Introduction to the NCI Grants System

Sharmistha Ghosh-Janjigian, Ph.D.
Program Director
Division of Cancer Biology
National Cancer Institute
National Institutes of Health

Disclosure Information

AACR American Association for Cancer Research
Annual Meeting
April 17-22, 2026 SAN DIEGO
AACR.ORG/AACR2026 | #AACR26

I have no financial relationships to disclose.

The National Cancer Institute (NCI) of the National Institutes of Health (NIH)

NCI Office of the Director
- Strategic planning and direction
- Budget and administration
- Program/science evaluation
- Special programs

Advisory Boards and Groups
Examples of responsibilities
- Evaluate science
- Second-level review
- Make recommendations

Extramural Research
- Grant funding and management
- Develops new programs
- Portfolio analysis
- Review of grants

Intramural Research
- Laboratory Studies
- Clinical Studies

NCI Extramural Divisions: Supporting Cancer Research

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DCB

Division of Cancer Biology

DCB supports research in foundational cancer biology that leads to better ways to prevent, detect, and treat the disease.

DCCPS

Division of Cancer Control and Population Sciences

DCCPS conducts and supports an integrated program of genetic, epidemiological, behavioral, social, applied, and surveillance cancer research to reduce risk, incidence, and deaths from cancer as well as enhance the quality of life for cancer survivors.

DCP

Division of Cancer Prevention

DCP conducts and supports research to find ways to prevent and detect cancer and to prevent or relieve symptoms from cancer and its treatments.

DCTD

Division of Cancer Treatment and Diagnosis

DCTD supports the translation of promising research into clinical applications to improve the diagnosis and treatment of cancer in areas of unmet need that are often too risky or difficult for industry or academia to develop alone.

DEA

Division of Extramural Activities

DEA coordinates the scientific review of extramural research before funding and provides systematic surveillance of that research after awards are made to assist NCI in achieving its goal of a balanced research portfolio.

NCI Division of Cancer Biology (DCB)

FY25 Progress in Advancing Basic Cancer Research

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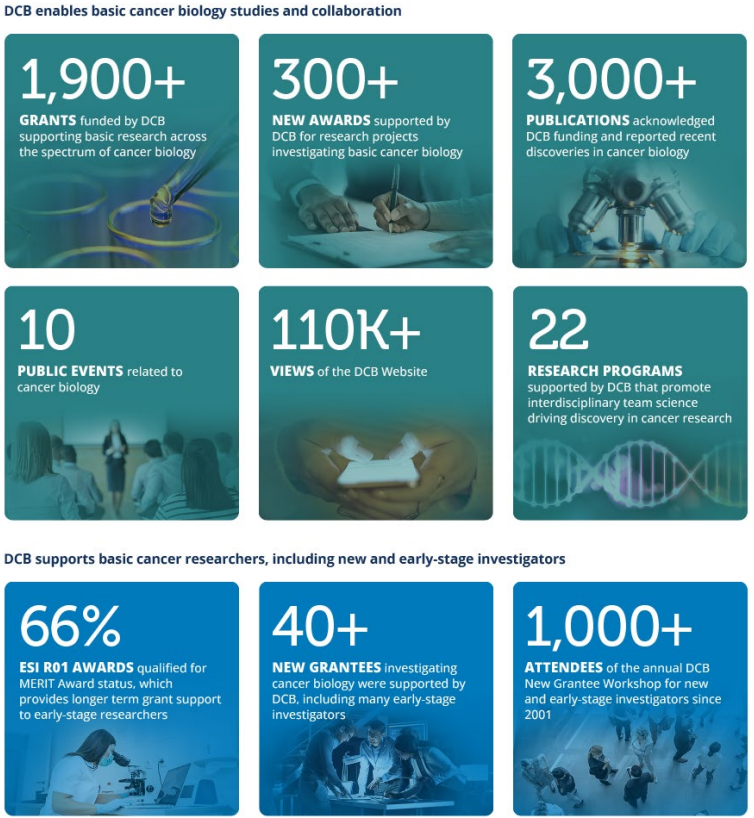
The Division of Cancer Biology (DCB) supports basic research in all areas of cancer biology at academic institutions and research foundations across the United States. As part of the National Cancer Institute, DCB provides funding for research that investigates the basic biology behind cancer.



