University of Maryland
Marlene & Stewart Greenebaum Comprehensive Cancer Center (UMGCCC)
FY26 Pilot Grant Program
Applications due August 4, 2025

Types of Awards Available

1. **Payline Program Awards**
2. **Multi-Year Collaborative Program Award**
3. **Translational Research Award**
4. **Shared Resource & Research Infrastructure Development**
5. **Community Informed Research Award**
6. **CRTEC NIH Support Award**
7. **CRTEC Trainee Travel Award**
8. **Fellowship Research Award**
9. **Career Development in Target Discovery & Validation Pilot Award**

As an NCI designated comprehensive cancer center, UMGCCC adheres to programmatic, financial, and scientific guidelines developed by the NCI. Beyond ongoing support of a very strong Community Outreach & Engagement program, UMGCCC also encourages Pilot Grant applications which will demonstrate our commitment to expansion and collaboration within the community, the catchment area , and the Cancer Center Network with our affiliate hospitals, especially for pragmatic clinical trials. Applications will be accepted from eligible Program in Oncology (PIO) members to any of the Award programs listed below provided their PIO membership is in good standing.

1. Payline Program Awards:
Applications will be accepted from PIO members in good standing who have submitted research applications to cancer-related funding agencies (e.g., NCI, ACS, VA) that were rejected but scored well following peer-review, as reflected by both the score and review comments. The purpose of this award is to provide funding to support additional pilots, data analysis or experimentation requested during peer-review that will ultimately support resubmission and funding of the application. Priority will be given to NCI applications. Applicants must provide the peer review score and the review comments as part of the justification request for pilot funding. Program Leaders will prioritize applications, and final funding decisions will be made by UMGCCC Leadership. Inter-programmatic collaborations are strongly encouraged. The number of final awards will depend on the size and scope of the proposals. The awards will not exceed $50,000. When appropriate, at least 25% of the proposed budget must be devoted to the use of UMGCCC Shared Resources. Applicants that choose not to use a Shared Resource must include adequate scientific justification. The Shared Resource portion of the budget will be administered by the UMGCCC Shared Resources staff. UMGCCC Research Program Leaders are not eligible to be PIs on this category of award – they may be named as co-investigators. Full instructions and review criteria for this application are provided at the end of this RFA.

2. Multi-Year Collaborative Program Awards:
Program Leaders are required to endorse the application that is most likely to form the basis for a multi-PI R01, U01, P01, SPORE or other similar cancer-based NIH/NCI application, and for determining the likelihood of a successful NIH application. Specific plans must be included that promote collaborative research among the PIs, including any ongoing/current collaborations, plans for joint lab meetings, and co-authored publications. A clear plan for how the successful completion of the proposed studies will set the foundation for submitting a viable grant, when the grant is expected to be submitted, and which funding opportunity the grant(s) will be submitted to is required. Inter-programmatic collaborations are strongly encouraged. Final funding decisions will be made by UMGCCC Leadership. Applications that address recent NCI announcements will receive priority.
The number of final awards will depend on the size and scope of the proposals. We note that UMGCCC has new strategic interests to **increase research programs in cancer genomics, cancer data science, immunoengineering and convergence science for technology development.** New awards will support

multidisciplinary research in these domains, seeking team-science to advance applications to target discovery, cancer etiology and progression, biomarker discovery, novel correlative technologies, etc. The maximum award will be $150,000 for the first award period (not to exceed 18 months) with renewal dependent upon progress. Renewal beyond one year will require an identified team, a grant mechanism, and a submission date. At least 25% of the proposed budget must be devoted to the use of UMGCCC Shared Resources. Applicants that choose not to use a Shared Resource must include adequate scientific justification. The Shared Resources portion of the budget will be administered by the UMGCCC Shared Resources staff. UMGCCC will provide the administrative support required to assist in arranging meetings and supporting required logistical infrastructure needs, all of which should be outlined in the application. Full instructions and review criteria for this application are provided at the end of this RFA.

