

Department of Radiation Oncology

Monthly Research Update: September 2025

UM RadOnc at ASTRO 2025

SEPTEMBER AT A GLANCE TOTALS

Clinical trials

Total enrolled	27
GCC, other	8
NRG, co-ops	3
PCG, other registries	16

Grants and contracts

New awards	3
Submitted	0

Articles published	6
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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.edu

The 67th Annual Meeting of the American Society for Radiation Oncology (ASTRO) was held September 27–October 1 in San Francisco, CA. The theme of this year's meeting was "Rediscovering radiation medicine and exploring new indications." Faculty members, residents, postdoctoral students, and others from the Maryland Department of Radiation Oncology participated in almost 40 presentations, including 10 podium (oral) and 4 Quick-Pitch oral talks (complete brochure attached). These included reports of scientific research, as well as invited lectures and service as session moderators and on discussion panels. A highlight of the meeting was the department Welcome Dinner and Reception, held at the Rooftop 25 restaurant on the evening of September 28.

UMB, the Federal Shutdown, and Beyond

In a message to the UMB community on October 2, Bruce E. Jarrell, MD, UMB President, addressed the evolving effects of the government shutdown on university activities, pointing to a [website with answers to FAQs](#) on federally funded projects, financial aid, immigration services, and more. This website will be updated for the duration of the shutdown. On September 29, UM Vice President for Research Patrick O'Shea, PhD, [issued guidance](#) regarding the potential impacts of a government shutdown on federally funded contracts, grants, cooperative agreements, and subawards for principal investigators, administrators, and research support staff.

Dr. Jarrell reported that the [UMB Issues Management Advisory Group](#) (IMAG) continues to assess how federal policies may impact the university as well as higher education and scientific research at large. Today, about 70 individuals from across UMB serve on IMAG or on 4 related task forces to "ensure that our university remains steadfast in our mission, even in times of change." He assured the community that UMB remains fully operational: "Classes, research, clinical care, and the day-to-day work of UMB will continue. Our mission endures, as does our commitment to every member of our community."

Clinical Trial Enrollment

- 16 patients at MPTC on the **Proton Collaborative Group Registry**
- 2 patients at UMMC on **GCC 2422**: Phase I feasibility and pilot RCT of serious illness conversation
- 1 patient at UMMC and 2 at BWMC on **GCC 21136**: Phase 2 randomized total eradication of metastatic lesions following definitive radiation to the prostate in de novo oligometastatic prostate cancer (TERPS) trial
- 1 patient at Capital Regional on **NRG GU013**: The phase III 'High Five Trial' five fraction radiation for high-risk prostate cancer
- 1 patient at UMMC on **NRG CC009**: Phase III trial of stereotactic radiosurgery (SRS) versus hippocampal-avoidant whole brain radiotherapy (HA-WBRT) for 10 or fewer brain metastases from small cell lung cancer
- 1 patient at UMMC on **NRG BN012**: A randomized phase III trial of pre-operative compared to post-operative stereotactic radiosurgery in patients with resectable brain metastases
- 2 patients at UMMC on **GCC 2494**: Practical clinical interventions to help improve cancer care for patients who live in food priority areas (FPAs) or food deserts
- 1 patient at MPTC on **GCC 2032**: Feasibility of strength training with androgen deprivation and proton therapy for high-risk prostate cancer

Grants and Contracts

Funded:

- **Erika Davies, PhD**, PD/PI, from the Biomedical Advanced Research & Development Authority (BARDA; 75A50122D00016/75A50123F61001. RADNUC 2201; exercise of option period) for “Repeat performance verification of ILP in an established ARS model” (\$3,909,795; Sept 2025–Sept 2026).
- **Erika Davies, PhD**, PD/PI, for a Research Services Agreement with the University of Zürich for “Experiment 1: A pharmacokinetic (PK) study looking at the role of haptoglobin-CD163 scavenger system in iron metabolism, iron recycling, and erythropoiesis in vivo” (\$31,195; Sept 2025–Mar 2026).
- **Erika Davies, PhD**, PD/PI, for a Research Services Agreement with the University of Zürich for “Experiment 2: A pilot study to evaluate the kinetics of hemoglobin-haptoglobin (Hb-Hp) complexes in vivo” (\$20,902; Sept 2025–Mar 2026).