DCB Organization

Office of the Director
Director:
Daniel Gallahan, Ph.D.
Deputy Director (acting):
Sean Hanlon, Ph.D.

Cancer Cell Biology Branch
Chief:
Rihab Yassin, Ph.D.

Cancer Immunology, Hematology and Etiology Branch
Chief:
Kevin Howcroft, Ph.D.

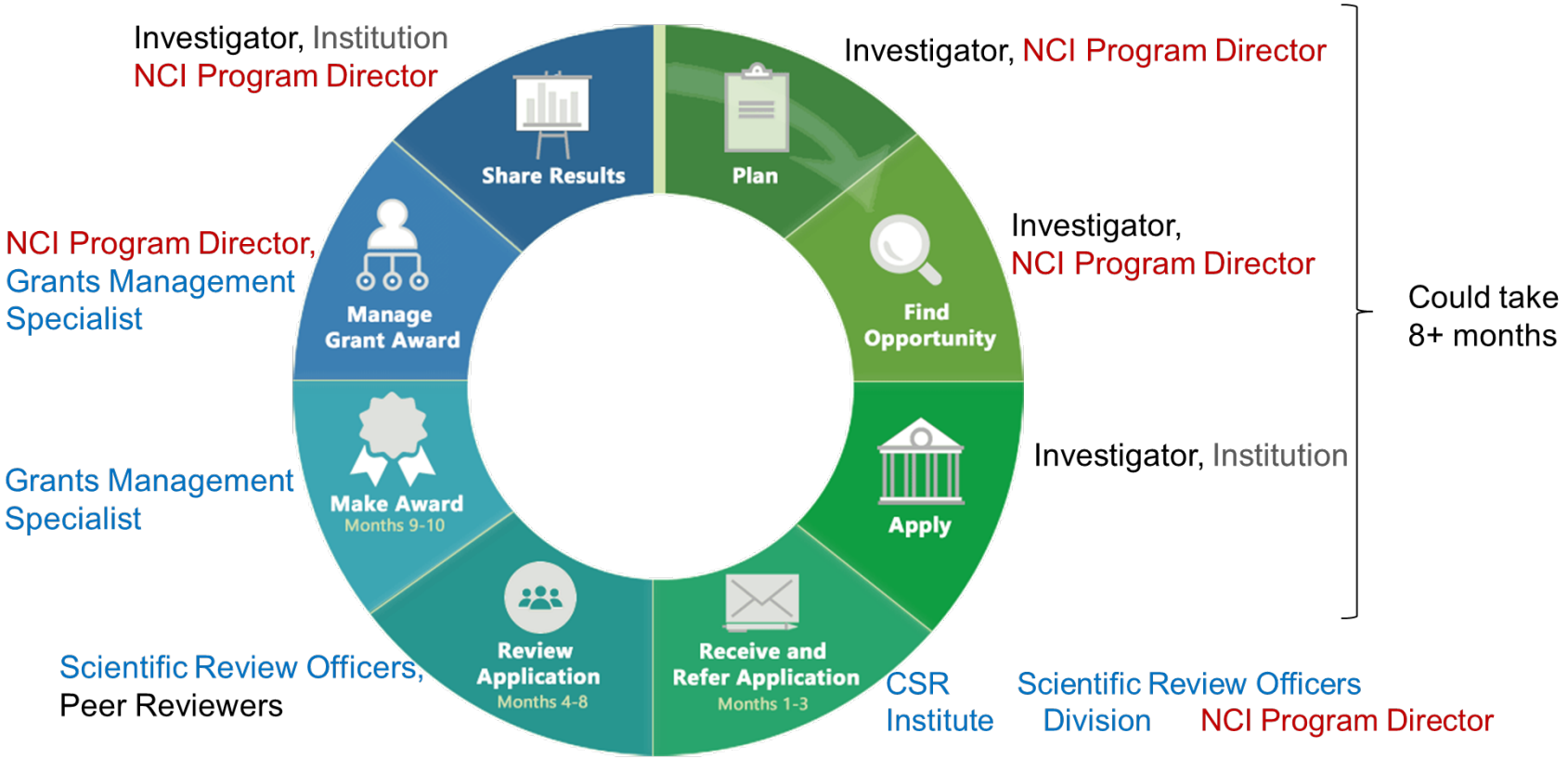
DNA and Chromosome Aberrations Branch
Chief:
Ian Fingerman, Ph.D.

