FY25 Peer Reviewed Cancer Research Program (PRCRP)

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Transforming Healthcare through Innovative and Impactful Research



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Presentation contents

- About CDMRP
- About the PRCRP
 - New Topic Areas
 - New portfolio-based Strategic Goals
 - New Application Requirements
- Funding Mechanisms
- Strategies for Success
 - Understanding DoD funding
 - Application nuts and bolts
 - Two-tier review process
 - General Tips



https://cdmrp.health.mil

About CDMRP



Mission

Responsibly manage collaborative research that discovers, develops, and delivers health care solutions for Service Members, their Families, Veterans and the American public



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Consumers are the "True North" and Foundation of the CDMRP



CDMRP includes consumers – patients, survivors, family members, and/or caregivers in every aspect of the program lifecycle.

Consumers serve as full voting members on peer review and programmatic panels.

Through their lived experiences, consumers add valuable perspectives, a sense of urgency, and important input to the program mission, investment strategy, and research focus.



PROGRAM LIFECYCLE Stakeholder Meeting Vision Setting **Pre-App** Screening Peer Review **Programmatic** Review Funding **Recommendations** Award Execution Participate on research teams for funded projects 19 programs offered funding opportunities that incorporate consumer participation in the **Awards Management/** research project Closeout

FY23 Consumer Involvement

93 consumers* were assigned as **Programmatic Panel members** and ad hoc reviewers representing 91 consumer advocacy organizations, Service Members, or Veterans

854 consumer reviewers** assigned to panels representing **334** consumer advocacy (nominating) organizations



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Goal of the Two-Tier Review Process



To develop funding recommendations that balance *the most meritorious science* and offer the highest promise to *fulfill the programmatic goals* set forth in the funding opportunity



Understanding DOD Funding



Congressional Special Interest (CSI) versus DoD Core funding



- CDMRP's CSI funds are directed by Congress and appropriated through the DoD budget
 - Obligated up-front because there is no guarantee of out-year funding
- DoD Core funds are planned through specific budgeting processes and appropriated yearly in response to the President's DoD budget request
 - Projects can be incrementally funded in out-years

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PRCRP Overview







History: Initiated in Fiscal Year (FY) 2009 with an appropriation of \$16 Million (M) and 4 Topic Areas

- **FY09-FY24:** 35 Unique Topic Areas, \$1.04B, 1,084* Awards
- FY25: \$130M Appropriation, 22 Topic Areas

Vision: To advance the health and mission readiness of members of the U.S. military community affected by cancer.



Mission: To successfully promote high-impact research in cancer prevention, detection, treatment, quality of life, and survivorship for Service Members, their Families, Veterans, and the American public.

* Pending FY24 negotiations

FY25 Congressional Language Peer Reviewed Cancer Research Program, 22 topic areas

- Bladder cancer
- Blood cancer
- Brain cancer
- Colorectal cancer
- Endometrial cancer
- Esophageal cancer
- Germ cell cancers
- Kidney cancer
- Liver cancer
- Lung Cancer
- Lymphoma
- Mesothelioma

- Metastatic cancer
- Myeloma
- Neuroblastoma
- Neuroendocrine tumors
- Pancreatic Cancer
- Pediatric, adolescent and young adult cancers
- Pediatric brain tumors
- Sarcoma
- Stomach cancer
- Thyroid cancer



Applicants must address at least one of the Topic Areas, as directed by Congress

Research must be relevant to Service Members, their Families, Veterans, and other military beneficiaries



Funds may not be used for research into cancers originating in the breast, ovary, or prostate, or for melanoma, or rare cancers except those named topic areas which are rare by definition.

