Division of Cancer Treatment and Diagnosis (DCTD)

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Cancer Imaging Program



PAVES: Sept 28, 2022

NCI Organizational Structure

Extramural

Division of Cancer

Control and

Population

Sciences

Intramural



Division of Cancer Epidemiology and Genetics



Division of Cancer

Biology

Division of Cancer Treatment and Diagnosis (DCTD)

Cancer Imaging Program

- Cancer Diagnosis Program
- Cancer Therapy Evaluation Program
 - Radiation Research Program

- Biometric research Program
- Development Therapeutics Program
- Translational Research Program
- Office of Cancer Complementary and Alternative Medicine

Office of Cancer Clinical Proteomics Research

DCTD: Common Themes

Diagnosis and Treatment

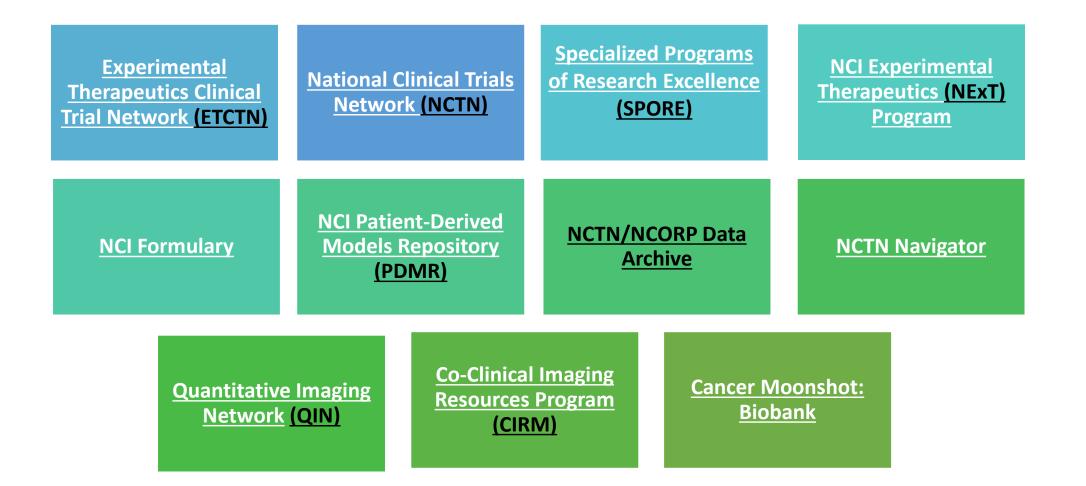
- Cancer Biology
- Molecular Imaging
- Nanotechnology
- Target identification,
- Drug development
- Clinical trials
- Technology development
- Biobanks, genomic, proteomic and imaging archives

 Imaging: diagnosis, treatment planning; radiation therapy treatment evaluation

Information Technologies

- Artificial Intelligence
- Algorithm development
- Machine learning
- Treatment Planning
- Predictive analysis
- Robotics

DCTD: Major Activities



Research Resources

DCTD has a variety of resources available for preclinical and clinical anti-cancer drug development, as well as resources pertinent to clinical applications of imaging.



https://dctd.cancer.gov/ResearchResources/default.htm

COVID-19 Research Initiatives

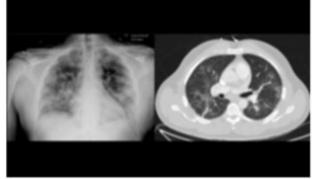
- NCI COVID-19 in Cancer Patients study (NCCAPS): involves all clinical trial programs
- NCI COVID-19 Serology Program: understand immune response to SARS-CoV-2 (SeroNet)
- Study of Other Risk Factors: (smoking status in COVID patients related to severity)
- Search for COVID 19-Treatments: (RAS initiative: compounds that block RAS protein that drive tumor growth)
- **Digital Health Solutions:** To address the COVID-19 (pandemic (Along with NIBIB)
- Genomic Studies of COVID-19 Outcomes- (DCEG)
- https://www.cancer.gov/research/key-initiatives/covid-19

MAGING ARCHIVE

The Cancer Imaging Archive posts COVID-19 imaging data to benefit community

The Frederick National Lab (FNL) has published an article about TCIA's COVID-19 response efforts!

"Publicly available datasets related to COVID-19 are appearing in an unexpected place—the Cancer Imaging Archive (TCIA), a project of the Division of Cancer Treatment and Diagnosis of the National Cancer Institute.