Biophysics, Bioengineering, and Comp Sciences Branch
Chief:
Jennifer Couch, Ph.D.

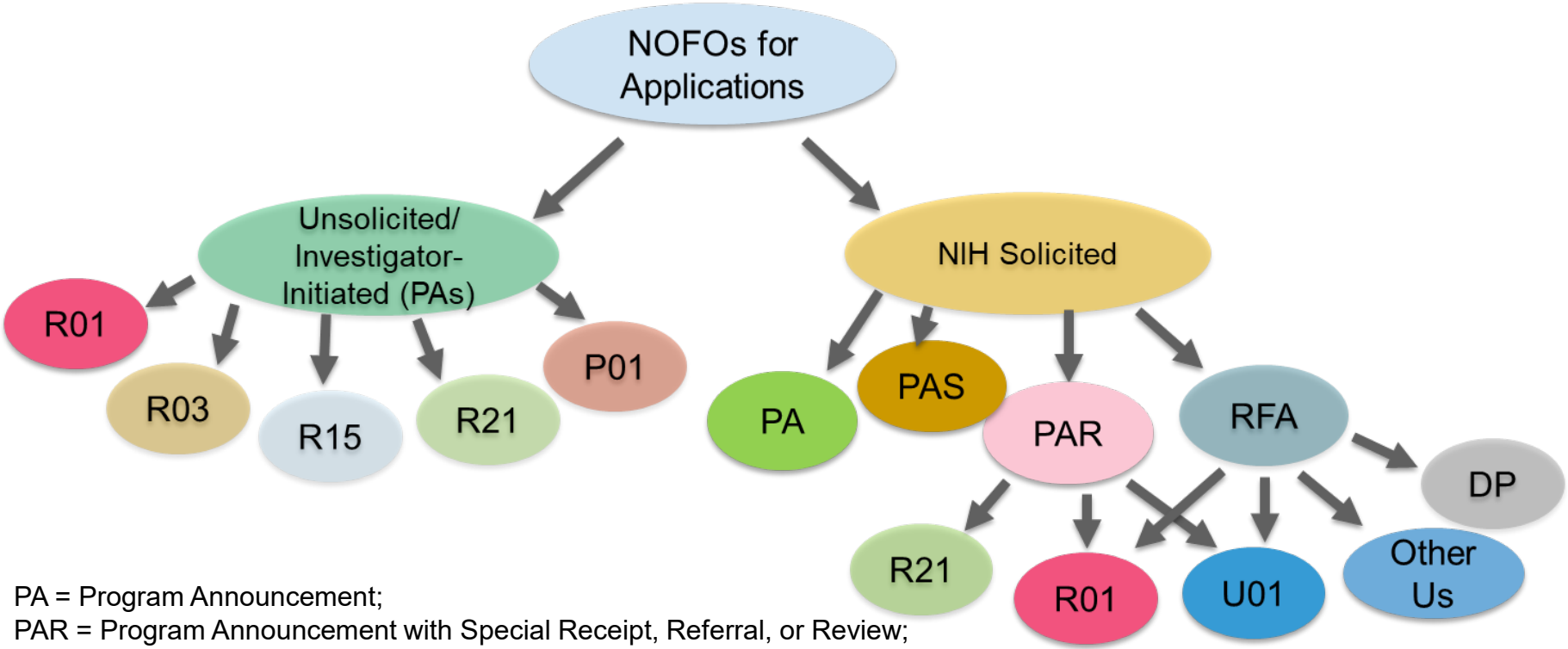
Tumor Biology and Microenvironment Branch
Chief:
Jeff Hildesheim, Ph.D.

Tumor Metastasis Branch
Chief:
Joanna Watson, Ph.D.

