

Department of Radiation Oncology

Monthly Research Update: April 2026

Identifying NIH Areas of Research Interest

APRIL AT A GLANCE TOTALS

Clinical trials

| | |
|-----------------------|----|
| Total enrolled | 26 |
| GCC, other | 5 |
| NRG, co-ops | 8 |
| PCG, other registries | 13 |

Grants and contracts

| | |
|------------|---|
| New awards | 0 |
| Submitted | 1 |

Articles published

9

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.

When planning future investigator-initiated research, consider reviewing the [NIH centralized list of highlighted topics](#). Each topic represents a current research priority area within 1 or more NIH institutes, centers, or offices (ICOs) that may have or be planning dedicated funding. This list is useful for both long- and near-term research support planning. Each of the highlighted areas covers a broad range of potential scientific foci, including basic, translational, and clinical studies. Careful consideration of the ways in which these topics are of interest to each ICO (for example, the National Cancer Institute) allows researchers to tailor proposed investigations to NIH funding goals. NIH suggests that the list is also useful to investigators who can reach out early to the appropriate scientific contacts to discuss how research ideas may align with the topics and appropriate parent funding opportunities. The list is regularly updated, and investigators can [subscribe](#) for email alerts as new topics are added. More information is available in the [Highlighted Topics FAQs](#) and in a [December 2025 NIH Extramural Nexus article](#).

An important reminder: The process of submitting a proposal for extramural funding is governed by a complex set of departmental, institutional, federal, and legal requirements. Experienced staff is in place in our department, the UM SOM, and UMB to guide faculty and others through this process. **No one in our department may submit or participate in a proposal for external funding (from federal, private, industry sources, or through academic partnerships) without first notifying our Department Office of Research Administration**, who will provide this guidance. The resources allocated in such proposals (including faculty and staff time) are the property of the university and cannot be independently committed in submissions from individuals. If you are planning a funding submission or collaboration, notify [Miek Segers](#) as early as possible to ensure compliance with deadlines (see p. 2).

Clinical Trial Enrollment

- 13 patients at MPTC on the **Proton Collaborative Group Registry**
- 1 patient at MPTC, 1 at BWMC, and 1 at Shore on **NRG GU013**: The phase III 'High Five Trial' five fraction radiation for high-risk prostate cancer
- 1 patient 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)
- 3 patients at UMMC on **GCC 2422**: Phase I feasibility and pilot RCT of serious illness conversation guide in patient and intimate partner dyads living with advanced lung cancer
- 2 patients at MPTC and 1 at UCH on **GCC 2563/PCG BRE009**: Phase III randomized trial of conventionally fractionated vs. hypo fractionated comprehensive nodal irradiation for breast cancer using pencil beam scanning protons therapy (COMPRO)
- 1 patient at MPTC on **GCC 2431**: A pilot study of systemic immune-based therapy combined with hyperthermia and spatially fractionated radiotherapy in advanced biliary tract cancer and hepatocellular carcinoma
- 1 patient at Cap Region and 1 at UCH on **CCTG MA.39**: A randomized trial of regional radiotherapy in biomarker low-risk node positive and T3N0 breast cancer

Grants and Contracts

Submitted:

- **Erika Davies, PhD.** Maryland Industrial Partnerships (MIPS), for a collaboration with Youth Biotech, LLC, on “XEPC in vivo potency assay” (\$89,664).

Articles Published

Entered into PubMed April 9 through May 5. Titles link to PubMed abstracts.

1. Cammin J, Manuel E, Chen S, Rana Z, Ferris MJ. Stereotactic body radiotherapy to the left lung in right lateral decubitus: A challenging case report. *J Appl Clin Med Phys.* 2026 May;27(5):e70564.
2. De Lazzari M, Dobsicek Trefna H, Carrapiço-Seabra C, Granton PV, Curto S, Rodrigues D. Quality assurance phantoms for deep hyperthermia devices: design principles informed by computational modeling. *Phys Med Biol.* 2026 Apr 30. Online ahead of print.
3. Deng W, Han D, Byrne KE, Bhandary B, Jiang K, Poirier YP, Mossahebi S, Xu J, Shukla H, Sawant A. Enable preclinical, high-precision image-guided radiotherapy research with a stand-alone small animal IGRT system. *Med Phys.* 2026 Apr;53(4):e70426.
4. Díaz-Comeche A, Oliver S, Juste B, Jardin D, Zakhary M, Mossahebi S, Mille MM, Lee C, Miró R, Verdú G, Morató S. Monte Carlo simulation and unfolding of an extended Bonner sphere system for secondary neutron spectrometry in proton therapy facilities using conventional BSS experimental data. *Front Oncol.* 2026 Apr 13;16:1789835.
5. Einstein DJ, Chen RC, Hoffman KE, Madan RA, Marvaso G, Tang C, Tran PT, Yu JB, Regan MM. Treatment-free survival: A novel endpoint in trials of stereotactic body radiation with or without systemic therapy. *Int J Radiat Oncol Biol Phys.* 2026 May 1;125(1):40-43.
6. Huang K, Wang K, Schrum A, Kusmaul E, Fisler E, Guerrero M. Development and clinical deployment of an automated planning tool for prostate only and male whole pelvis plans based on multi-criteria optimization. *J Appl Clin Med Phys.* 2026 May;27(5):e70598.
7. Lee C, Mille MM, Griffin KT, Rigsby C, Popescu A, Gopalakrishnan M, Leisenring W, Peterson S, Dome JS, Laurie F, Fitzgerald TJ, Bentzen S, Jung JW, Lee C, Kalapurakal JA. Estimation of detailed cardiac doses for pediatric radiotherapy patients in National Wilms Tumor Study. *Int J Radiat Oncol Biol Phys.* 2026 Apr 15:S0360-3016(26)00570-5. Online ahead of print.
8. Patel KR, Pugh SL, Simko JP, Zietman A, Fiorentino M, D'Souza DP, Rosenthal S, Currey A, Dicker A, Stish BJ, Horwitz EM, Robin TP, Dominello M, Peters C, Choi K, Efstathiou JA, Narayan S, Grass GD, Rana ZH, Tran PT, Loda M, Nguyen PL. the association of p27 with prostate cancer outcomes: A secondary analysis of NRG/RTOG 8610 and 9202. *Adv Radiat Oncol.* 2026 Mar 10;11(5):102022. eCollection 2026 May.
9. Zakhary MJ, Redell D, Alicia D, Jatczak J, Biswal NC, Mossahebi S, Sun K, Bark R, Molitoris JK, Yi B. Nominal plan robustness may predict plan degradation in proton therapy for oropharyngeal head-and-neck cancer. *J Appl Clin Med Phys.* 2026 May;27(5):e70585.

Important Dates for Upcoming Funding Submissions

Below is an updated calendar for **near-term NIH Submission Deadlines for 2026**, 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 |
|---------------------------|----------------------------|---------------------------|---------------------------|
| R01 June 5 (new) | 05/22/2026 | 05/27/2026 | 05/29/2026 |
| *R21 June 16 (new) | 06/03/2026 | 06/05/2026 | 06/09/2026 |
| R01 July 6 (Resub) | 06/23/2026 | 06/25/2026 | 06/29/2026 |
| *R21 July 16 (Resub) | 07/03/2026 | 07/07/2026 | 07/09/2026 |

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.