Since the start of the pandemic, researchers around the world have been racing to learn as much as possible about the virus—how it spreads, how to diagnose and treat it, and how to develop vaccines against it. One way to help speed up scientific discovery is data sharing."

Read the full article here and find the COVID Collections available on TCIA here.

FNL newsletter February 2021 by Justin Kirby



CIP: Focus Areas and Funding Support The Cancer Imaging Archives (TCIA)

Co-Clinical Imaging Research Resource Program (CIRP)

Nanotechnology: NCI Alliance for Nanotechnology in Cancer

Quantitative Imaging Network (QIN)

Information Technologies for Cancer Research (ITCR)

Investigator initiated R01 grant

Small Business grants and contracts (SBIR/STTR)

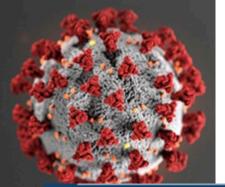
Radiation Research Program (RRP)

Funding Opportunities

RRP Initiatives (current)

FOA #	Initiative Title				
RFA-CA-22-046	Radiation Oncology-Biology Integration Network (ROBIN) Centers (U54 Clinical Trial Required)				
NOT-CA-22-113	Notice of Intent to Publish a Funding Opportunity Announcement for Radiation Oncology-Biology Integration Network (ROBIN) Centers (U54 Clinical Trial Required)				
PAR-22-198	Precision Approaches in Radiation Synthetic Combinations (PAIRS, R01 Clinical Trial Optional)				
PAR-22-199	Precision Approaches in Radiation Synthetic Combinations (PAIRS, R21 Clinical Trial Optional)				
PAR-22-139	Systematic Testing of Radionuclides in Preclinical Experiments (STRIPE) (R01 Clinical Trial Not Allowed)				
PAR-22-140	Systematic Testing of Radionuclides in Preclinical Experiments (STRIPE) (R21 Clinical Trial Not Allowed)				

Guidance for NCI Clinical Trial Activities Affected by the Novel Coronavirus More...



Cancer Therapy Evaluation Program Early Drug Development

How Does COVID-19 Affect People with Cancer? NCCAPS Will Help Find Out. More...

NCI-COG Pediatric MATCH (Molecular Analysis for Therapy Choice)

is a phase 2 clinical trial for children and adolescents with advanced solid tumors – including non-Hodgkin lymphomas, brain tumors, and histiocytoses – that have not responded to treatment or have progressed on standard therapy. More...

Experimental Trials Networ

National Clinical

Trials Network

a National Cancer Institute program

NCTN Overview

NCI transformed its longstanding Cooperative Group Program into the new

NCI National Clinical Trials Network (NCTN) Program. More...

NC

The National Canc in the pharmaceuti individual investiga innovative cancer to Clinical Trials Network these therapies us inclusive team-bas

					Qu	ick Links
~		(F)			Th	e NCI Grants Process
		R	WEL			nplates for Clinical Assay velopment
		Care y	To The GT	Ex Bioba		prepositories and Biospecimen search Branch
	611		2./_		Use	mics" Checklist — Criteria For e of Omics-based Predictors in nical Trials
Fun	ding Opportunities	GTEx Biobank	NCTN Navigator	Clinical Trial Ap		iical, Legal and Social blications of Biobanking in

Welcome to the Cancer Diagnosis Program!

The Cancer Diagnosis Program strives to improve the diagnosis and assessment of cancer by effectively moving new scientific knowledge into clinical practice. This national program stimulates, coordinates and funds resources and research for the development of innovative in vitro diagnostics, novel diagnostic technologies and appropriate human specimens in order to better characterize cancers and allow improved medical decision making and evaluation of response to treatment.

For more information about the Cancer Diagnosis Program and its Branches, please click here.

s://biospecimens.cancer.gov/gtexbiobank/

CDP

cancer

Improve the

diagnosis and

assessment of

Stay Connected

(REMARK)

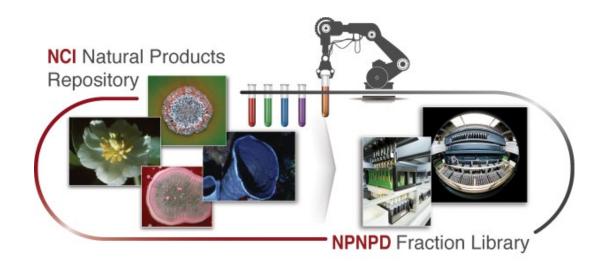
NCI-MATCH/EAY131

Reporting Recommendations for

Tumor Marker Prognostic Studies

Developmental Therapeutics Program (DTP)

