

# Department of Radiation Oncology

## Monthly Research Update: June 2025

### JUNE AT A GLANCE TOTALS

#### Clinical trials

Total enrolled	34
GCC, other	9
NRG, co-ops	2
PCG, other registries	23

#### Grants and contracts

New awards	0
Submitted	4

Articles published	4
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## New NIH Strategic Plan for Data Science

On July 1, NIH published the [2025-2030 Strategic Plan for Data Science](#), outlining key goals intended to encourage greater integration of data science to improve access to and use of biomedical and behavioral data. NIH indicates that these efforts will increase the scientific community's ability to address new challenges in accessing, managing, analyzing, integrating, and reusing the large amounts of data generated by the biomedical research enterprise. Highlights of the plan include: increased support for the NIH Data Management and Sharing Policy, with new tools and processes planned; new suggested methods for collecting informed consent when combining data from multiple sources; enhanced support for community-developed software tools with better visualization capabilities; progress toward a federated data ecosystem where researchers can more easily connect disparate datasets across platforms; and increased data science training opportunities. In a related [blog](#), Susan Gregurick, PhD, NIH Associate Director of Data Science, said "This strategic plan builds on significant progress made since the [first Data Science Strategic Plan](#), with a renewed focus on partnership, capacity-building, and responsible innovation. As the research landscape evolves with unprecedented speed, NIH is working to ensure these powerful data tools and technologies benefit all Americans through more comprehensive scientific discoveries."

## Clinical Trial Enrollment

- 21 patients at MPTC on the **Proton Collaborative Group Registry**
- 2 patients at MPTC on the **Deep Thermal Therapy HUD**
- 1 patient at UMMC on **GCC 2384**: Evaluation of improved onboard patient imaging with the HyperSight platform on TrueBeam 4.1
- 2 patients at UMMC on **GCC 2380**: A single-arm phase I-II trial evaluating selective adjuvant therapy for HPV-mediated oropharynx SCCs based on residual circulating tumor DNA (ctDNA) levels (SAVAL)
- 1 patient at UMMC on **NRG BN013**: Phase III trial of single-fraction stereotactic radiosurgery (SRS) versus fractionated SRS (FSRS) for intact brain metastases
- 1 patient at MPTC on **GCC 19140**: Pilot study of laser interstitial thermal therapy followed by hypofractionated radiation therapy for recurrent high-grade gliomas
- 1 patient at UMMC on **GCC 1926**: A phase I dose escalation study of single-fraction pre-operative partial breast S-PBI for early-stage breast cancer
- 1 patient at UMMC on **GCC21136**: 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 UMMC on **GCC 23100**: A randomized trial of high-risk metachronous oligometastatic prostate cancer with high-risk mutations treated with metastasis-directed therapy and niraparib/abiraterone acetate and prednisone (KNIGHTS)
- 1 patient at MPTC on **GCC 20138**: Laser interstitial thermal therapy followed by hypofractionated radiation therapy for treatment of newly diagnosed high-grade gliomas
- 1 patient at UCH on **GCC 2497**: A phase 1 single-arm single-institution study evaluating neoadjuvant chemoimmunotherapy with immuno-sensitizing radiation for borderline resectable non-small cell lung cancer (NeoRADjuvant Trial)
- 1 patient at BWMC on **NRG BR007**: A phase III clinical trial evaluating de-escalation of breast radiation for conservative treatment of stage I, hormone sensitive, HER-2 negative oncotype recurrence score  $\leq 18$  breast cancer

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)

### Grants and Contracts

#### Submitted:

- **France Carrier, PhD**, PI, to NIH PAR-24-265: Shared Instrumentation Grant (SIG) Program for “X-RAD 320 with OptiMax” (\$418,255).
- **Hem Shukla, PhD**, PI, to the American Cancer Society Research Scholars Grant for “Patients-derived pancreatic cancer organoids as a personalized clinical model to understand therapy resistance” (\$917,104).
- **Hem Shukla, PhD**, PI, to the Focused Ultrasound Foundation Preclinical Program for “Investigate impact of focused ultrasound targeted hyperthermia in OX40 immunotherapy response modulation in pancreatic cancer in orthotopic mouse model” (\$75,860).
- **Lei Ren, PhD**, MPI, resubmission with SUNY Upstate Medical Center to NIH PA-25-301: Research Project Grant (R01) for “Advancing precision oncology in lung cancer with AI-powered multimodal clinical decision making” (\$1,252,415).