3. Translational Research Award

Applications will be accepted from PIO members that facilitate the transition of UMGCCC-developed discoveries and treatments from the lab to the proof-of-concept stage, or to clinical trials. Recognizing the unique nature of this type of support, there are no specific budgetary limits, and the timeline for approval and implementation is flexible. Applications that propose pragmatic clinical trials are encouraged as well. Clinical trial support, including all Regulatory Resources and biostatistics, must be provided by the UMGCCC Clinical Research Office. The CRO should be consulted *in advance* in order to confirm coverage analysis, allowability, and effort/resources. All proposed clinical trial awards are subject to UMGCCC Feasibility and CRC Committee review and other institutional reviews. UMGCCC will provide the administrative support required to assist in arranging meetings and supporting required logistical infrastructure needs, all of which should be outlined in the application.

Applications that propose new staffing should be fully justified and should include a rationale for that support. *New staffing requests will be assigned to existing UMGCCC units.* When appropriate, applications must also include the use of UMGCCC Shared Resources laboratories. UMGCCC Research Program Leaders can serve as co-investigators or MPIs but must include other non-leader PIs to foster collaboration between programs or research/clinical modalities. This mechanism requires an MPI structure with co-leaders that span two different research programs or different research areas, e.g., basic, clinical and population science. Full instructions and review criteria for this application are provided at the end of this RFA.

4. Shared Resource and Research Infrastructure Development Award

Applications will be accepted from Program in Oncology members that propose new support for existing UMGCCC-supported Shared Resources or the development of a new service within a UMGCCC cancer relevant Shared Resource or development of a new Shared Resource. Applications are encouraged that will enhance population science - or clinical research-based support infrastructure that will provide a clear benefit to UMGCCC investigators such as new or unique resources.

Applications for expanded Shared Resources, or new Shared Resources, should discuss the benefits and provide a quantitative justification that will support new cancer research or support. Applications that propose infrastructure improvements should be fully justified and should include a rationale for that support. Applicants are encouraged to expand state of the art research capabilities and access to the shared resources, including but not limited to structural biology, high-dimensional single-cell and spatial immune profiling, data infrastructure, and analysis pipelines. Efforts to automate or streamline these capabilities are encouraged, as are cost reimbursement/revenue generating models. New Shared Resources will be overseen and supervised by the existing UMGCCC Shared Resource infrastructure. Applications are encouraged to defray the cost for developing new research aims that exploit the state-of-the-art capabilities of our Shared Resources, and when appropriate, share data within emerging data infrastructure developing in the UMGCCC Shared Resource.

Recognizing the unique nature of this type of support, there are no specific budgetary limits. Applications for large or unique pieces of equipment will be considered only if other sources of support (e.g., an NIH S10) have been previously submitted and scored. Awards must be used during FY26. Full instructions and review criteria for this application are provided at the end of this RFA.

5. Community-Informed Research Award

NCI-designated cancer centers are expected to demonstrate the relevance of their cancer research to their local catchment area. While COE often has a natural linkage to some Population Science research, the connection between COE, the Cancer Network and basic and clinical research Programs is still nascent. NCI-designated Cancer Centers are evaluated on the extent to which ALL research Programs incorporate COE. Centers are expected to show specific ways in which engagement with community members in the catchment area has informed or shaped the research conducted in the Programs.

An example of COE bidirectional research influence could include a new grant proposal or other similar research activity in which the area of study, specific aims, research methods, dissemination plan or other aspect was directly informed by interaction with community member(s) or specific catchment area data. Other examples could include a secondary analysis of study data that was informed by community input, or a peer-reviewed manuscript in which community input influenced the way that study findings were interpreted or otherwise disseminated. This bidirectional relationship between communities and Cancer Centers promotes an understanding of cancer that is more holistic (bench-to-bedside-to-community), transdisciplinary, encompassing of different views and experiences, culturally sensitive, and reflective of mutual goals.

This funding opportunity is designed to foster integration of COE into one or more UMGCCC Research Programs including the Cancer Network. We invite applications led by a UMGCCC member in Cancer Therapeutics, Tumor Immunology and Immuno-engineering, or Cancer Biology. Population Science members are not eligible to apply unless the Principal Investigator's research to date has not demonstrated community-engagement aspect. UMGCCC Research Program Leaders are not eligible to be PIs on this category of award – they may be named as co-investigators.

