

ROBIN OligoMET Center

Monthly Research Update: January 2024

Publications

JANUARY AT A GLANCE TOTALS	
Publications	8
Grants and contracts	
New awards	0
Submitted	2
Oral Presentations	0
Abstracts	0
Clinical trials	
TERPS	2
Awards/Honors	2

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

- Bergom HE, Sena LA, Day A, Miller B, Miller CD, Lozada JR, Zorko N, Wang J, Shenderov E, Lobo FP, Caramella-Pereira F, **Marchionni L**, Drake CG, Lotan T, De Marzo AM, Hwang J, Antonarakis ES. [Divergent immune microenvironments in two tumor nodules from a patient with mismatch repair-deficient prostate cancer](#). NPJ Genom Med. 2024 Jan 22;9(1):7. doi: 10.1038/s41525-024-00392-1. PMID: 38253539; PMCID: PMC10803790.
- Byrne KE, Poirier Y, Xu J, Gerry A, Foley MJ, Jackson IL, **Sawant A**, Jiang K. [Technical note: A small animal irradiation platform for investigating the dependence of the FLASH effect on electron beam parameters](#). Med Phys. 2024 Feb;51(2):1421-1432. doi: 10.1002/mp.16909. Epub 2024 Jan 11. PMID: 38207016.
- Cheng HR, Qu M, Zafari Z, **Bentzen S**, Armstrong TS, Gondi V, Brown PD, Mehta M, **Mishra MV**. [Evaluating the sensitivity of EQ-5D-5L in patients with brain metastases: a secondary analysis of NRG CC001](#). J Natl Cancer Inst. 2024 Jan 27:djae020. doi: 10.1093/jnci/djae020. Epub ahead of print. PMID: 38281073.
- Hua CH, **Bentzen SM**, Li Y, Milano MT, Rancati T, Marks LB, Constone LS, Yorke ED, Jackson A. [Improving Pediatric Normal Tissue Radiation Dose-Response Modeling in Children With Cancer: A PENTEC Initiative](#). Int J Radiat Oncol Biol Phys. 2024 Jan 25:S0360-3016(23)08171-3. doi: 10.1016/j.ijrobp.2023.11.038. Epub ahead of print. PMID: 38276939.
- Meiller TF, Fraser CM, Grant-Beurmann S, Humphrys M, Tallon L, Sadzewicz LD, Jabra-Rizk MA, Alfaifi A, Kensara A, Molitoris JK, Witek M, Mendes WS, Regine WF, **Tran PT**, Miller RC, Sultan AS. [A Longitudinal Metagenomic Comparative Analysis of Oral Microbiome Shifts in Patients Receiving Proton Radiation versus Photon Radiation for Head and Neck Cancer](#). J Cancer Allied Spec. 2024 Jan 22;10(1):579. doi: 10.37029/jcas.v10i1.579. PMID: 38259673; PMCID: PMC10793722.
- Omar M**, Xu Z, Rand SB, Alexanderani MK, Salles DC, Valencia I, Schaeffer EM, Robinson BD, Lotan TL, **Loda M**, **Marchionni L**. [Semi-Supervised, Attention-Based Deep Learning for Predicting TMPRSS2:ERG Fusion Status in Prostate Cancer Using Whole Slide Images](#). Mol Cancer Res. 2024 Jan 29. doi: 10.1158/1541-7786.MCR-23-0639. Epub ahead of print. PMID: 38284821.
- Pakula H, **Omar M**, Carelli R, Pederzoli F, Fanelli GN, Pannellini T, Socciarelli F, Van Emmenis L, Rodrigues S, Fidalgo-Ribeiro C, Nuzzo PV, Brady NJ, Dinalankara W, Jere M, Valencia I, Saladino C, Stone J, Unkenholz C, Garner R, Alexanderani MK, Khani F, de Almeida FN, Abate-Shen C, Greenblatt MB, Rickman DS, Barbieri CE, Robinson BD, **Marchionni L**, **Loda M**. [Distinct mesenchymal cell states mediate prostate cancer progression](#). Nat Commun. 2024 Jan 8;15(1):363. doi: 10.1038/s41467-023-44210-1. PMID: 38191471; PMCID: PMC10774315.
- Tran PT**, Mouw KW. [SABR Today . . . and Tomorrow?](#) Int J Radiat Oncol Biol Phys. 2024 Jan 1;118(1):11. doi: 10.1016/j.ijrobp.2023.10.013. PMID: 38049218.

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Grants and Contracts

Funded:

- None reported.

Submitted:

- **Phuoc T. Tran, MD, PhD**, Lead-PI, PA-20-185 NIH R01, “Quantitative spatial analysis of immune-mediated response to chemo-immune-radiotherapy from muscle-invasive bladder cancer clinical trials” (\$4,028,295).
- **Phuoc T. Tran, MD, PhD**, PI UMB, sub UWisconsin, NIH R01 PAR-22-139 program Systematic Testing of Radionuclides in Preclinical Experiments (STRIFE), “Tumor-Barcoding and High-Throughput Sequencing to Assess Genomic Predictors of TRT Response and Immunomodulation in NSCLC” (\$1,267,325).

Oral Presentations

- None reported.

Abstracts

- None reported.

Clinical Trial Enrollment

- 2 patients were enrolled (18/122 total) on the **TERPS trial**.

Awards/Honors

- **Phuoc T.** serves as Ad Hoc Reviewer at JAMA Network Open.
- **Phuoc T.** serves as Ad Hoc Reviewer at Oncogene.

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