Submitted: none

Articles Published

Entered into PubMed September 11 through October 8. Titles link to PubMed abstracts.

1. **Keepers Z**, Sharma A, Roy S, Ryan H, **Bhandary B**, Ren L, **Lamichhane N**, **Shukla HD**. [Mouse pancreatic tumor organoids reveal synergistic efficacy of low-dose anticancer drug and radiation combinations](#). *Front Med (Lausanne)*. 2025 Sep 16;12:1661521.
2. **Lang Y**, Buller J, Xu Y, Sun L, Jiang Z, Xiang S, **Ren L**. [3D electroacoustic tomography image enhancement using deep learning with the SAM-Med3D encoder](#). *Phys Med Biol*. 2025 Sep 25;70(19).
3. Liang X, Pan L, Nevo E, **Soomro MH**, Roys S, Gullapalli R, **Sawant A**, Ernst T, Zhuo J. [Capturing breathing variability using surface tracking-assisted time-resolved multi-cycle 4D lung MRI](#). *Phys Med Biol*. 2025 Oct 2. Online ahead of print.
4. Marks LB, Andratschke N, Yom SS, Paradis KC, Mayo CS, Yorke ED, Jackson A, **Bentzen SM**, Appelt AL, Vasquez Osorio E, Dawson LA. [Addressing clinical challenges of reirradiation: A continuum of evolving options](#). *Int J Radiat Oncol Biol Phys*. 2025 Nov 1;123(3):617–622.
5. Suter P, Van der Eecken K, Song Y, Shetty AC, Davicioni E, Proudfoot JA, Hakansson A, English K, Wang J, Guler OC, **Bazyar S**, Verbeke S, Van Dorpe J, Fonteyne V, De Laere B, Hathout L, Ennis R, Jabbour SK, Saraiya B, Stephenson R, Mayer T, **Mishra M**, **Rana Z**, **Molitoris J**, Kiess A, Song DY, DeWeese T, Pienta KJ, **Tran PT**, Berlin A, Onal C, Ost P, Deek MP. [Genomic predictors of response to metastasis-directed therapy with or without androgen deprivation therapy](#). *Eur Urol Oncol*. 2025 Sep 20:S2588-9311(25)00199-3. Online ahead of print.
6. **Tran PT**, Wang JH, Tang C, Kiess AP. [Reply to: Revisiting radium-223 in oligometastatic castration-sensitive prostate cancer: RAVENS trial insights](#). *J Clin Oncol*. 2025 Oct 3:JCO2501855. Online ahead of print.

Important Dates for Upcoming Funding Submissions

Below is an updated calendar for remaining **Cycle III NIH Submission Deadlines for 2025**, with firm due dates for major standard NIH deadlines (RFA/PA dates may differ). Contact the Department Office of Research Administration (msegers@som.umaryland.edu) ASAP if you plan to submit a proposal, regardless of funder.

NIH deadline ⁴	DORA deadline ¹	ORA deadline ²	SPA deadline ³
*R21 Oct 16 (new)	10/03/2025	10/07/2025	10/09/2025
R01/U01 Nov 5 (resub)	10/23/2025	10/27/2025	10/29/2025
*R21 Nov 16 (resub)	11/04/2025	11/06/2025	11/10/2025

¹DORA deadline: All forms to be included in proposal, known or in draft, budget final, subcontractor budgets and information final in final form, 9 business day prior to NIH deadline. ²ORA deadline: Personnel, effort, budget materials, performance site, and compliance forms routed in final form, 7 business days prior to NIH deadline. ³SPA deadline: All proposal materials routed in FINAL form by 5 pm, 5 business days prior to NIH deadline. No more corrections allowed, unless indicated after review by SPA. *R21 deadline is also for R03, R33, R21/R33, R34, R36, U34, UH2, UH3, and UH2/UH3 submissions.