Expectations

Applicants should propose a process to incorporate patient or community member input into the proposed research. This can include plans for communication/discourse with community members (e.g., meetings, interviews, surveys, clinical observations) or other methods as appropriate. Applications should specify the target community member(s) or partner(s) to be involved, how they will be involved, and should speculate on ways in which community involvement may inform the proposed research. Applications should have a clear endpoint deliverable such as a new grant application, peer-reviewed manuscript, or other research product that would be submitted subsequently because of this pilot research. Applicants are encouraged to use the pilot data as the basis for an NCI grant application within 12 months of pilot study completion. Because community-engagement is a time-intensive investment, applications should allow fiscal support for the study team, community partner(s), and supportive staff if appropriate. *Applicants are encouraged to contact the UMGCCC Office of Community Outreach and Engagement for support or technical assistance with application development (cholt14@umd.edu, Cheryl L. Knott, UMGCCC Associate Director for COE).*

One year of support will be provided with a budget of up to $50,000. Up to two awards are expected to be made. Renewal for a second year is dependent upon progress. Full instructions and review criteria for this application are provided at the end of this RFA.

6. Cancer Research Training & Education Coordination (CRTEC) NIH Support Award

Available to trainees and junior faculty working with PIO members. A maximum of $10K funding (support for 1 year) for research-related expenses of innovative cancer-focused research projects that have a high likelihood of leading to NIH F/K or R funding or other extramural support. Eligible applicants include - Pre-Doctoral Students (PhD, MD, MD/PhD); Post-Doctoral Trainees (PhD); Junior Faculty (Instructor or Assistant Professor); Research Associates; MD Residents; and Research Fellows. Projects must use a portion of the budget in UMGCCC Shared Resources and must include a detailed and specific plan for submitting a subsequent F-, K-, or R-series or similar grant application. Full instructions for this application are provided at the end of this RFA.

7.CRTEC Trainee Travel Awards (Ongoing Opportunity)

Trainee Travel Awards up to $1,000 each, towards the cost of attending and presenting UMGCCC cancer research at a national or local meeting. Eligible: Pre-Doctoral Students (PhD, MD, MD/PhD); Post-Doctoral Trainees (MD & PhD); Junior Faculty (Instructor or Assistant Professor); Research Associates; Residents; and Research Fellows. Trainees must provide a copy of an abstract or publication, a copy of conference

registration materials with fees and estimated travel costs. Awards will be competitively determined and based on funding availability. Full instructions for this application are provided at the end of this RFA.

8. Fellowship Research Award:

Awards are open to trainees in various oncology disciplines (hematology, medical oncology, radiation oncology, surgical oncology, and pathology) who are within the last 2 years of training completion. The goal of the project will be to publish an abstract, author a paper or navigate the steps required to initiate an Investigator Initiated Trial. Distinct research projects may also be proposed. Projects may be proposed in Outcomes Research, Cancer Equity Research, or Translational Research. Translational projects should include collaborations with current M.D. or Ph.D. UMGCCC faculty. Progress will be monitored by each Fellow's Mentorship Research Committee. Infrastructure to support the project (clinical research staff support, biostatistics, etc.) will be provided by UMGCCC.

Projects may span two years with funding for the second dependent upon progress during the first year. Annual awards of $7,500 will be made. Full instructions for this application are provided at the end of this RFA.

9.Career Development in Target Discovery and Validation Pilot Award (CDPA)

This award is open to trainees (graduate students, postdoctoral fellows, and/or others) and Early-Stage Investigator (as defined by the NIH) seeking a career development opportunity in cancer therapeutic development. Awards (up to $10,000) will be granted for early-stage, lead identification and/or target validation via a partnership between the Center for Biomolecular Therapeutics (CBT) and the University of Maryland Greenebaum Comprehensive Cancer Center (UMGCCC). Projects involving structure (NMR, cryoEM, X-ray) and computer-aided drug design (CADD), protein engineering/biophysics (PEB), target validation and/or screening (TVS) studies, in vivo biology & drug testing (IVBDT) and/or some other feasible research tasks towards advancing therapeutic development are welcome.
Examples of research activities funded can include but are not limited to:

- Developing a high throughput drug screening (HTS) assay
- Exploratory drug screen
- Structural and/or biophysical studies of a drug target
- Computer aided drug design
- In vivo testing of a lead compound(s)
- Other well-defined drug development deliverable(s) or research activities