FY25 Congressional Language Military Relevance

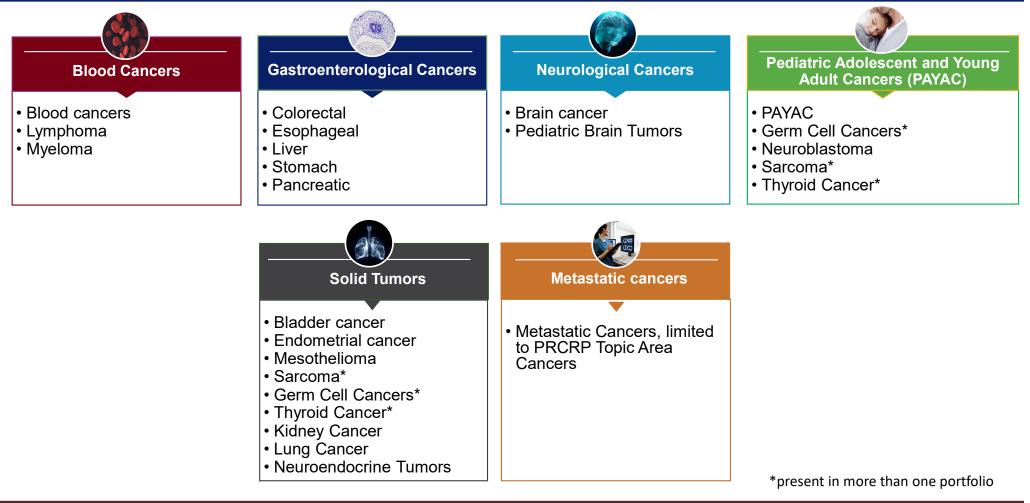


The Committee directs the Assistant Secretary of Defense for Health Affairs to provide a report not later than 12 months after the enactment of this Act to the congressional defense committees on the status of the **peer-reviewed cancer research program**. For each research area, the report shall include the funding amount awarded, the **progress of the research**, and the **relevance of the research to servicemembers and their families**.



FY25 Topic Areas (22) and Portfolios (6) Peer Reviewed Cancer Research Program - \$130M







Topic Areas: Bloo	d, Lymphoma, Myeloma
Strategic Goals:	
Prevention and	Improve risk assessment of pre-cancerous conditions
Etiology	Develop early intervention strategies to prevent initiation disease progression
	 Investigate auto-immune disorders as risk factors for lymphoma to inform surveillance strategies
	Understand the role of cancer stem cells and the tumor micro-environment in the development of blood cancers
Diagnosis and	Improve methods for early detection, prognostic evaluation, and/or therapeutic stratification
Prognosis	Develop more cost-effective molecular diagnostics
Ū	 Identify biomarkers to predict progression from indolent disease
	Identify unique prognostic factors in pediatric, adolescent, and young adult malignancies
Treatment	Develop new, less toxic therapies
	Develop methods to predict therapeutic vulnerabilities
	Develop therapies that don't require hospitalization
	Develop therapies employing gene editing technologies and cell therapies
	Identify contribution of immune niche to initial treatment response and relapse
	Develop therapeutic options for patients who fail last line therapies
Survivorship	Develop strategies to minimize and mitigate treatment toxicities
•	Improve quality of life for survivors and/or caregivers
	• Identify long-term effects of gene editing and cell therapies and develop risk-based standards
	for surveillance of treated patients
	Improve understanding of the effects of long-term immunosuppression
Epidemiology	Design population-based studies to identify and characterize risk factors related to malignancy



Portfolio: Gastroentero	logical Cancers		
	this portfolio must address one Topic Area and one Strategic Goal listed below.		
	I, Esophageal, Liver, Pancreatic, Stomach		
Strategic Goals			
Prevention and Etiology	 Identify modifiable and non-modifiable risk factors to inform prevention strategies Identify factors driving the increasing rates of early-age onset disease Identify environmental and genetic factors associated with an increased cancer risk Identify key drivers of conversion from precancerous lesions into cancer Explore the interplay between the microbiome and infectious agents in cancer initiation and progression 		
	Conduct integrative studies that analyze stool, blood, and the microbiome as they impact disease onset and patient outcomes		
Diagnosis and Prognosis	 Improve methods for early detection, prognostic evaluation, and/or therapeutic stratification Develop cost-effective and minimally invasive tools for early detection Develop pre-clinical models to study disease development 		
Treatment	 Develop new, less toxic therapies Develop effective treatments for advanced disease Develop immunotherapies, and novel targeting therapies Identify combination therapies to improve patient outcomes Identify predictive biomarkers to determine treatment response Develop integrated treatment plans to address short and long-term impacts of cancer 		
Survivorship	Develop strategies to minimize and mitigate treatment toxicities		
Epidemiology	 Design population-based studies to identify and characterize risk factors related to malignancy Implement systems to analyze disease patterns and track patient outcomes to inform best practices Examine the influence of familial genetics and geographic location on disease onset and treatment outcome. 		



