

# Department of Radiation Oncology

## Monthly Research Update: March 2022

### MARCH AT A GLANCE TOTALS

Clinical trials	
Total enrolled	42
GCC, other	13
NRG, NCI, co-ops	3
PCG Registry	26
Grants and contracts	
New awards	1
Submitted	2
Articles published	8

Information for this monthly update should be provided no later than the second Wednesday of each month to Miek Segers at [msegers@som.umaryland.edu](mailto:msegers@som.umaryland.edu). The update will be published on the second Friday of each month.

Have questions about identifying a funding source? Finding research partners across the UMB/UM campuses or at another university? Defining future research strategies? Or organizing your thoughts on (virtual) paper? Contact Nancy Knight, PhD, Director of Academic and Professional Development for the department, at [nknight@umm.edu](mailto:nknight@umm.edu)

### New NIH Data Sharing Website

The National Institutes of Health (NIH) announced in early April the launch of a new website on data sharing, in preparation for the NIH Data Management and Sharing Policy that will go into effect for all applications on or after January 25, 2023. The [NIH Scientific Data Sharing](#) site will serve as a central portal through which funded researchers can understand which sharing policies apply to their research and how to comply with these policies, as well as how to access scientific data from NIH-affiliated repositories. The new website will help users navigate requirements and will offer step-by-step guides, infographics, tools, and resources. For clinical trials and associated public access policies, the site provides a central access point to these policies and links out to relevant NIH sites for more information. Registration for a summer 2022 [2-part webinar](#) on these policies and requirements is now open. The data sharing site also features a [contact and help page](#) through which users can identify the right resources and solicit more information. All researchers targeting NIH funding for research are urged to familiarize themselves with these resources well before the January 2023 implementation of new data sharing rules.

### Clinical Trial Enrollment

- 26 patients at MPTC on the **PCG Registry**.
- 2 patients at MPTC on the **Deep Thermal Therapy HUD**.
- 1 patient at MPTC on **GCC 20138**: Laser interstitial thermal therapy followed by hypofractionated radiation therapy for treatment of newly diagnosed high-grade gliomas.
- 2 patients at MPTC on **GCC 20110**: A single-arm, single-stage phase II trial of Selective Avoidance of nodal VolumEs at minimal Risk (SAVER) in the contralateral neck of patients with p16-positive oropharynx cancer.
- 1 patient at UCH on **NRG-HN005**: A randomized phase II/III trial of de-intensified radiation therapy for patients with early-stage, p16-positive, non-smoking associated oropharyngeal cancer
- 1 patient at BWMC on **GCC 15100**: RADCOMP: Pragmatic phase III randomized trial of proton vs. photon therapy for patients with non-metastatic breast cancer: A Radiotherapy Comparative Effectiveness (RADCOMP) Consortium trial.
- 1 patient at BWMC on **NRG BR007**: A phase III clinical trial evaluating de-escalation of breast radiation (DEBRA) for conservative treatment of stage I, hormone sensitive, HER2 negative, oncotype recurrence score  $\leq 18$  breast cancer.
- 1 patient at UCH on **NRG HN009**: Randomized phase II/III trial of radiation with high-dose cisplatin ( $100 \text{ mg/m}^2$ ) every three weeks versus radiation with low-dose weekly cisplatin ( $40 \text{ mg/m}^2$ ) for patients with locoregionally advanced squamous cell carcinoma of the head and neck.
- 1 patient at UCH and 2 patients at MPTC on **GCC 2048**: A phase I dose escalation study of hypofractionated accelerated pelvic nodal radiotherapy delivered with a simultaneously integrated prostate boost for patients with localized, intermediate- and high-risk prostate cancer.
- 2 patients at MPTC on **GCC 2032**: Phase 1 feasibility study of strength training with androgen deprivation and proton therapy for intermediate and high risk prostate cancer.
- 2 patients at MPTC on **GCC 19146**: Comparison and verification of radiation planning for pencil beam scanning proton therapy using single energy and dual energy computed tomography simulation methods.

## Grants and Contracts

### Funded:

- **Nancy Knight, PhD (PI)**, renewal, contract with the Society of Nuclear Medicine and Molecular Imaging as consulting editor for The Journal of Nuclear Medicine (\$37,125; 1 year).

### Submitted:

- **Phuoc T. Tran, MD, PhD (PI)**, Department of Defense W81XWH-21-1-0296 transfer, "Novel biomarkers to direct stereotactic ablative radiotherapy in castration-sensitive oligometastatic prostate cancer" (\$1,349,255).
- **Hem Shukla, PhD (PI)**, to Gilead Research Scholars Program Solid Tumors Proposal, for "Combination of tumor targeted hyperthermia, radiation therapy, and immunotherapy (anti-OX40) to treat locally advanced pancreatic cancer (\$129,518; 2 years).

