Department of Radiation Oncology Monthly Research Update: February 2024

2024 RadOnc Seed Grant Program

FEBRUARY AT A GLANCE TOTALS

33

11

Clinical trials Total enrolled

GCC, other	7
NRG, NCI, co-ops	3
PCG registry	23
Grants and contracts	
New awards	0
Submitted	2

Articles published

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. 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.ed

On February 27, Phuoc T. Tran, MD, PhD, chair of the department's Executive Academic and Advisory Council (EAAC), announced the opening of the 2024 cycle of the Department of Radiation Oncology Seed Grant Program. For more than a decade, this program has offered support for preliminary research intended to lead to future investigations and extramural funding. The program is administered by the EAAC, with award amounts ranging from \$2,500 to \$50,000. The award term is 1–2 years, with terms beginning on July 1 and ending on June 30.

Eligible applicants include any full-time faculty member or resident (partnered with a faculty member) in the Department of Radiation Oncology. Collaborations between department divisions, with other University of Maryland System faculty, or with industry (with matching funds or in-kind support) are encouraged but not required. Applications with such collaborations will be given additional review weight. Criteria for selection include: (1) Feasibility, novelty, and overall scientific merit of the research proposed; (2) Translational nature of the research and/or likelihood of near-term extension to patient benefit; and (3) Likelihood that the proposed studies will lead to extramural funding, in particular multi-investigator grants, and to supporting a well-defined long-term research strategy within the department.

Applications can be requested from Nancy Knight, PhD, at nknight@umm.edu. Applications are due on April 17, 2024, with awards to be announced in June. Questions about the seed grant program should be directed to Dr. Tran, Dr. Knight, or other members of the department's EAAC.

Reminder: ROBIN Pilot Research Grants Available

ROBIN OligoMET Collaborative Pilot Project Grant proposals are due on April 30. These are small research projects (up to \$75,000) aimed at obstacles in radiation research that can be addressed by leveraging the expertise of new collaborations. Contact jadynstewart@som.umaryland.edu for more information.

Clinical Trial Enrollment

- 23 patients at MPTC on the Proton Collaborative Group Registry
- 3 patients enrolled on the DTT HUD
- 1 patient at MPTC on NRG GU009: Parallel phase III randomized trials for high-risk prostate cancer evaluating deintensification for lower genomic risk and intensification of concurrent therapy for higher genomic risk with radiation (Predict-RT).
- 1 patient enrolled at UCH on GCC1926: Phase Ib dose escalation of single-fraction preoperative stereotactic partial-breast irradiation for early-stage breast cancer.
- 1 patient enrolled at Shore Health on **CCTG MA.39:** TAILOR RT: A randomized trial of regional radiotherapy in biomarker low risk node and T3N0 positive breast cancer.
- 1 patient enrolled at UMMC on NRG GU010: Parallel phase III randomized trials of genomic-risk stratified unfavorable intermediate risk prostate cancer: Deintensification and intensification clinical trial evaluation (GUIDANCE).
- 1 patient enrolled at UMMC on GCC 20138: Laser interstitial thermal therapy followed by hypofractionated radiation therapy for treatment of newly diagnosed high-grade gliomas.
- 1 patient enrolled on MPTC on GCC 2242: Hybrid virtual-MRI/CBCT for image guidance in liver radiation therapy.
- 1 patient enrolled at MPTC on GCC 2032: Feasibility of strength training with androgen deprivation and proton therapy for patients with prostate cancer.

Radiation Oncology: Monthly Research Update: February 2024

Grants and Contracts

Submitted

- Tran, Phuoc, MD PhD, PI. PA-23-189, Administrative Supplement to NIH R01 CA231189, "Research supplement to promote diversity in health-related research" (\$175,223).
- **Shukla, Hem, PhD,** Pl. The National Pancreas Foundation. Research Grant. "Combination of tumor targeted hyperthermia, proton radiation therapy, and anti-PD-1 immunotherapy drug to treat locally advanced pancreatic cancer" (\$42,300).

Articles Published

Entered into PubMed February 8-March 7. Titles link to PubMed abstracts, with full-text links.

