doi: 10.1101/2025.07.28.25332319. PMID: 40766112; PMCID: PMC12324662.

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Grants and Contracts

Funded:

None reported

Submitted:

- **Amit Sawant, PhD**, lead MPI, renewal/resubmission of NIH R01-CA202761 NCI Investigator-Initiated Early Phase Clinical Trials for Cancer Treatment and Diagnosis for “The INSPIRE trial integrating serial and parallel interconnected respiratory elements for sparing post-radiotherapy pulmonary function” (\$3,755,629).
- **Amit Sawant, PhD**, lead MPI, to DOD Peer Reviewed Clinical Trial Award for “Preserving post-radiotherapy respiratory function using virtual bronchoscopy-guided dose-sparing of interconnected serial and parallel functional lung units” (\$7,203,088).

Oral Presentations

- Apurva Singh, William Silva Mendes, Sang-Bo Oh, Ozan Cem Guler, Aysenur Elmali, Birhan Demirhan, Amit Sawant, **Phuoc Tran**⁺, Cem Onal⁺, Lei Ren⁺. Prediction of metastasis-free survival in patients with prostate adenocarcinoma using primary tumor and lymph node radiomics from pre-treatment PSMA PET/CT scans. Oral Presentation in the Physics Scientific Session: AI-Driven Radiomics and Imaging for Predicting Disease Outcomes of the AAPM National Meeting 2025.
- David P. Adam, Allison G. Cartee, Ian R. Marsh, Ana P. Kiess, Bin He, Michael Ghaly, Natalie Kania, Hao Wang, Steven P. Rowe, **Phuoc T. Tran**, Eric C. Frey, George Sgouros, Robert F. Hobbs. Retrospective evaluation of combined photon SBRT and Radium-223 SPECT based radiopharmaceutical therapy tumor dosimetry in clinical trial patient cases. Oral Presentation in the AAPM National Meeting 2025.
- Yufeng Cao, Philip Suter, William Silva Mendes, Amit Sawant, Luigi Marchionni, Nicole L. Simone, **Phuoc T. Tran**, Cem Onal, Lei Ren. Interpretable deep learning predicts metastasis-free survival (MFS) from conventional imaging for oligometastatic castration-sensitive prostate cancer (omCSPC) using multi-modality PSMA PET and CT imaging. Oral Presentation in the AAPM National Meeting 2025.

Abstracts

- Aman Sangal, Jinhyuk Choi, Matthew Brown, William Silva Mendes, Yushi Chang, Hualiang Zhong, Paul Segars, **Phuoc Tran**, Lei Ren. Simulating realistic digital phantoms for virtual clinical trials in radiology and radiation oncology using a deep-learning based conditional Denoising Diffusion Probabilistic Model (c-DDPM). AAPM National Meeting 2025.

Clinical Trial Enrollment

- 4 patients were enrolled (48/122 total) on the **TERPS trial**.

Awards/Honors

- None reported

Please note that these examples are representative of productivity from the ROBIN OligoMET Center members and are not exclusively attributable to the U54 grant.