Portfolio: Neurolo	gical Cancers			
All applications u	nder this portfolio must address one Topic Area and one Strategic Goal listed below.			
	n Cancer, Pediatric Brain Tumors			
Strategic Goals:				
Prevention and Etiology	 Identify biological and environmental exposures, including maternal exposures during pregnancy, that increase risk 			
Diagnosis and Prognosis	 Develop early detection methods that avoid diagnostic uncertainties Develop effective monitoring for recurrence/refractory disease Develop less invasive diagnostic procedures 			
Treatment	 Develop new, less toxic therapies Prevent or overcome treatment resistance Develop personalized oncological care and synergistic multi-modal therapies Identify protective therapies to be used in conjunction with toxic therapies to reduce treatment-related damage Develop less invasive treatment options Develop therapies that cross the blood-brain-barrier 			
Survivorship	 Develop strategies to minimize and mitigate treatment toxicities Improve quality of life for survivors and/or caregivers Develop effective screening, monitoring, and provision of psychosocial support/care for the patient and family Develop care for patients as they transition from pediatric to adult survivors 			
Epidemiology	Analyze and assess the incidence/prevalence of brain tumors over time to identify changes in trends			
Technology Development	Advance the development or adoption of technologies in areas including artificial intelligence and machine learning, human microbiota, genomics, nanoparticles, and robotics			



Portfolio: Pediatric	Adolescent and Young Adult Cancers (PAYAC)		
	ler this portfolio must address one Topic Area and one Strategic Goal listed below.		
Topic Areas: PAYAC	, Germ cell cancers, Neuroblastoma, Sarcoma*, Thyroid Cancer "		
Strategic Goals:			
Prevention and Etiology	 Determine the molecular basis of cancer pre-disposition syndromes Determine the extent to which development of disease is attributable to genetic versus environmental differences Increase understanding of epigenetic influences on cancer development and progression Identify biological and environmental exposures, including maternal exposures during pregnancy, that increase risk Investigate the role of microbiome composition in cancer risk and outcomes 		
Diagnosis and Prognosis	 Improve methods for early detection, prognostic evaluation, and/or therapeutic stratification Develop pon-invasive techniques for monitoring progression and recurrence 		
Treatment	 Develop new, less toxic therapies Develop treatments for relapse/recurrence, metastatic, and advanced disease Increase the number of clinical trials, including ones that may not be curative but may improve the second secon		
Survivorship	 Develop strategies to minimize and mitigate treatment toxicities Improve quality of life for survivors and/or caregivers Develop strategies to improve the full implementation of survivorship guidelines Develop survivorship guidelines based on current/modern therapeutic agents 		
Epidemiology	 Design population-based studies to identify and characterize risk factors related to malignanc 		



Portfolio: Solid Tumors All applications under this p below.	ortfolio must address one Topic Area and one Strategic Goal listed
-	r, Endometrial Cancer, Kidney Cancer, Lung Cancer, Mesothelioma,
· · · · · · · · · · · · · · · · · · ·	rcoma*, Germ cell cancers, Thyroid cancer*
Strategic Goals: Prevention and Etiology Diagnosis and Prognosis	 Develop methods that mitigate or identify risk Develop prevention strategies Explore the mechanistic relationship between novel and known risk factors and oncogenesis Identify convergent etiologies underlining the development of malignancies Improve methods for early detection, prognostic evaluation, and/or therapeutic stratification Investigate the interactions of pre-existing autoimmune disease and
Treatment	 cancer Develop new, less toxic therapies Develop feasible precision medicine approaches.
	Identify ways to tailor therapeutic strategies to minimize toxicity
Survivorship	 Develop strategies to minimize and mitigate treatment toxicities Improve quality of life for survivors and/or caregivers
Epidemiology • Design population-based studies to identify and characterize factors related to malignancy	



