

ROBIN OligoMET Center

Monthly Research Update: February 2023

Publications

FEBRUARY AT A GLANCE TOTALS	
Publications	6
Grants and contracts	
New awards	0
Submitted	2
Oral Presentations	1
Abstracts	6
Clinical trials	
TERPS	0
Awards/Honors	0

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

1. **Imada EL**, Wilks C, Langmead B, **Marchionni L**. [REPAC: analysis of alternative polyadenylation from RNA-sequencing data](#). *Genome Biol.* 2023 Feb 9;24(1):22. doi: 10.1186/s13059-023-02865-5. PMID: 36759904; PMCID: PMC9912678.
2. Jiang Z, Polf JC, Barajas CA, Gobbert MK, **Ren L**. [A feasibility study of enhanced prompt gamma imaging for range verification in proton therapy using deep learning](#). *Phys Med Biol.* 2023 Mar 20;68(7). doi: 10.1088/1361-6560/acbf9a. PMID: 36848674.
3. Omar M, Dinalankara W, Mulder L, Coady T, Zanettini C, **Imada EL**, Younes L, Geman D, **Marchionni L**. [Using biological constraints to improve prediction in precision oncology](#). *iScience.* 2023 Feb 2;26(3):106108. doi: 10.1016/j.isci.2023.106108. PMID: 36852282; PMCID: PMC9958363.
4. Roubinov D, Griffith KA, **Simone NL**, Alvarez SE, Thomas M, Mangurian C, Jaggi R. [Gender Composition in Biomedical Research Grant Submissions and Grant Review Panels Before Versus During the COVID-19 Pandemic](#). *J Womens Health (Larchmt).* 2023 Feb 15. doi: 10.1089/jwh.2022.0188. Epub ahead of print. PMID: 36795988.
5. Vidotto T, **Imada EL**, Faisal F, Murali S, Mendes AA, Kaur H, Zheng S, Xu J, Schaeffer EM, Isaacs WB, Sfanos KS, **Marchionni L**, Lotan TL. [Association of self-identified race and genetic ancestry with the immunogenomic landscape of primary prostate cancer](#). *JCI Insight.* 2023 Feb 8;8(3):e162409. doi: 10.1172/jci.insight.162409. PMID: 36752203; PMCID: PMC9977441.
6. Wang X, Raman N, Lemtiri-Chlieh G, Chang J, Jagtap S, Chowdhury DD, Ballew M, Carrieri FA, Nguyen T, Nugent K, Peck T, Levine MS, Chan A, Lam C, Malek R, Hoang T, Phillips R, Cheng Z, Taparra K, Connis N, Hann CL, Holland A, **Tran PT**, Lafargue A, Wang H. [Griseofulvin Radiosensitizes Non-Small Cell Lung Cancer Cells and Activates cGAS](#). *Mol Cancer Ther.* 2023 Feb 7:MCT-22-0191.

Grants and Contracts

Funded:

- None reported.

Submitted:

- **Erika Davies, PhD**, PI, to SRI International. (RFP No. RV-11212022-2) for "Animal model development and efficacy testing of candidate MCMs" (\$7,310,297).
- **Lei Ren, PhD**, Multi-PI, to the National Institutes of Health Research Project Grant program (PA-20-185) for "Study of biological and radiographic biomarkers and association with ancestry and survival disparities in oral cavity squamous cell carcinoma" (\$758,739).

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Oral Presentations

- **Phuoc T.**, Genitourinary Cancers Symposium, Clinical Decision-Making in the Treatment of Localized Prostate Cancer: Controversial Points Session (February 16, 2023 – San Francisco, CA). “Novel Approaches for Risk Stratification of Newly Diagnosed Localized Prostate Cancer”.