## Articles Published

Entered into PubMed March 10–April 7. Titles link to PubMed abstracts, where full-text links are available.

1. Carey GB, Ezelle HJ, Steinle N, Cao Q, Simington L, Matson C, Singh N, Jones L, **Mohindra P**, Cullen KJ, Giglio M, Parker E, Hassel BA. **Correction to: Robust institutional support and collaboration between summer training programs in cancer and biomedicine drive the pivot to a virtual format in response to the COVID pandemic.** *J Cancer Educ.* 2022 Mar 29. Online ahead of print.
2. Hoppe BS, Nichols RC, Flampouri S, Pankuch M, Morris CG, Pham DC, **Mohindra P**, Hartsell WF, Mohammed N, Chon BH, Kestin LL, Simone CB. **Chemoradiation with hypofractionated proton therapy in stage II-III non-small cell lung cancer: A YYY phase 1/2 trial.** *Int J Radiat Oncol Biol Phys.* 2022 Mar 16:S0360-3016(22)00238-3.
3. Khatib ME, **Van Slyke AL**, Velalopoulou A, Kim MM, Shoniyozov K, Allu SR, Diffenderfer EE, Busch TM, Wiersma RD, Koch CJ, Vinogradov SA. **Ultrafast tracking of oxygen dynamics during proton FLASH.** *Int J Radiat Oncol Biol Phys.* 2022 Mar 18:S0360-3016(22)00249-8. Online ahead of print.
4. Lakomy DS, Yang J, **Vedam S**, Wang J, Lee B, Sobremonte A, Castillo P, Hughes N, Mohammadsaid M, Jhingran A, Klopp AH, Choi S, Fuller CD, Lin LL. **Clinical implementation and initial experience with a 1.5 Tesla MR-linac for MR-guided radiotherapy for gynecologic cancer: An R-IDEAL stage 1/2a first in humans/feasibility study of new technology implementation.** *Pract Radiat Oncol.* 2022 Mar 9:S1879-8500(22)00079-0. Online ahead of print.
5. Mahuvava C, Esplen NM, **Poirier Y**, Kry SF, Bazalova-Carter M. **Dose calculations for preclinical radiobiology experiments conducted with single-field cabinet irradiators.** *Med Phys.* 2022 Mar;49(3):1911–1923.
6. **Vicente EM**, **Modiri A**, Kipritidis J, Yu KC, **Sun K**, **Cammin J**, **Gopal A**, Xu J, **Mossahebi S**, Hagan A, Yan Y, Owen DR, **Mohindra P**, Matuszak MM, Timmerman RD, **Sawant A**. **Combining serial and parallel functionality in functional lung avoidance radiation therapy.** *Int J Radiat Oncol Biol Phys.* 2022 Mar 8:S0360-3016(22)00092-X. Online ahead of print.
7. Wang G, Zhai S, **Lasio G**, **Zhang B**, **Yi B**, **Chen S**, Macvittie TJ, Metaxas D, Zhou J, Zhang S. **Semi-supervised segmentation of radiation-induced pulmonary fibrosis from lung CT scans with multi-scale guided dense attention.** *IEEE Trans Med Imaging.* 2022 Mar;41(3):531–542.
8. Zhang Z, Huang M, Jiang Z, Chang Y, Lu K, Yin FF, **Tran P**, Wu D, Beltran C, **Ren L**. **Patient-specific deep learning model to enhance 4D-CBCT image for radiomics analysis.** *Phys Med Biol.* 2022 Apr 1;67(8).

## Important Dates for Upcoming Funding Submissions

Below is an updated calendar with firm due dates for upcoming major NIH deadlines in 2022 (individual RFA/PA dates may differ). Contact the Department Office of Research Administration (DORA) ([msegers@som.umaryland.edu](mailto:msegers@som.umaryland.edu)) ASAP if you plan to submit any funding proposal, regardless of funder. Failure to meet these deadlines may result in delaying your submission until the next cycle (if available).

NIH deadline	DORA budget, prelim materials	Dean/SOM prelim materials	FINAL Dean/SOM/SPA
R01 new 06/5/22	05/23/22	05/26/22	05/30/22
R21 new 06/16/22	06/03/22	06/07/22	06/09/22
R01 resub 07/5/22	06/20/22	06/23/22	06/27/22
R21 resub 07/16/22	07/01/22	07/07/22	07/11/22