Portfolio: Metastatic Disease			
All applications under this portfolio must address one Topic Area and one Strategic Goal listed below.			
Topic Area: Metastatic Cancers, limited to PRCRP Topic Area Cancers			
Strategic Goals:			
	Identify biomarkers in primary disease that could predict metastatic potential		
	Prevent immune evasion by circulating tumor cells		
Prevention and	Identify how dormant, disseminated tumor cells (DTCs) persist		
Etiology	Identify drivers that initiate DTCs progression to metastatic colonies		
Ellology	Prevent metastatic colonization by maintaining dormancy of DTCs		
	Investigate clonal divergence of primary tumor cells between metastatic sites to		
	immunological disease		
Diagnosis and	Improve early detection of metastasis and dormant residual disease		
Prognosis	Develop biomarkers that predict and monitor treatment efficacy		
	Develop new, less toxic therapies		
	Revert metastatic cells to a dormant state		
Treatment	Identify strategies to prevent or overcome treatment resistance		
Treatment	Investigate abscopal effects of primary disease treatment		
	Determine optimal sequencing of treatments		
	Eliminate chemotherapy-induced metastasis		
Survivorship	Develop strategies to alleviate treatment toxicities		
Survivorsnip	Improve quality of life for survivors and/or caregivers		

Applications submitted under any PRCRP Topic Area, including the Metastatic cancers Topic Area, may not address or include research focused on cancers that originate in the breast, prostate, ovaries, or on melanoma, or rare cancers (excluding relevant subtypes of the FY25 PRCRP Topic Areas) as part of the research study.





When starting the pre-application, applicants will be asked to identify the following:

- The FY25 PRCRP Portfolio addressed by the proposed research.
- The **FY25 PRCRP Strategic Goal** addressed by the proposed research.
- The FY25 PRCRP Topic Area addressed by the proposed research.
- Where applicable, select a secondary FY25 PRCRP topic area, instances such as (not all-inclusive):
 - Applications addressing more than one cancer type should select the two most applicable.
 - Applications addressing a topic area that is the subtype of another topic area (e.g. Lymphoma and Blood Cancers) should select both.
 - Applications addressing a cancer type in PAYA populations, should select both the cancer type and the PAYAC topic area.
 - Applications addressing metastatic disease in a cancer type should select both the metastatic disease and cancer type topic area.
- The FY25 PRCRP Military Health Focus Area addressed by the proposed research.

FY25 PRCRP Funding Mechanisms



FY25 Program Announcements to be released around May 12-16, 2025

	Bench		Bedside	
Funding Opportunity	Idea Award	Impact Award (Partnering Option)	Clinical Trial Award	Career Development Awards (Fellow or Resident Option, Scholar Option)
Investment for FY25	\$16M (25)	\$44M (25)	\$33.6M (7)	\$16M (19)
Funding Rate FY18-23*	13.6%	13.8% +	22.6%	Fellow/Resident 30.5% Scholar, 48.4%

+Impact Award funding rate reflects Single PI Only *Clinical Trial Award limited to FY23-24

FY25 PRCRP Career Development Award, Fellow or Resident Option



Fellow Option

- Direct Costs: \$400K (3 years)
- Eligibility: Early-career scientist within 7 years of terminal degree
- Postdoctoral fellows are not eligible
- Career Guide: Experienced Cancer Researcher, Associate Professor (or equivalent)
- Research Project and Career Development Plan
- Clinical trials are <u>not</u> allowed
- Pre-application is only a Letter of Intent
- Pre-App Deadline: July 12, 2025
- Full App Deadline: July 26, 2025

Resident Options

- Direct Costs:
 - Level 1, \$200K (1 year)
 - Level 2, \$400K (2 years)
- Eligibility: Early-career scientist enrolled in an accredited graduate medical education program with an institutional letter of support
- Postdoctoral fellows are not eligible
- **Career Guide:** Experienced Cancer Physician Scientist, Associate Professor (or equivalent)
- Research Project and Career Development Plan
- Clinical trials are not allowed
- Pre-application is only a Letter of Intent
- Pre-App Deadline: July 12, 2025
- Full App Deadline: July 26, 2025