- 1. **Bazyar S,** Mannuel H, **Tran PT**. Stereotactic ablative radiation therapy in metastatic prostate cancer. *Curr Opin Oncol.* 2024 Feb 15. Online ahead of print.
- Chen JJ, Brown AM, Garda AE, Kim E, McAvoy SA, Perni S, Rooney MK, Shiue K, Tonning KL, Warren LE, Golden DW, Croke JM; Radiation Oncology Education Collaborative Study Group (ROECSG) Patient Education Working Group. Patient education practices and preferences of radiation oncologists and interprofessional radiation therapy care teams: A mixed methods study exploring strategies for effective patient education delivery. Int J Radiat Oncol Biol Phys. 2024 Mar 2:S0360-3016(24)00332-8.
- Kishan AU, Siva S, Hofman MS, Nagarajah J, Kiess AP, Tran P, Calais J. The potential contribution of radiopharmaceutical therapies in managing oligometastatic disease. J Nucl Med. 2024 Feb 15. Online ahead of print.
- 4. Markan U, Baker K, Eggleston C, Cheston SB, Mohindra P, Nichols E, McAvoy S, Bentzen SM, Vyfhuis MAL. Psychosocial factors that influence a woman's decision to enroll in a clinical trial - implications on how to improve clinical trial enrollment among Black women. *Int J Radiat Oncol Biol Phys.* 2024 Feb 20:S0360-3016(24)00328-6. Online ahead of print.
- Mayr NA, Mohiuddin M, Snider JW, Zhang H, Griffin RJ, Amendola BE, Hippe DS, Perez NC, Wu X, Lo SS, Regine WF, Simone CB 2nd. Practice patterns of spatially fractionated radiation therapy: A clinical practice survey. Adv Radiat Oncol. 2024 Feb eCollection.
- Morgan TM, Boorjian SA, Buyyounouski MK, Chapin BF, Chen DYT, Cheng HH, Chou R, Jacene HA, Kamran SC, Kim SK, Kirkby E, Luckenbaugh AN, Nathanson BJ, Nyame YA, Posadas EM, Tran PT, Chen RC. Salvage Therapy for Prostate Cancer: AUA/ASTRO/SUO Guideline Part I: Introduction and treatment decision-making at the time of suspected biochemical recurrence after radical prostatectomy. J Urol. 2024 Feb 14. Online ahead of print.
- 7. Morgan TM, Boorjian SA, Buyyounouski MK, Chapin BF, Chen DYT, Cheng HH, Chou R, Jacene HA, Kamran SC, Kim SK, Kirkby E, Luckenbaugh AN, Nathanson BJ, Nyame YA, Posadas EM, Tran PT, Chen RC. Salvage Therapy for Prostate Cancer: AUA/ASTRO/SUO Guideline Part III: Salvage therapy after radiotherapy or focal therapy, pelvic nodal recurrence and oligometastasis, and future directions. J Urol. 2024 Feb 14. Online ahead of print.
- 8. Morgan TM, Boorjian SA, Buyyounouski MK, Chapin BF, Chen DYT, Cheng HH, Chou R, Jacene HA, Kamran SC, Kim SK, Kirkby E, Luckenbaugh AN, Nathanson BJ, Nyame YA, Posadas EM, **Tran PT**, Chen RC. Salvage Therapy for Prostate Cancer: AUA/ASTRO/SUO Guideline Part II: Treatment delivery for non-metastatic biochemical recurrence after primary radical prostatectomy. *J Urol.* 2024 Feb 14. Online ahead of print.
- Roy S, Dukic T, Keepers Z, Bhandary B, Lamichhane N, Molitoris J, Ko YH, Banerjee A, Shukla HD. SOX2 and OCT4 mediate radiation and drug resistance in pancreatic tumor organoids. Cell Death Discov. 2024 Mar 1;10(1):106.
- 10. Stokkevåg CH, Journy N, Vogelius IR, Howell RM, Hodgson D, **Bentzen SM**. Radiation therapy technology advances and mitigation of subsequent neoplasms in childhood cancer survivors. *Int J Radiat Oncol Biol Phys.* 2024 Mar 1:S0360-3016(24)00250-5. Online ahead of print.
- 11. Zhang H, **Zhang B, Lasio G, Chen S, Nasehi Tehrani J.** Assessing quality assurance of multi-leaf collimator using the structural similarity index. *J Appl Clin Med Phys.* 2024 Feb 12. Online ahead of print.