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Review Criteria UMGCCC FY26 Pilot Awards:

- Significance – Does the research address an important cancer related scientific question and support the mission of the UMGCCC? Will support lead to a multi-PI, U01, P01, SPORE or similar applications for external funding? Will it lead to peer-reviewed publications?
- Does the proposed project address one or more of key determinants of cancer outcomes relevant to UMGCCCC catchment area including cancer biology, prevalence and incidence, prevention, treatments, care access, geography, outcomes, and survivorship relevant to specific communities?
- Approach – Are the design and methods appropriate, and can the research be completed within the proposed period?
- Innovation – Are scientific questions and/or approaches novel?
- Investigators – Are the researchers qualified, and does the team include one or more collaborations among PIO research programs?
- Environment – Is the environment supportive and are UMGCCC Shared Resources used?

All Applications - Application Components:

Unless specifically stated, title page (including names of key personnel, project title, PIO program(s) affiliated and Shared Resources used), 5 page maximum single spaced, excluding references, budget, budget justification and biosketches.

Applications will be accepted from Program in Oncology members/trainees/Fellows only.

- Title
- PIO Program
- Principal Investigator(s)
- Other Key Personnel
- Specific Aims and Hypotheses
- Background and Significance – include rationale, significance, innovation, how results will support an application for external funding
- Scientific Approach – include overall design, participant eligibility, data collection, intervention (if appropriate), data analysis plan, statistical power/sample size justification, strengths, and limitations
- Budget (NIH 398 format) – faculty salary is not allowable
- A current Biosketch, including biosketches for Key Personnel – use NIH style
- Scores and reviewer comments for Payline Program Applications
- References

All Applications - Award Conditions: Applications that span more than one PIO research program are **strongly** encouraged.

The application must demonstrate how funds will be spent by August 31, 2026 unless stated specifically in the RFA.

- Unspent funds **cannot** be carried forward.
- Applicants are responsible for cost overruns.
- Any unallowable expenses will become the responsibility of the recipients.
- F&A costs (indirect costs) will not be provided.
- Reasonable staff salaries will be funded. Faculty salaries **will not** be permitted.
- Funding requests for travel (except Fellowship awards), membership, subscriptions and telecommunications are not permitted.
- Applicants are solely responsible for having appropriate institutional approvals (IRB, IACUC, EHS, etc.) before projects are undertaken.

Career Development in Target Discovery and Validation Pilot Award (CDPA)

In addition to the potential impact of the project, successful applications will have feasible deliverable(s) identified for publication and/or for use in next stage grant proposals, including to the NCI (e.g., PAR-22-216 and PAR-23-264). Like for NIH training grants, non-faculty applicants must have mentors/collaborators with recent (ended within 3 years) or ongoing, federally funded research program(s). The applicant must be an employee of the University of Maryland and highly capable researcher, as judged by their research accomplishments; there is not a Green Card or U.S. citizenship requirement for the applicant to receive a CDPA providing that they are a University System of Maryland employee.

Awardees will be expected to attend bi-weekly meetings at the CBT and serve as the project manager for the tasks and deliverables outlined in the pilot award.

Prior to the applicant and mentor's co-submission of a proposal, a mandatory, preliminary consultation with the CBT, via the GCCC Structural Biology Shared Resource (SBSR), needs to be scheduled with the applicant and mentor. This meeting will be used to evaluate the mentor's project and feasibility of working with the CBT/SBSR to obtain successful outcome(s) from the CDPA.

CDPA Application Process and Components:
I. Consultation – MANDATORY

1. One Slide should be presented by the Applicant. Please use the GCCC/CBT Project Summary Template Slide, and include the following:

i. Overall Project Summary. A figure or cartoon that illustrates the impact of the overall project of the Mentor(s) towards the basic science and/or treatment of cancer. Also include relevant publications and funding for the Mentor. A brief description of how a CDPA can impact the overall project.
ii. Project Team. Provide the mentor, and any other scientists working with the applicant (i.e., the team), who can provide substantive input towards achieving outcomes from the proposed research.
iii. Section of the CBT to manage the GCCC/CBT project with the Applicant. CBT sections include Target Validation and/or high throughput Screening, TVS; Structural Biology, SB; Computer Aided Drug Design CADD; In Vivo Biology and/or Drug Testing, IVBDT; Protein Engineering and Biophysics, PEB; Medicinal Chemistry, MC; Genomics and Bioinformatics, GB (Figure 1).
iv. Additional slides (<10) to communicate the project are welcome but not required.
v. Consultation Outcome: Specific CBT/GCCC deliverables with any section of the CBT and/or GCCC will be thoroughly discussed during the consultation and developed during the consultation for a proposal.