Application Deadlines subject to Program Announcement release

PRCRP Virtual Cancer Center (VCC)



- Funded through the VCC Director Award and CDA- Scholar Award
- Director and Deputy Director:
 - Cancer research leaders with mentorship and convergent science experience
 - Different cancer disciplines
 - Different institutions
- VCC Cohorts of Scholars are comprised of Career Development Award- Scholar Option
- VCC provides intensive mentoring and national networking in a collaborative research environment
 - Annual Workshops (e.g. Military Medicine, Artificial Intelligence)
 - Virtual Lab Meetings
 - Leadership coaching
 - Networking Interactions, including Patient Advocacy Organizations
 - Subaward funding opportunities for collaborative projects with other Scholars
- Convergent Science Virtual Cancer Center: <u>https://csvcc.org/</u>

FY25 PRCRP VCC Scholars



Career Development Award, Scholar Option

- **Direct Costs:** \$800K (4 years)
- Eligibility:
 - Early-career scientist within 7 years of terminal degree
 - Tenure-track or equivalent position
 - Independent laboratory space
- Career Guide: Experienced Cancer Researcher
- Research Project and Career Development Plan
- Requires participation in the PRCRP Convergent Science
 Virtual Cancer Center
- Clinical trials are <u>not</u> allowed
- Pre-application is only a <u>Letter of Intent</u>
- Pre-App Deadline: July 12, 2025
- Full App Deadline: July 26, 2025

FY25 PRCRP Idea and Impact Awards



Idea Award

- Direct Costs: \$400K (2 Years)
- Eligibility: Faculty or above
- Supports basic research that is innovative, untested, high-risk and potentially high-reward
- Preliminary data is discouraged
- Clinical Trials <u>not</u> allowed
- One-page pre-application followed by <u>invitation to submit</u> full application
- Pre-App Deadline: June 21, 2025
- Invite to Submit: August 2, 2025
- Full App Deadline: September 26, 2025

Impact Award

- Direct Costs: <u>Single PI</u> Option, \$1M
 <u>Partnering PI</u> Option, \$1.25M (3 years)
- Eligibility: Assistant Professor or above
- Supports mature research that has the potential to make a near-term, major impact on cancer patients
- Preliminary data required
- Clinical Trials are allowed
- One-page pre-application followed by invitation to submit full application
- Pre-App Deadline: June 21, 2025
- Invite to Submit: August 2, 2025
- Full App Deadline: September 26, 2025

Application Deadlines subject to Program Announcement release

FY25 Clinical Trial Award



Clinical Trial Award

- Direct Costs: \$3M (4 Years)
- Eligibility: Faculty-level appointment or above
- Supportive preclinical data is required; no animal work allowed
- IND (or equivalent) application must be in place at the time of submission
- Trial expected to be open within the first 12 months
- May evaluate pharmacologic agents (drugs or biologics), devices, clinical guidance, and/or emerging approaches and technologies
- Projects may range from small Phase 0 safety trials to large Phase III efficacy studies
- Three-page pre-application followed by invitation to submit full application
- Pre-App Deadline: June 21, 2025
- Invite to Submit: August 2, 2025
- Full App Deadline: September 26, 2025

