Introduction to the NIH Grants System and NCI's Division of Cancer Biology

Yin Liu Ph.D.

Program Director

NCI/NIH



Overview of the NCI

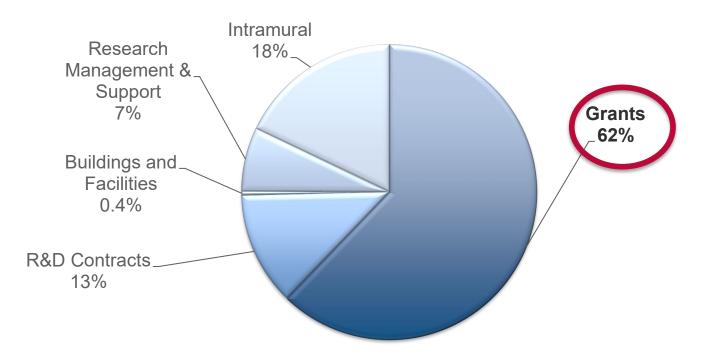
- Created by the National Cancer Act in 1937
- One of 27 Institutes and Centers (ICs) at the NIH
- \$400,000 budget in 1938; \$7.22 billion budget in FY24

NCI Mission:

- The National Cancer Institute leads, conducts, and supports cancer research across the nation to advance scientific knowledge and help all people live longer, healthier lives.
- NCI manages a broad range of research, training, and information dissemination activities that reach across the entire country, meeting the needs of all demographics – rich and poor, urban and rural, and all populations.

NCI: FY 2023 Total Budget (Obligations)

Grants' Share: 62 Percent of Total Budget (Est.)





Organization of the National Cancer Institute



Director
W. Kimryn Rathmell,
MD, PhD

NCI Office of the Director

- Strategic planning and direction
- Budget and administration
- Program evaluation
- Special programs

Advisory Boards

- Scientific guidance
- Approval of funding
- Program evaluation

Extramural Program

- Manages grant funds
- Develops new programs
- Portfolio analysis
- Peer review

Intramural Program

- Laboratory studies
- Clinical studies

Organization of the Extramural Programs at the National Cancer Institute

Extramural Programs (~75% budget, ~7000 grants)

Division of Cancer Biology (DCB) Division of Cancer Treatment and Diagnosis (DCTD)

Division of Cancer Prevention (DCP)

Division of
Cancer Control
and Population
Sciences
(DCCPS)

Division of Extramural Activities (DEA)

DCB (~2000 grants)



Office of the Director: Office of Grants Administration (OGA)

Organization of the Extramural Programs at the National Cancer Institute (cont'd)

- The NCI Extramural Program consists of five divisions. Four of these divisions coordinate grant activities in <u>cancer biology</u>, <u>cancer control and population</u> <u>sciences</u>, <u>cancer prevention</u>, and <u>cancer treatment and diagnosis</u>.
- The <u>DEA</u> manages the peer review process for specific NCI initiatives and provides support for funding opportunity development and portfolio analysis.
- The OGA manages the business aspect of NCI awards and ensures the grantee and the NCI fulfill and comply with all legal requirements, regulations, and administrative policies.

Division of Cancer Biology (DCB)



Office of the Director

<u>Director:</u>
Daniel Gallahan, Ph.D.

<u>Deputy Director:</u>
Shannon Hughes, Ph.D.



Cancer Cell Biology
Branch

<u>Chief:</u> Rihab Yassin, Ph.D.

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

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

Tumor Biology and Microenvironment Branch

<u>Chief:</u>
Jeff Hildesheim, Ph.D.

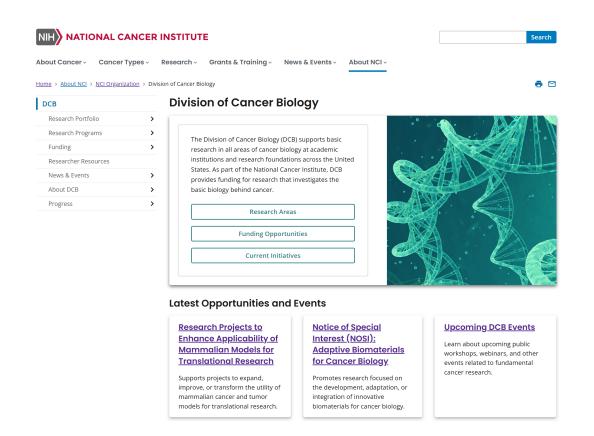
DNA and Chromosome Aberrations Branch

<u>Chief:</u> Ian Fingerman,, Ph.D.

Tumor Metastasis
Branch

<u>Chief:</u> Joanna Watson, Ph.D.

DCB Website Provides useful information for Grantees





Claire McCarthy, PhD



DCB Staff and Their Responsibilities/Interest Areas on DCB Websites

Tumor Metastasis Branch

The Tumor Metastasis Branch plans, develops and directs the Division's research program in tumor metastasis, focusing on mechanisms of metastasis and metastatic niches, circulating tumor cells, dormancy, and angiogenesis and vasculogenesis.

More information on research supported by this branch is available in the Research section.