Grants Process, Life Cycle, and Key Points of Contact



Grant Mechanisms for a New Application

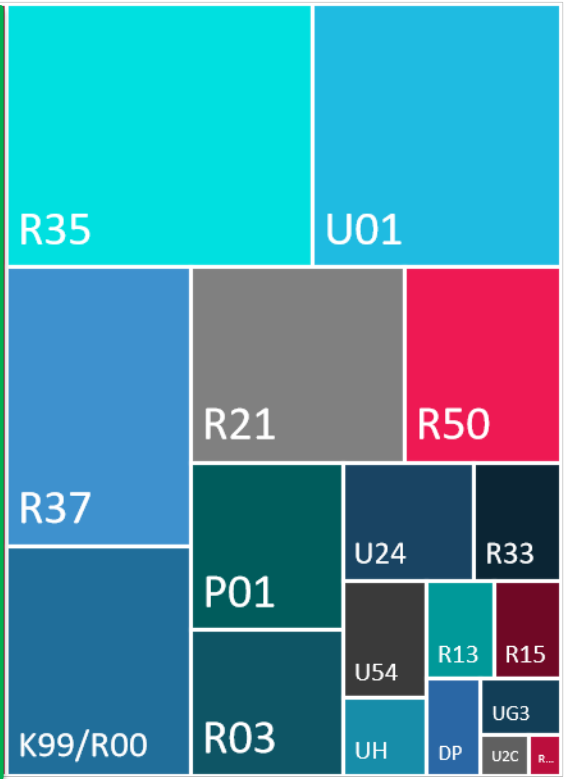


PA = Program Announcement;
PAR = Program Announcement with Special Receipt, Referral, or Review;
PAS = PA with set-aside funds;
RFA = Request for Applications (set-aside funds).

DCB Portfolio

- Usually 5 years of funding
- Can be investigator-initiated or submitted in response to a NOFO
- Requires substantial preliminary data
- No payline

R01



Many Options: How to Decide?

- Let the research plan dictate the mechanism
  - How large is the project?
  - What resources does it require — funds, equipment, collaborations, new technologies?
  - Are the preliminary data strong and sufficient for the grant mechanism of interest?
- Search currently active NOFOs
- Reach out to your program officer or use MATCHMAKER to identify a program director

When is a P01 Mechanism Suitable?

- **P01 Research Program Project Grant**
- Usually, 3 or 4 research projects on a common theme and contributing to overall research objectives; synergy is the key
- Has an Admin Core plus usually one or more Shared Resource Cores
- PIs, Project Leaders, and Core Leaders all expected to have independent research funding and a track record of leadership
- Reach out to a program officer for guidance

Don’t Forget About Smaller Grant Mechanisms

R21 Exploratory/Developmental Research Grant

- 2-year grants
- Often high-risk high reward
- Preliminary data optional, but desired
- Not renewable
- NCI Participation: NOT-CA-25-118

Myths about R21 Grants

- They are designed for new investigators
- They are easier to get funded than R01s
- They are a good way to develop preliminary data

R03 NIH Small Grant

- Up to 2 years; up to $50K direct costs per year
- For NCI, usually in response to an omnibus R03 NOFO
- Designed for small, self-contained research projects, pilot or feasibility studies, secondary analysis of existing data, or development of research methodology or new technology
- Not renewable

What are Cooperative Agreement Awards?

U Mechanism = Cooperative Agreement Award

A cooperative agreement is a funding mechanism used for high-priority research areas that require substantial involvement from NIH scientific staff.

- Significant collaborative aspects (i.e., regular meetings, sharing of data, protocols, ideas, development of trans-consortium collaborative projects, etc.).
- Requires substantial time commitment from investigators beyond research time.
- A team science approach.
- Institute may or may not set aside funds upfront (RFA vs. PAR).

RFA Example

DCB Research Programs

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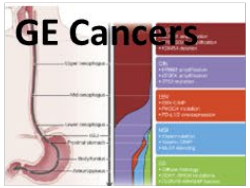
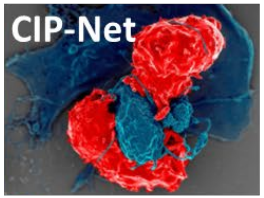
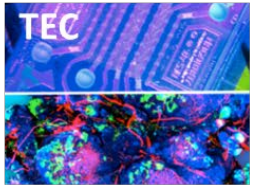
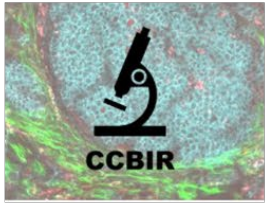
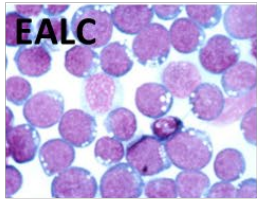
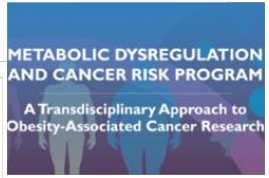