Application Deadlines subject to Program Announcement release



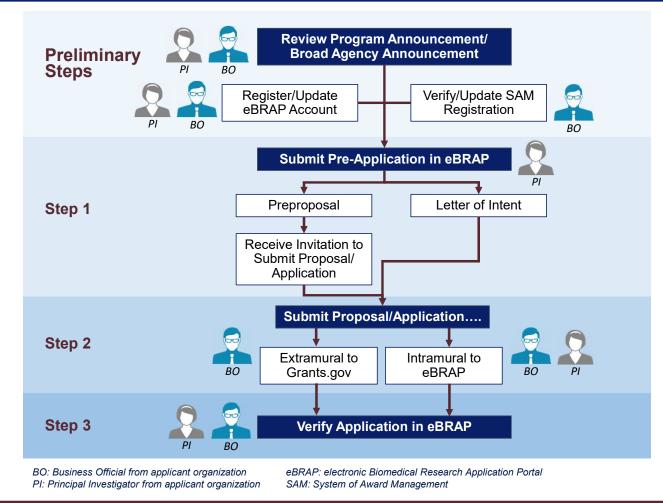
Funding Opportunities

- Pre-announcements and funding opportunity release notifications
 - CDMRP website and email blasts
- Funding opportunity postings
 - CDMRP website (cdmrp.health.mil)
 - Grants.gov (CFDA 12.420)
 - electronic Biomedical Research Application
 Portal (eBRAP) system (ebrap.org)
 - Notification posted on SAM.gov (BAAs)
- Quickly find open CDMRP Funding Opportunities on the CDMRP website here:
 - Home > Funding Opportunities > Program
 Funding Opportunities



Application Process Overview





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Goal of the Two-Tier Review Process



To develop funding recommendations that balance *the most meritorious science* across many disciplines and offer the highest promise to *fulfill the programmatic goals* set forth in the funding opportunity



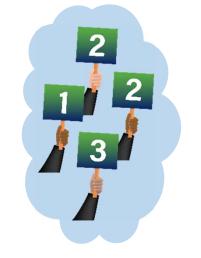
Peer Review Criteria

(PRMRP verbiage example)

II.E.1.a. Peer Review

To determine technical merit, all applications will be evaluated according to the following **scored criteria**, which are listed in decreasing order of importance:

Example Peer Review Criteria			
Scored		Unscored	
Research Str	ategy and Feasibility	Environment	
Impact		Budget	
Transition Plan and Regulatory Strategy		Application Presentation	
Personnel	FY24 PRMRP To	opic Area.	oblem or question in the PI-selected ddresses the PI-selected FY24 PRMRF



- How the proposed research project, if successful, will make important scientific advances in the relevant field of research or advance patient outcomes.
- To what extent the proposed research has potential for impact, both short-term and long-term, on the field of study and/or patient care.



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Programmatic Panel membership lists are available on the **CDMRP** website

(PRMRP verbiage example)

II.E.1.b. Programmatic Review

To make funding recommendations and select the application(s) that, individually or collectively, will best achieve the program objectives, the following criteria are used by programmatic reviewers:

- Ratings and evaluations of the peer reviewers
- Relevance to the priorities of the Defense Health Program and FY24 PRMRP, as evidenced by the following:
 - Adherence to the intent of the funding opportunity 0

Programmatic Review Criteria

- Relative impact 0
- Relevance to the FY24 PRMRP Topic Areas 0
- Relevance to the FY24 PRMRP Strategic Goals 0
- Relevance to military health 0
- Program portfolio composition 0
- Relative outcomes from the PI's previous CDMRP-/PRMRP-funded research (if 0 applicable)



Strategies for Success

Relevance

- Address program-specific goals
- Align the proposed work with specific guidance from the announcement

Impact

- Propose **solutions** to important problems or gaps
- Clearly articulate translatability how will this work make a difference?

Innovation

• Provide clear rationale if proposing to test new, potentially high-risk ideas or use novel approaches

Feasibility

- Justify a technically sound plan with clear approaches for contingencies
- Include evidence of appropriate **expertise** (collaboration, consultants, etc.)
- Ensure the study is **appropriately powered** for the proposed research outcome
- Demonstrate availability and access to critical resources, reagents, and/or subject populations



Strategies for Success

✓ Planning/Timelines

- Include and allow adequate time in project plan for regulatory approvals if required
- For multi-organizational efforts, show a clear plan for **coordination** and communication
- For DOD collaborations, understand rules and plan for differences in funding process

🗸 Grantsmanship

- Explain the proposed work with **clarity** and **unburdened** by jargon
- Understand the different audiences of the peer and programmatic reviews and communicate effectively
- **Review** application documents carefully before submission enlist experienced colleagues to help
- Don't break the rules for deadlines or requirements be compliant



Questions? For more information, please visit: Comp.health.mil



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