Phone: (240) 276-6220 Fax: (240) 276-7866

Name & Position	Email	Areas of Expertise
Joanna Watson, Ph.D. Chief	watsonjo@mail.nih.gov	Circadian rhythms, cancer cachexia, circulating tumor cell biology, and mechanisms of metastasis
Grace Ault, Ph.D. Program Director	aultg@mail.nih.gov	Cell invasion and migration, epithelial-mesenchymal transition, metabolic adaptation to the microenvironment, and growth factor signaling
Justin Benavidez, Ph.D. Program Director	justin.benavidez@nih.gov	Biological sciences, developmental biology, and cancer metastasis
Brunilde Gril, Ph.D. Program Director	grilbrun@mail.nih.gov	Brain metastases, blood-brain/tumor barrier, experimental therapies for metastasis, and receptor tyrosine kinase signaling
Christine Nadeau, Ph.D. Program Director	christine.nadeau@nih.gov	Mammalian models of cancer, Notch signaling, breast cancer, and systemic immunity
Elizabeth Snyderwine, Ph.D. Program Director	snyderwe@mail.nih.gov	Xenobiotic and cellular metabolism, metastasis, aging biology, and the bone microenvironment

Talk to your program director!

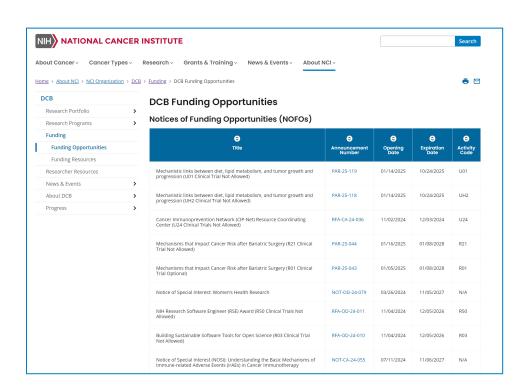
Session 1: Communicating with your program director



Natalia Mercer, PhD

DCB Funding Opportunities on DCB Websites

NOFO: Notice of Funding Opportunity



Session 3:
Additional funding opportunities



Sharmistha Ghosh-Janjigian, PhD Program Director

DCB Supported Resources

 DCB supports a variety of <u>resources</u> that are available to scientists studying cancer to aid in research.

Session 3: DCB/NCI Research Resources



Stefan Maas, PhD Program Director

DCB supports webinar series, workshops, and opportunities





Steven Becker, PhD Program Director

NCI is dedicated to building upon the critical impact sharing data has on accelerating

treatment for cancer

Session 3: NCI requirement regarding data



Justin Benavidez, PhD Program Director



Adrian Lee, PhD University of Pittsburgh

Session 3: Importance of Sharing Resources and Data

DCB Supported Resources (cont'd)

 NCI also provides support for pursuing a successful research enterprise, including additional funding opportunities and help with trainees.

Session 2: Awards to support trainees

Session 2: Funding
Opportunities for Cancer
Health Disparities
Research



Nas Zahir, PhD Cancer Training Branch CCT



Tiffany Wallace, PhD CRCHD



Behrous Davani, PhD CRCHD

http://grants.nih.gov/grants/grants process.htm

Find



Grant Application life cycle

YOU STARTED HERE!

Administrative review by Program & Grants Management Staff

> 2nd tier of review: Advisory Board/Council Institute Director

1st tier of review: **Study Section**

Division of Receipt and Referral (**DRR**) Center for Scientific Review (CSR) assigns application to a Review Group and an NIH Institute

NCI Funding Selections

Grant Activity Codes	Funding Methods	Authority	Selection Considerations
R01, R03, R15, R21	Payline: Scored applications are sorted in rank order by score and selected up to an established score or percentile (Payline)	NCI Leadership	Percentile/Score, Commitment to ESI investigators
P01, U01, RFAs,	Non-Payline	NCI Leadership	Scientific merit, novel or promising scientific approach, etc.
R01, R03, R15, R21	Select Pay	NCI Division, Offices, and Centers (DOCs)	Scientific merit, filling gaps in cancer research portfolio, etc.

When to talk to your Extramural Team

Session 4:
Program perspective of review
Michael Weinreich, PhD
Program Director

Session 1: Funding of your NCI grant



Amy Bartosch
Grants Management Specialist



Session 1: Communicating with your PD



Natalia Mercer, PhD Program Director



Session
4:
Peer
Review

Jennifer Sanders, PhD Center for Scientific Review

Keynotes

Keynote I: Day 1- 11:20am



W. Kimryn Rathmell, MD, PhD Director, National Cancer Institute

Keynote II: Day 2-9:10 am



Elana Fertig, MBBS
Director, Institute for Genome Science
University of Maryland

The objectives of this workshop:

- Better understanding of the roles of the extramural staff
- Establish connection with program, grants officials, and other Pls
- Gain insight about grant processes and opportunities
- Understand your responsibilities as an NCI funded investigator
- Ways to promote your science and participate in outreach activities

Congratulations, New Grantees!

Welcome to the New Grantee Workshop!







Thank You

