PEER REVIEWED CANCER RESEARCH PROGRAM



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.

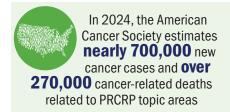
FY09-FY25: \$1.175B total

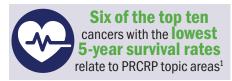


"In every cancer breakthrough and triumph, I see echoes of the countless lives touched by the Peer Reviewed Cancer Research Program. It's a reminder of the incredible impact we can make when we come together with a shared sense of purpose. With every beat of my heart, I am honored to be a part of this extraordinary journey, where hope shines brightest in the face of adversity, and miracles happen."

Brandi Benson, Sarcoma Alliance, FY23-FY24 Programmatic Panel Member

SCOPE OF THE PROBLEM





PROGRAM PRIORITIES

FY25 Topic Areas

All applications for PRCRP funding must specifically address one of the PRCRP topic areas as directed by the U.S. Congress.



Blood Cancers

- Blood
- Lymphoma
- Myeloma



Gastroenterological Cancers

- Colorectal
- · Esophageal
- Liver
- Pancreatic
- Stomach



Metastatic Disease

• Metastatic Cancers



Neurological Cancers

- Brain Cancer
- Pediatric Brain Tumors



Pediatric, Adolescent and Young Adult Cancers, or PAYAC

- Germ Cell Cancers
- Neuroblastoma
- PAYAC
- Sarcoma
- Thyroid Cancer



Solid Tumors

- Bladder Cancer
- Endometrial Cancer
- Germ Cell Cancers
- · Kidney Cancer
- · Lung Cancer
- Mesothelioma
- Neuroendocrine Tumors
- Sarcoma
- · Thyroid Cancer

MILITARY HEALTH FOCUS AREAS

- Environmental exposure risk factors associated with cancer
- · Mission readiness and gaps in cancer research

RELEVANCE TO MILITARY HEALTH

More than **55**% of cancer-related medical encounters by Service Members in 2022 relate to a PRCRP topic area²

More than **43,000**Veterans receive a cancer diagnosis each year and more than **450,000** Veterans receive cancer care at a VA hospital or institution³

Members of the military may be exposed to hazardous environments, putting them at risk for the development of many types of cancers

- 1 https://cancerstatisticscenter.cancer.org/
- ² Armed Forces Health Surveillance Branch. MSMR 30, no 6, 2023:3-11.
- ³ https://news.va.gov/107976/va-did-that-advancing-cancer-moonshot/







PROGRAM IMPACT AND OUTCOMES

Approaches and Initiatives Investigated in Multiple Cancer Types

Chimeric Antigen Receptor-T Cell Therapy

Leveraging the strength of an individual's immune system, CAR-T therapy delivers a personalized approach to cancer treatment **AWARDS**

\$6.1M **INVESTED**

TOPIC AREAS: Brain and Esophageal Cancers: Immunotherapy; Mesothelioma; Neuroblastoma; Pediatric











Thriving Beyond Treatment

Lasting effects of cancer diagnoses and treatment come into focus with new investments in quality of life and survivorship for Service Members and their Families

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Cancers; Pediatric, Adolescent, Young Adult Cancers,











Oncolytic Virus Therapy

Engineering a new way to selectively target and kill tumors without harming healthy cells; OV therapy attacks the most difficultto-treat cancers

14 **AWARDS** \$8.7M **INVESTED**

TOPIC AREAS: Brain, Stomach, and Bladder Cancers; Melanoma; Sarcoma











AWARDS \$29.4M **INVESTED**

TOPIC AREAS: Brain; Germ Cell; Head and Neck; Metastatic Mesothelioma, Colorectal, and Endometrial Cancer



Targeting Guanylyl Cyclase C

Due to overexpression in colorectal cancer cells, GUCY2C offers hope as a target for Listeria-based vaccines and CAR-T cells for the prevention and treatment of CRC

AWARDS \$7.4M INVESTED

TOPIC AREAS: Colorectal Cancer, Listeria Vaccine





RESEARCH BREAKTHROUGHS — MAKING A DIFFERENCE

- CIBERSORTx A computational tool that characterizes gene expression data to improve understanding of patient responses to treatments for diverse and complex cancer types
- Selinexor An FDA-approved treatment for relapsed/refractory multiple myeloma and diffuse large B-cell lymphoma currently in clinical trials for treating additional cancers including advanced or recurrent endometrial cancer
- EsoCheck™ A triaging tool to improve the accuracy of esophageal cancer diagnoses in asymptomatic individuals



CONVERGENT SCIENCE VIRTUAL CANCER CENTER

- Focuses research on improving cancer patient outcomes
- · Expands research capacity by engaging early career investigators across the U.S.
- Incorporates military health experts on the leadership team

