Congressionally Directed Medical Research Programs

CDMRP

Department of Defense

https://cdmrp.army.mil

Peer Reviewed Cancer Research Program

VISION

To advance mission readiness of U.S. military members affected by cancer and to improve quality of life by decreasing the burden of cancer on Service members, their families, and the American public

MISSION

To successfully promote high-impact research for cancer prevention, detection, treatment, quality of life, and survivorship

PROGRAM HISTORY

Since fiscal year 2009 (FY09) Congress has appropriated $539.8 million (M) to the Department of Defense Peer Reviewed Cancer Research Program (PRCRP) to invest in cancer research covering over 25 topics areas. The PRCRP offers a variety of high impact funding opportunities.

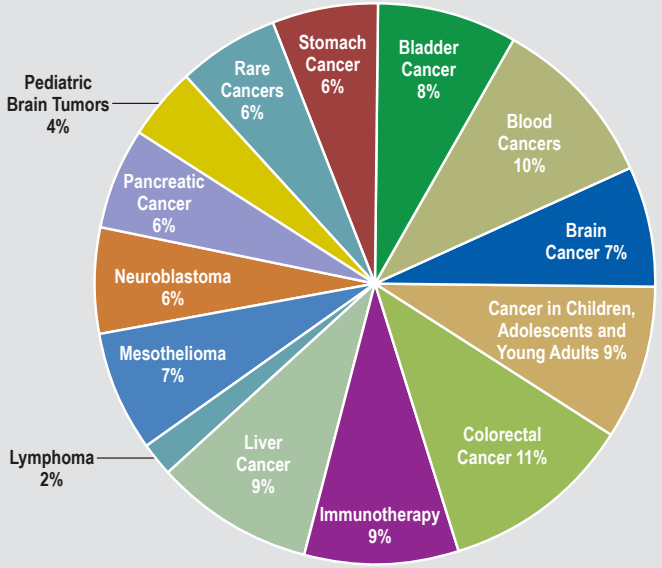
PRCRP MILITARY HEALTH FOCUS AREAS

- Environmental/exposure risk factors associated with cancer
- Mission Readiness
  - Gaps in cancer prevention, early detection/diagnosis, prognosis, and/or treatment
  - Gaps in quality of life and/or survivorship

HIGH-IMPACT ADVANCES SUPPORTED BY THE PRCRP

- Groundbreaking studies in the development of XPOVIO (Karyopharm Therapeutics) a Food and Drug Administration-approved treatment for refractory or relapsed multiple myeloma and diffuse large B-cell lymphoma
- A novel tumor slice culture method to test drug sensitivities to support personalized treatment options for colorectal cancer patients.

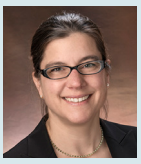
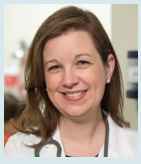
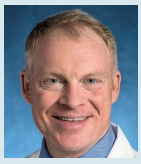
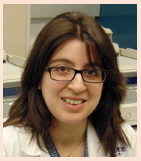
PROGRAM PORTFOLIO



TOPIC AREAS[1]

Brain Cancer
Cancer in Children, Adolescents, and Young Adults
Immunotherapy
Mesothelioma
Neuroblastoma
Pediatric Brain Tumors

[1] Two program summary sheets were prepared. The following topic areas are discussed on the second program summary sheet: Bladder Cancer, Blood Cancers, Colorectal Cancer, Liver Cancer, Lymphoma, Pancreatic Cancer, Rare Cancers, Stomach Cancer.

FY19 Topic Area	Summary	Cancer Care Spectrum
Brain Cancer	 **Dr. Rongze Lu** aims to increase the sensitivity of glioma tumors to immunotherapy by inhibiting protein phosphatase 2A in myeloid cells to enhance sensitivity to anti-PD1 treatment.	Treatment (Immunotherapy)
Cancer in Children, Adolescents, and Young Adults	 **Dr. Philip Lupo** will identify new cancer predisposition syndromes to improve surveillance strategies for children with congenital anomalies, who comprise 120,000 U.S. births every year.	Prognosis
Immunotherapy/ Brain Cancer	 **Dr. Jianping Huang's** primary goal in studying CD70 expression in glioblastoma-multiforme (GBM) is to conduct a Phase 1 clinical trial utilizing IL-8R-mod CD70 CAR T cells in GBM patients.	Treatment (Clinical Trial)
Immunotherapy	   **Drs. Kathrin Bernt, Erin Guest,** and **Patrick Brown** will address knowledge gaps related to treatment resistance and relapse in infant acute lymphoblastic leukemia (iALL), a rare subtype of pediatric ALL with an extremely poor prognosis.	Continuity
Mesothelioma	   **Drs. Valsamo Anagnostou, Patrick Forde,** and **Anna Nowak** aim to collaboratively investigate the mechanisms of how mesothelioma evades anti-tumor immune surveillance during immunotherapy, leveraging clinical specimens, multi-omic and functional analyses.	Biology/Etiology
Neuroblastoma	   The central hypothesis of **Drs. Brian Crompton, C. Patrick Reynolds,** and **Kristopher Bosse** is focused on defining patterns of tumor evolution and treatment resistance in neuroblastoma, which can be identified using serial assessment of ctDNA and comprehensive profiling of paired diagnosis-relapse PDXs to identify and functionally validate these recurrent events in neuroblastoma.	Treatment (Recurrence)
Pediatric Brain Tumors	 **Dr. Bakhos Tannous's** main objective is to screen the WRAIR* antimalarial compound library to find an analog with increased potency and improved pharmacokinetics against diffuse intrinsic pontine glioma (DIPG). Quinoline analogs may penetrate the brain and target DIPG, leading to inhibition of tumor growth and increase in overall survival.	Treatment (1st line)

*Walter Reed Army Institute of Research

Point of Contact: CDMRP Public Affairs, 301-619-9783
usarmy.detrick.medcom-cdmrp.mbx.cdmrp-public-affairs@mail.mil

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