PDW 2024: Funding Opportunities in Cancer Biology

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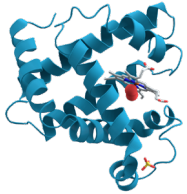
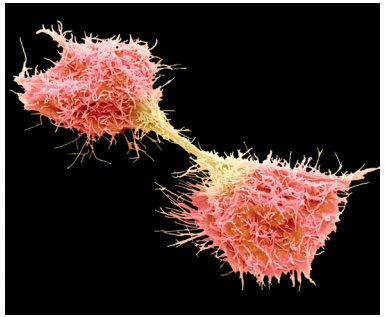
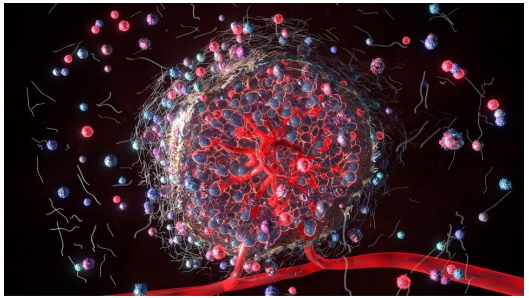
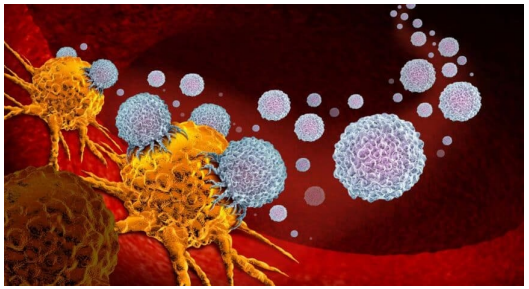
https://www.cancer.gov/about-nci/organization/dcb

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





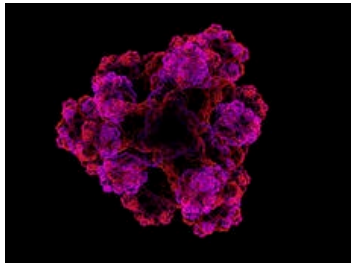




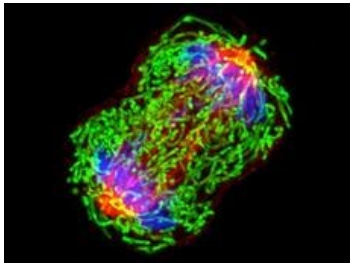
Molecular **Cellular** **Microenvironment**

Organelle **Tumor** **Organ Systems**

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



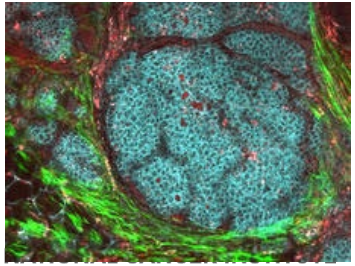
Biophysics, Bioengineering, and Computational Sciences Research



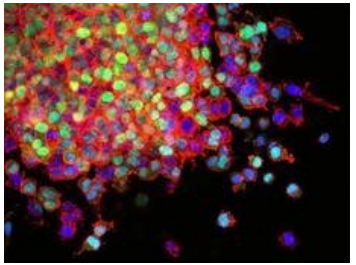
Cell Biology Research

Cancer Immunology, Hematology, and Etiology Research

DNA and Chromosome Aberrations Research



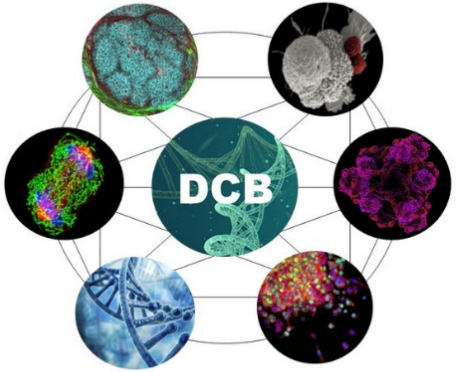
Tumor Biology and Microenvironment Research



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 cancer.gov/dcb



Funding Opportunities in Collaboration with CCHE (CRCHD)

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

NOFOs and Fact sheets

PAR-24-039: Exploratory Grant Award to Promote Workforce Diversity in Basic Cancer Research (R21 Clinical Trial Not Allowed)

Basic Research in Cancer Health Disparities *(R01, R21, and R03)*
TBD… stay tuned!