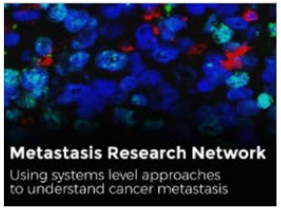


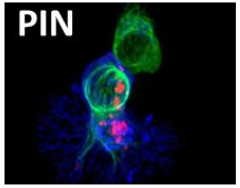


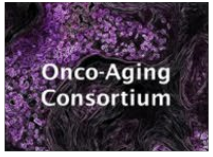


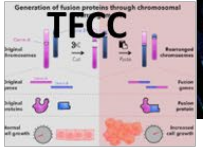


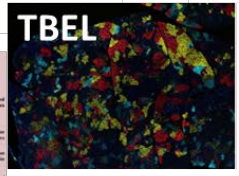


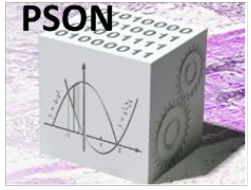






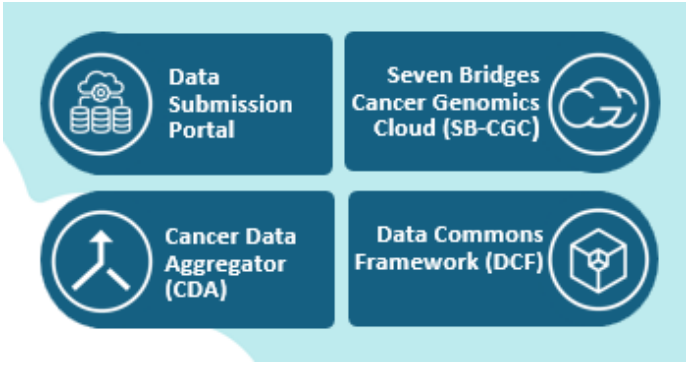






Generated Data:
NCI Cancer Research Data Commons (CRDC)

- A cloud-based data science infrastructure that provides secure access to a large, comprehensive, and expanding collection of cancer research data.
- Users can explore and use analytical and visualization tools for data analysis in the cloud.
- The NCI CRDC includes several data commons.



Contact: NCICRDC@mail.nih.gov

CRDC DATA COMMONS

DATA COMMON	KEY FEATURES
Genomic Data Commons (GDC)	The GDC houses and shares harmonized genomic data, including WGS, WXS, RNAseq, miRNA-seq, scRNAseq, ATAC-seq, and DNA methylation data. The GDC supports free data downloading (both raw sequencing data and derived data), and hosts both open and controlled access data. The GDC Data Portal supports free online data exploration and analysis of custom cohorts.
Proteomic Data Commons (PDC)	PDC houses and shares mass spectrometry-based proteomic data. The PDC portal supports online data exploration and visualization. All data (both raw and derived data) are open access.
Imaging Data Commons (IDC)	The IDC houses and shares de-identified imaging data, including both radiology and pathology slide images. All images are harmonized using DICOM standards. All data in the IDC are open access.
Integrated Canine Data Commons (ICDC)	The ICDC houses and shares data from the veterinary records of pet dogs that naturally developed tumors. Key data types include WXS, WGS, RNA-Seq, and DNA Methylation. All data (including raw sequence data) are open access.
General Commons (GC)	The GC houses and shares data that are not a match for other CRDC Data Commons. Data go through quality control (QC) but are not harmonized. The GC includes both open and controlled access data.
Clinical and Translational Data Commons (CTDC)	The CTDC houses and shares clinical, biospecimen, and molecular characterization data from clinical trials and other studies. All CTDC data are controlled access.

NIH Support Toward Cancer Training

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Key

F = Fellowship
K = Career Development
R = Research
T = Training
^ = NIH intramural postdocs are eligible to apply
-PI = The principal investigator of the application must be an established investigator

Loan Repayment Programs (LRPs)

cancer.gov

Stay Connected, Stay Informed

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NIH Director's Statement of NIH Priorities

NIH Highlighted Topics

NIH Guide Notices


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