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The Division of Cancer Biology (DCB) Covers Research Across the Cancer Spectrum and Biological Scales











Molecular

Cellular

Microenvironment

Organelle

Tumor

Organ Systems

DCB Covers Research Across the Cancer Spectrum and Biological Scales



Biophysics, Bioengineering, and Computational Sciences Research



Cell Biology Research



Cancer Immunology, Hematology, and Etiology Research



DNA and Chromosome Aberrations Research



Tumor Biology and Microenvironment Research



Tumor Metastasis Research

Current NCI Funding Opportunities in Cancer Biology

Notices of Funding Opportunities (NOFOs) supported by the NCI Division of Cancer Biology can be found at <u>cancer.gov/dcb</u>





https://www.cancer.gov/about-nci/organization/dcb



Funding Opportunities Related to Cancer Health Disparities

PAR-22-114: Administrative Supplements to Support Cancer Disparity Collaborative Research

Promotes new cancer disparities research among investigators who do not normally conduct it and encourages the partnership of experienced cancer research investigators with cancer disparities-focused researchers



NOFOs and Fact sheets



Natalia Mercer (<u>Natalia.Mercer@nih.gov</u>)



Funding Opportunities Related to Diet and Metabolism (1)

PAR-23-051 & PAR-23-052: Mechanistic links between diet, lipid metabolism, and tumor growth and progression (UH2 & U01)

Support fundamental investigations of the links between diet, lipid metabolism, and tumor growth/progression.



Kris Willis (<u>Kristine.Willis@nih.gov</u>)



Natalia Mercer (<u>Natalia.Mercer@nih.gov</u>)

Funding Opportunities Related to Diet and Metabolism (2)

PAR-23-279 & PAR-23-280: Mechanisms that Impact Cancer Risk with Use of Incretin Mimetics (R01 & R21)

NOT-CA-21-121 (NOSI): Dietary effects on nutrient sensing pathways in tumor etiology and prevention Support studies addressing mechanisms by which mechanisms by which incretin mimetics, specifically glucagon-like peptide (GLP)-1 or dual GLP-1/glucose-dependent insulinotropic polypeptide (GIP)-1 receptor agonists, impact cancer risk.

Supports basic research investigating the biology and molecular mechanisms that determine the outcome of key diet/nutrient/cell interactions during early tumor development.



Phil Daschner (daschnep@mail.nih.gov)

Funding Opportunities Related to *Physical Sciences, Engineering, and Biomaterials*



PAR-22-147: Research Projects in Physical Sciences-Oncology (U01) Supports research projects addressing challenging problems in cancer using a physical science framework, perspective, or approach, which will be a part of the **Physical Sciences – Oncology Network (PS-ON).**



(steven.becker@nih.gov)



PAR-22-099: Cancer Tissue Engineering Collaborative -Enabling Biomimetic Tissue-Engineered Technologies for Cancer Research (R01)

Supports the development and characterization of state-of-the-art biomimetic tissue-engineered technologies for cancer research, which will be a part of **Cancer TEC**.



NOT-CA-23-030 (NOSI): Adaptive Biomaterials for Cancer Biology Support research focusing on the development, adaptation, or integration of innovative biomaterials for cancer biology.

Eric Johnson Chavarria (eric.johnsonchavarria@nih.gov)

Funding Opportunities Related to Cancer Immunology (1)

Notice of Funding Opportunity

NOT-CA-24-016

Notice of Special Interest (NOSI): Exploratory Cancer Immunology Projects and Technologies (ExCITe)

> *NCI Contact* Monica Zamisch monica.zamisch@nih.gov





Monica Zamisch (monica.zamisch@nih.gov)

Funding Opportunities Related to Cancer Immunology (2)

PAR-22-061 & PAR-22-062: Modulating Human Microbiome Function to Enhance Immune Responses Against Cancer (R01 & R21)

Support basic research that elucidates mechanisms by which the microbiome inhibits or enhances antitumor immune responses and identifies targets for cancer prevention strategies.