### Articles Published

Entered into PubMed June 11–July 9. Titles link to PubMed abstracts.

1. Ferris MJ, Mossahebi S, Jatczak J, Molitoris JK, Rana ZH, Steacy KJ, Regine WF, Yi BY. [Bulky non-small cell lung cancer treated with two-field robust proton lattice boost followed by conventional chemoradiation.](#) *Clin Transl Radiat Oncol.* 2025 Jun 1;53:100987. eCollection 2025 Jul.
2. Prabhu RS, Russek R, Vaslow ZK, Matsui JK, Haghighi N, Dan T, Mishra MV, Murphy ES, Boyles S, Perlow HK, Palmer JD, Udovicich C, Patel TR, Wardak Z, Woodworth GF, Ksendzovsky A, Yang K, Chao ST, Asher AL, Burri SH. [Standard dose versus reduced dose single fraction preoperative radiosurgery for resected brain metastases \(PROPS-BM\) international multicenter cohort study.](#) *Adv Radiat Oncol.* 2025 Apr 19;10(7):101794. eCollection 2025 Jul.
3. Salinas CS, Magudia K, Sangal A, Ren L, Segars PW. [In-silico CT simulations of deep learning generated heterogeneous phantoms.](#) *Biomed Phys Eng Express.* 2025 Jun 30. Online ahead of print.
4. Taliaferro LP, Brenner DJ, Amundson SA, Garty G, Zhang Y, Davies EW, Carrier F, Ross JR, Cline JM, Chao NJ. [Centers for Medical Countermeasures Against Radiation Consortium: Past, present, and beyond.](#) *Radiat Res.* 2025 Jun 27. 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](mailto:msegers@som.umaryland.edu)) ASAP if you plan to submit a funding proposal, regardless of funder.

NIH deadline <sup>4</sup>	DORA deadline <sup>1</sup>	ORA deadline <sup>2</sup>	SPA deadline <sup>3</sup>
R01/U01 Oct 5 (New)	09/23/2025	09/25/2025	09/27/2025
R21* Oct 16 (New)	010/03/2025	10/07/2025	10/09/2025

<sup>1</sup>**DORA deadline:** All forms to be included in proposal, known or in draft, budget final, subcontractor budgets and information final in final form, 9 business days prior to NIH deadline. <sup>2</sup>**ORA deadline:** Personnel, effort, budget materials, performance site, and compliance forms routed in final form, 7 business days prior to NIH deadline. <sup>3</sup>**SPA 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.

### Security Training for All PIs, Key Personnel

On July 7, the UMB Office of Research Affairs announced required security training for all key personnel at the UMSOM engaged in federally supported R&D. This training is required of all PIs who receive or apply for federal R&D funding, whether directly or via a pass-through entity, and all senior/key personnel involved in the development or execution of federally supported R&D, whether directly or via a pass-through entity. The 80-min online training covers international collaborations, disclosure requirements, foreign travel, and cybersecurity. Completion satisfies requirements for most federal agencies. Some federal agencies or sensitive research topics may require more in-depth training, per specific funding agencies. PIs and senior/key personnel who have received a federal R&D award or submitted a proposal to a federal agency (as direct or subaward) in the past 12 mo must complete training by **August 31, 2025**. PIs and senior/key personnel who expect to receive a federal R&D award or plan to submit a proposal to a federal agency (as direct or subaward) must complete training by **September 15, 2025**. The training modules are available at: [UMB Research Security training via Percipio](#).