Funding Opportunities Related to Diet and Metabolism

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
(Kristine.Willis@nih.gov)

Natalia Mercer
(Natalia.Mercer@nih.gov)

Funding Opportunities Related to Diet and Metabolism, cont'd

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

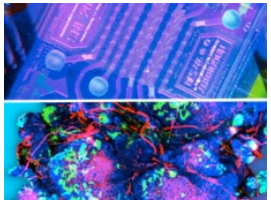
Support studies addressing mechanisms by which mechanisms by which incretin mimetics, specifically glucagon-like peptide (GLP)-1 or dual GLP-1/glucose-dependent insulinotropic polypeptide (GIP)-1 receptor agonists, impact cancer risk.

NOT-CA-21-121 (NOSI):
Dietary effects on nutrient sensing pathways in tumor etiology and prevention

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

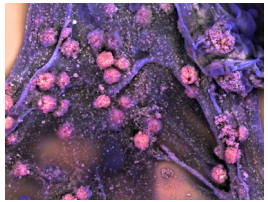
Supports the development and characterization of state-of-the-art biomimetic tissue-engineered technologies for cancer research, which will be a part of **Cancer TEC**.

Steven Becker
(steven.becker@nih.gov)

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).**

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



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.

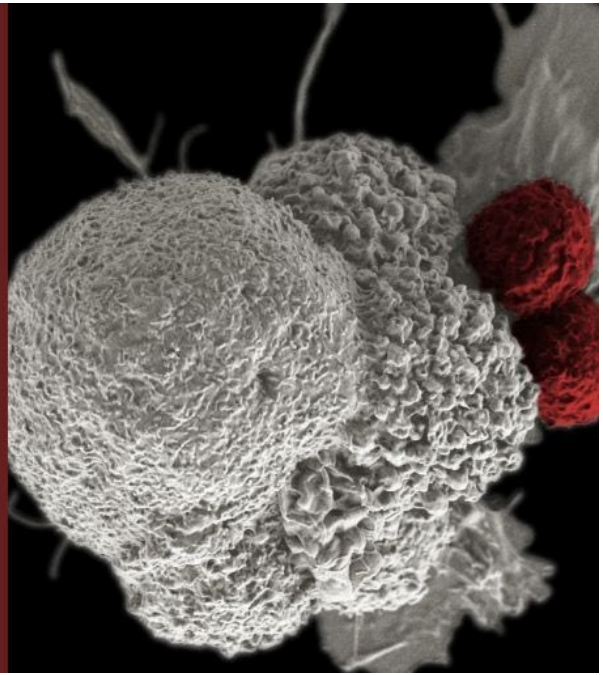
Funding Opportunities Related to Cancer Immunology

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, cont'd

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 anti-tumor immune responses and identifies targets for cancer prevention strategies.

Phil Daschner
(daschnep@mail.nih.gov)

PAR-22-085 & PAR-22-086
Microbial-based Cancer Imaging and Therapy -Bugs as Drugs (R01 & R21)

Support research investigating novel microbial-based cancer therapy, imaging detection, and diagnosis strategies to overcome the limitations of inadequate conventional cancer imaging and therapies.

Yin Liu
(liuy@exchange.nih.gov)

NOT-CA-22-063 (NOSI):
Basic Mechanisms of Immune-related Adverse Events (irAEs) in Cancer Immunotherapy

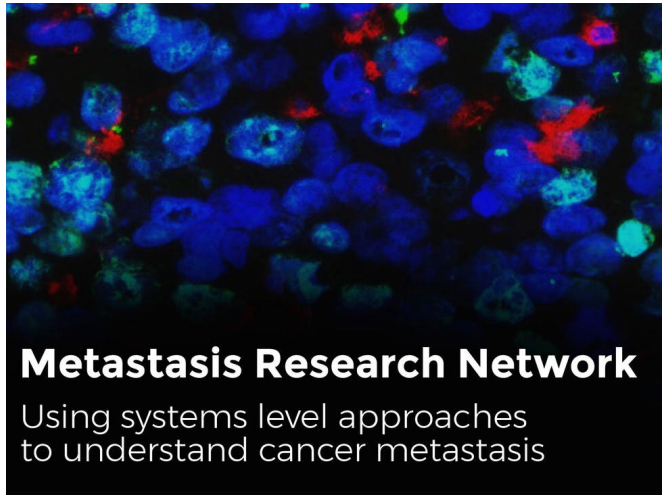
Supports mechanistic research that aims to improve the understanding of the pathophysiology of irAEs related to immunotherapy.