Abstracts

- Adam B. Weiner, Alex Hakansson, Yang Liu, Ashley E. Ross, Eric Li, **Phuoc Tran**, Anis Hamid, Xin Zhao, Julian Ho, James Proudfoot, Elai Davicioni, Gerhard Attard, Daniel E. Spratt, Christopher Sweeney, Edward M. Schaeffer. Prostate cancer subtyping by gene expression identifies patients with differential response to radiation and chemohormonal therapies. Genitourinary Cancers Symposium 2023.
- Bridget Koontz, Theodore Karrison, Thomas Pisansky, Edwin Posadas, Leslie Ballas, Alejandro Berlin, William A Hall, **Phuoc Tran**, Jennifer O'Daniel, Thomas Hope, Joseph P. Rodgers, Felix Feng. NRG-GU011: A Phase II Double-Blinded, Placebo-Controlled Trial of Prostate Oligometastatic Radiotherapy with or without Androgen Deprivation Therapy in Oligometastatic Prostate Cancer (NRG PROMETHEAN). Genitourinary Cancers Symposium 2023.
- Daniel E Spratt, Vinnie YT Liu, Rikiya Yamashita, Emmalyn Chen, Sandy DeVries, Ashley E Ross, Angela Y Jia, Todd M Morgan, Seth A Rosenthal, Howard M Sandler, Osama Mohamed, Andre Esteva, Jedidiah M Monson, Steven J Chmura, John H Carson, Alan C Hartford, Albert J Chang, Stephanie L Pugh, **Phuoc T. Tran**, Felix Y Feng. Patient-Level Data Meta-Analysis of a Multi-Modal Artificial Intelligence (MMAI) Prognostic Biomarker in High-Risk Prostate Cancer: Results from Six Phase III Randomized Trials. Genitourinary Cancers Symposium 2023. Oral presentation in the General Session of the Genitourinary Cancers Symposium 2023.
- Philip Sutera, Kim Van der Eecken, Amol C. Shetty, Yang Song, Theresa Hodges, Sofie Verbeke, Jo Van Dorpe, Valérie Fonteyne, Bram De Laere, **Mark Mishra**, Zaker Rana, Jason Molitoris, Matthew Ferris, Nicholas Roberts, Daniel Y. Song, Theodore DeWeese, Kenneth J. Pienta, Matthew P. Deek, Piet Ost, **Phuoc T. Tran**. Genomic determinants of patterns of failure in metachronous oligometastatic castration-sensitive prostate cancer. Genitourinary Cancers Symposium 2023.
- Soha Bazyar, Philip Sutera, Ryan Phillips, Mathew Pierre Deek, Noura Radwan, Catherine Handy Marshall, **Mark V. Mishra**, Zaker Hamid Rana, Jason K. Molitoris, Young Kwok, Santosh Gupta, Alisa Tubbs, Rick Wenstrup, Theodore L. DeWeese, Daniel Y. Song, Felix Y Feng, Kenneth J. Pienta, Emmanuel S. Antonarakis, Ana Ponce Kiess, **Phuoc T. Tran**. Prognostic impact of circulating tumor cells in oligometastatic hormone-sensitive prostate cancer following metastasis-directed therapy. Genitourinary Cancers Symposium 2023.
- **Zaker H. Rana**, **Nicole Helie**, **Caitlin Eggleston**, **Kaysee Baker**, Jason K. Molitoris, Matthew J. Ferris, Akshar N. Patel, Young Kwok, Sarah McAvoy, Dan Kunaprayoon, Jack Hong, Matthew P. Deek, Philip Sutera, Rebecca A. Deek, **Soren M. Bentzen**, M. Minhaj Siddiqui, Heather Mannuel, Arif Hussain, **Phuoc T. Tran**, **Mark V. Mishra**. Phase 2 randomized Total Eradication of metastatic lesions following definitive Radiation to the Prostate in de novo oligometastatic prostate cancer (TERPS) trial. Genitourinary Cancers Symposium 2023.

Clinical Trial Enrollment

- 0 patient was enrolled (4/122 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.