PAR-22-085 & PAR-22-086 Microbial-based Cancer Imaging and Therapy -Bugs as Drugs (R01 & R21) Support research investigating novel microbialbased cancer therapy, imaging detection, and diagnosis strategies to overcome the limitations of inadequate conventional cancer imaging and therapies.



Phil Daschner (<u>daschnep@mail.nih.gov</u>)

NOT-CA-22-063 (NOSI): Basic Mechanisms of Immune-related Adverse Events (irAEs) in Cancer Immunotherapy Supports mechanistic research that aims to improve the understanding of the pathophysiology of irAEs related to immunotherapy.



Yin Liu (liuy@exchange.nih.gov)

Funding Opportunity Related to Metastasis

PAR-22-234: The Metastasis Research Network (MetNet): MetNet Research Projects (U01)

Supports research projects that use systems-level approaches to address gaps and opportunities in metastasis research, which will be a part of the **MetNet**.

Next Receipt Dates: June 20, 2024 through June 20, 2025









Metastasis Research Network

Using systems level approaches to understand cancer metastasis



Christine Nadeau Brunilde Gril Joanna Watson (christine.nadeau@nih.gov) (grilbrun@mail.nih.gov) (watsonjo@mail.nih.gov)

Funding Opportunities Related to Bladder Cancer and Cannabis



PAR-22-218 & PAR-22-219: **Biology of Bladder Cancer (R01 & R21)**

Supports research projects investigating the biology and underlying mechanisms of bladder cancer.





NOT-CA-22-085 (NOSI): Basic Mechanisms of Cannabis and Cannabinoid Action in Cancer

Supports research in understanding the mechanisms (rjohnso2@mail.nih.gov) by which cannabis and cannabinoids affect cancer biology, cancer interception, cancer treatment and resistance, and management of cancer symptoms.

Ron Johnson

NCI Division of Cancer Biology (DCB) New Grantee Workshop

DCB offers an annual workshop for new and early-stage investigators to familiarize them with the processes of DCB, NCI, and NIH.



Presentation slides and FAQs from the 2024 meeting can be found at <u>cancer.gov/dcb</u>.

1,000+

NEW GRANTEES attended the annual DCB New Grantee Workshop for new and early-stage investigators since 2001

ICYMI: Current NCI Funding Opportunities in Cancer Biology

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www.cancer.gov/espanol

www.cancer.gov

Examples of NIH Grant Programs

R01 - Research Project Grant

- Usually 5 yrs; \$250K or more direct costs per year (but need advanced permission for > \$500K per year)

R21 - Exploratory/Developmental Research Grant

- 2 yrs; combined budget for both years capped at \$275K direct costs

- For NCI, only in response to a specific NOFO (but not the Parent Announcement)

R03 - Small Grant

- Up to 2 yrs; up to \$50K direct costs per year

- Designed for small research projects, pilot/feasibility studies, secondary analysis of existing data, or development of methodology/technology

Examples of NIH Grant Programs (cont'd)

- UH2 Exploratory/Developmental Cooperative Agreement Phase I
 - Support the developmental/pilot studies and often limited to 1-2 yrs
 - Substantial involvement from NIH staff
- U01 Research Project Cooperative Agreement
 - Substantial involvement from NIH staff
 - Significant collaborative aspects
 - Similar to an R01
- UM1 Research Project with Complex Structure Cooperative Agreement
 - Support large-scale research activities with complicated structures
 - Substantial involvement from NIH staff
- Administrative Supplements
 - Provide additional funding to a current grant

Different Types of NOFOs

- Request for Applications (RFA)
 - A call for applications in a specific area of high programmatic interest
 - Reviewed in a Special Emphasis Panel (SEP)
 - Has set-aside funds
- Program Announcement with Special Receipt, Referral, or Review (PAR)
 - Identifies areas of increased priority or emphasis by NIH or an IC
 - Can be reviewed in regular study sections or Special Emphasis Panel (SEP)
 - Does not have specific funds set aside
- Notice of Special Interest (NOSI)
 - Describes an IC's interest in an area
 - Points applicant to the right NOFOs to apply to (often a Parent Announcement)