Funding Opportunities 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



Christine Nadeau
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Brunilde Gril
(grilbrun@mail.nih.gov)

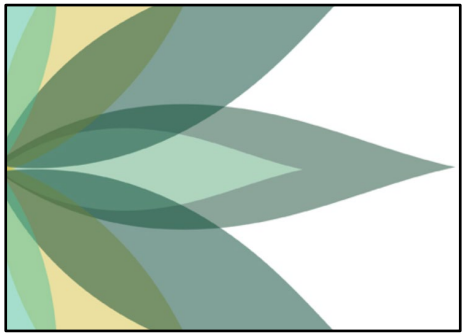
Joanna Watson
(watsonjo@mail.nih.gov)

MetNet webpage

Funding Opportunities Related to Bladder Cancer and Cannabis

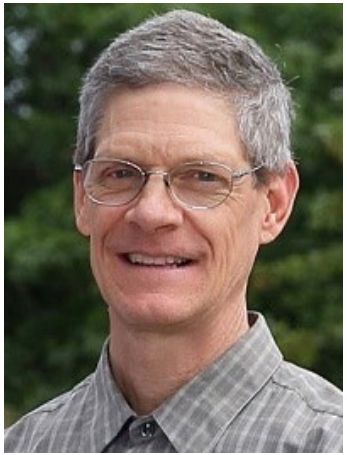
PAR-22-218 & PAR-22-219:
Biology of Bladder Cancer (R01 & R21)

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 by which cannabis and cannabinoids affect cancer biology, cancer interception, cancer treatment and resistance, and management of cancer symptoms.



Ron Johnson
(rjohnso2@mail.nih.gov)

NIH Data Management and Sharing

- NIH's goal is to promote a culture in which data management and sharing are recognized to be an integral component of a biomedical research project, rather than an administrative or additive one.
- NIH encourages data management and sharing practices to be consistent with the FAIR (Findable, Accessible, Interoperable, ad Reusable) data principles.
- Division of Cancer Biology recognizes the initial challenges but believes data sharing will greatly benefit the cancer research community by reducing unnecessary data replication and wastage of precious resources, while facilitating transparency, reproducibility, discovery and innovation.

Soumya Korrapati
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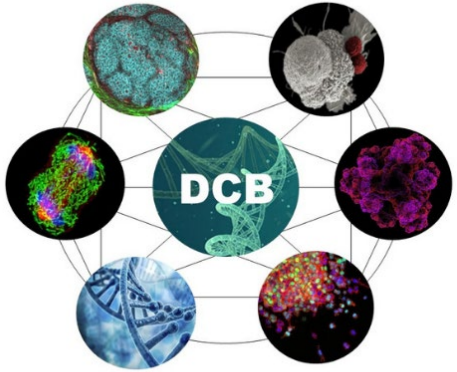
NCI Division of Cancer Biology (DCB)
New Grantee Workshop

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 cancer.gov/dcb.

Current NCI Funding Opportunities in Cancer Biology

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



www.cancer.gov

www.cancer.gov/espanol

The Division of Cancer Biology (DCB) Supports Emerging Areas and Technological Developments in Cancer Biology

Understanding Early Events in the Development of Cancers

Developing and Validating New Models and Approaches for Cancer Research

Investigating Mechanisms of Disparate Outcomes in Cancer

Enhancing the Discovery of Interactions in the Tumor Ecosystem

Using Systems Approaches to Advance the Understanding of Cancer Dynamics

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)

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
(Natalia.Mercer@nih.gov)

Funding Opportunities Related to *Cancer Health Disparities cont'd*

Basic Research in Cancer Health Disparities (R01, R21, and R03) TBD… stay tuned!

Research project grants to support innovative studies designed to investigate biological/genetic bases of cancer health disparities, such as (1) mechanistic studies of biological factors associated with cancer health disparities, including those related to basic research in cancer biology or cancer prevention strategies, (2) the development and testing of new methodologies and models, and (3) secondary data analyses

NOFOs and Fact sheets

Anu Sharman
(sharmananu@nih.gov)

Study Sections Related to *Cancer Health Disparities*

Basic Mechanisms in Cancer Health Disparities (BMCD)

Applications involving basic and mechanistic research into the biological/genetic and environmental causes of cancer health disparities in different racial, ethnic and geographic groups. Applications may include mechanistic studies of biological or environmental factors associated with cancer health disparities.

NOFOs and Fact sheets

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