2. Those interested must contact Kristen Varney (kvarney@som.umaryland.edu) to schedule a GCCC/CBT consultation.
3. At the end of the consultation a decision will be made regarding the next steps.

II. CDPA Invited Proposals

1. Applicants who identify feasible deliverable(s) during the consultation will be asked to submit a 1- to 2-page proposal that includes:
   i. Scientific justification of the target selected
   ii. Drug development objectives
   iii. Approach
   iv. Specific deliverables/tasks
   v. Mentor's program affiliation in GCCC
2. Milestone(s) to be achieved from the CDPA should be listed. How achieving such a milestone would enhance publications, patents, and/or impact new or existing external funding in cancer research should be discussed, including specific RFAs the team plans to pursue, if applicable.
3. How the proposal would make use of UMGCCC and/or CBT shared resources should be described.

III. CPDA Award Conditions and Outcome Reporting:

1. Applicant mentors must be active Program in Oncology (PIO) members.
2. Applications that span more than one PIO research program are strongly encouraged.
3. Unspent funds cannot be carried forward without detailed justification and approval.
4. Applicants are responsible for cost overruns.
5. Any expenses deemed unallowable will become the recipient(s)'s responsibility.
6. F&A (indirect) costs will not be provided.
7. Salary is not allowed (faculty or staff).
8. Funding requests for travel, memberships, subscriptions, and telecommunications are not permitted.
9. Applicants are solely responsible for having appropriate institutional approvals (IRB, IACUC, EHS, etc.) before projects are undertaken.
10. Data Presentation: At the completion of tasks/deliverable(s) for the award:
    a. Data will be presented at a CBT Section Leaders Meeting by the applicant with a 10-minute presentation and 5-minute Q&A
    b. Data slides (<6 total slides including Slide 1 from initial consultation)
        i. Slides should present results from the tasks and deliverables completed, methods used, and conclusions obtained from the CDPA award.
        ii. This presentation and the feedback received will serve as the basis for a final CBT progress report.
11. Final Project Report: Project reporting during the award, which includes a final CBT report at its completion, is required and will be achieved with the collaborating members of the CBT.
12. Applicants will be contacted annually by UMGCCC Administration to request updates on pending and awarded grants and publications from success(es) of the CDPA.

IV. **CDPA Questions & Application Due Date**: Questions about the RFA should be addressed to Kristen Varney at KVarney@som.umaryland.edu. Consultations are accepted on a rolling basis until a total of 10 awards have been made, and there is not a standard application deadline for the CDPA.

All Applications - Reporting:
The Cigarette Restitution Fund and the NCI Cancer Center Support Grant, both of which fund this initiative, include strict reporting requirements. Be sure to carefully cite & track publications, research applications, patents, inventions, collaborations, etc. that come to fruition because of this funding as you will be contacted annually by the administration for the collection of this information. A one to two-page final scientific report **will** be required within 90 days of the close of the pilot project.

All Applications – Mandatory Citations:
All efforts resulting from this funding opportunity must include the following citations:

This (article, conference, publication, etc.) was supported by funds through the Maryland Department of Health Cigarette Restitution Fund Program – CH-649-CRF.

This (article, conference, publication, etc.) was supported by funds through the National Cancer Institute – Cancer Center Support Grant (CCSG) – P30CA134274.

Questions & Application Due Date:
Questions about the RFA should be addressed to Bob Mitchell, UMGCCC Associate Director for Administration at x86834 or rmitchell1@umm.edu

The Due Date for all applications is August 4, 2025, at 5pm. Email PDF applications to Sarah Laye, UMGCCC Assistant Director for Administration at slaye@som.umaryland.edu