Important Dates for Upcoming Funding Submissions

Below is an updated calendar with firm due dates for upcoming major NIH deadlines (individual RFA/PA dates may differ). Attached to this MRU are the overall NIH deadlines for 2024. Contact the Department Office of Research Administration (DORA) (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,	Dean/SOM prelim	FINAL Dean/SOM/SPA	
	prelim materials	materials		
R01/U01 New June 5	05/23/24	05/28/24 (11 AM at ORD)	05/29/24	
R21 New June 16	06/03/24	06/06/24	06/10/24	
R01/U01 Resub July 5	06/20/24	06/25/24	06/27/24	
R21 Resub July 16	07/01/24	07/05/24	07/09/24	

	Cycle I			Cycle II			Cycle III		
Activity Code	NIH deadline	ORA deadline	SPA deadline	NIH deadline	ORA deadline	SPA deadline	NIH deadline	ORA deadline	SPA deadline
AIDS related (all)	May 7th	April 26th	April 30th	Sept 7th	Aug 29th	Sept 3rd *#	Jan 7th, 2024	Jan 2nd *	Jan 2nd *
P series (all)	Jan 25th	Jan 16th	Jan 18th	May 25th	May 16th	May 20th	Sept 25th	Sept 16th	Sept 18th
R18, U18, R25 (all)	Jan 25th	Jan 16th	Jan 18th	May 25th	May 16th	May 20th	Sept 25th	Sept 16th	Sept 18th
Construction grants (all)	Jan 25th	Jan 16th	Jan 18th	May 25th	May 16th	May 20th	Sept 25th	Sept 16th	Sept 18th
T series, D series (all)	Jan 25th	Jan 16th	Jan 18th	May 25th	May 16th	May 20th	Sept 25th	Sept 16th	Sept 18th
R01 & U01 (new)	Feb 5th	Jan 25th	Jan 29th	June 5th	May 28th *	May 29th	Oct 5th	Sept 26th	Sept 30th
K series <i>(new)</i>	Feb 12th	Feb 1st	Feb 5th	June 12th	June 3rd	June 5th	Oct 12th	Oct 3rd	Oct 7th
R03, R21, R33, R21/R33, R34, R36, U34, UH2, UH3, UH2/UH3 (new)	Feb 16th	Feb 7th	Feb 9th	June 16th	June 6th	June 10th	Oct 16th	Oct 7th	Oct 9th
R01 and U01 (renewal, resubmission, revision)	March 5th	Feb 23th	Feb 27th	July 5th	June 25th	June 27th	Nov 5th	Oct 25th	Oct 29th
K series (renewal, resubmission, revision)	March 12th	March 1st	March 5th	July 12th	July 2nd	July 5th	Nov 12th	Nov 1st	Nov 5th
R03, R21, R33, R21/R33, R34, R36, U34, UH2, UH3, UH2/UH3 (renewal, resubmission, revision)	March 16th	March 7th	March 11th	July 16th	July 5th	July 9th	Nov 16th	Nov 7th	Nov 11th
F series (all)	Apr 8th	March 28th	Apr 1st	Aug 8th	July 30th	Aug 1st	Dec 8th	Nov 26th	Dec 2nd
R13 & U13 (all)	Apr 12th	Apr 3rd	Apr 5th	Aug 12th	Aug 1st	Aug 5th	Dec 12th	Dec 3rd	Dec 5th

NIH deadlines in **bold underline** fall on a weekend or federal holiday and will be shifted to the next business day, per NIH policy. Internal deadlines are calculated according to the shifted NIH deadline.

ORA Deadline: Personnel, effort, budget materials, performance site and compliance forms routed in **final form**, **7 business days** prior to NIH deadline. **SPA Deadline:** All proposal materials routed in **final form** by 5 pm, **5 business days** prior to NIH deadline.

^{*} Extended internal deadlines due to a campus holiday. #Following Labor Day, final proposals must be at SPA by 11:00 am on Sept. 3rd.