The NCI Development Therapeutics Program (DTP) provides services and resources to the academic and privatesector research communities worldwide to facilitate the discovery and development of new cancer therapeutic agents



Funding Opportunity Announcement:

 <u>Assay development and screening for discovery of chemical</u> probes, drugs or immunomodulators (R01 Clinical Trial Not <u>Allowed</u>)
<u>Notice of Special Interest (NOSI): Advancing the development of</u>

tumor site-activated small molecules

•NCI Clinical and Translational Exploratory/Developmental

Studies (R21 Clinical Trial Optional)

(DCTD) Tumor Repository



Office of Cancer Complementary and Alternative Medicine (OCAM)

Established in October 1998 to coordinate and enhance the activities of the National Cancer Institute (NCI) in the arena of complementary and alternative medicine (CAM)



Talking about Complementary and Alternative Medicine with Health Care Providers: A Workbook and Tips

This workbook is designed to help you talk with your health care provider(s) about your complementary and alternative medicine (CAM) use during and after your cancer care. More...

Microbial-based Cancer Therapy - Bugs as Drugs

International Activities: Chinese Medicine Indian Medicine Research Resources



Technologies to Overcome Cancer

High-Dose Vitamin C (PDQ®) summary now available

This complementary and alternative medicine (CAM) information summary provides an overview of the use of highdose vitamin C (also known as ascorbate or L-ascorbic acid) as a treatment for people with cancer. **More...**

Yoga and Cancer

People with cancer often suffer from a host of symptoms and side effects such as depression, pain, nausea, fatigue and many others. Yoga has been studied to determine if it can aid patients with cancer to ease these and other associated problems. **More...** Annual Integrative Women's Health Symposium 2022

View Videocast – Traditional Medicines for COVID-19 and Cancer: Effects on Immunity and Inflammation

Integrative Oncology: Addressing the Global Challenges of Cancer Prevention and Treatment

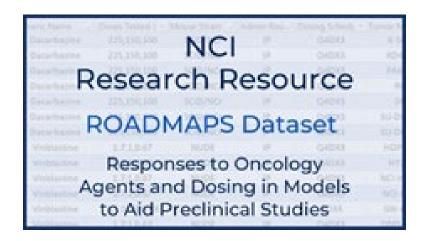
The National Cancer Institute Cannabis, Cannabinoids, and Cancer Research Symposium videos

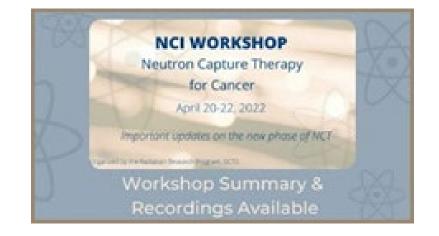
The NCI Library of TCM Plant Extracts

New Funding Opportunity: Microbial-based Cancer Therapy – Bugs as Drugs



Publicly Available Research Resources





Novel Chemical Approaches for Targeting Fusion Oncoproteins

Webinar Series: Fridays, 12:00 - 1:00 pm ET (Aug. 19 - Oct. 21, 2022)

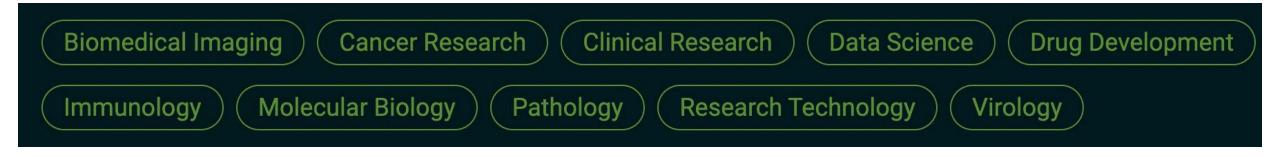


https://dctd.cancer.gov/ResearchResources/default.htm

Publicly Available Research Resources

Frederic National Lab for Cancer Research

The only national laboratory dedicated to the biomedical sciences



Funding Opportunities



https://dctd.cancer.gov/FundingPartnerships/PAsRFAs.htm



Workforce and Career Development

Diversity Career Development Program:

NCI is committed to excellence in science and to fostering a diverse and inclusive workforce. The Diversity Career Development Program (DCDP) seeks to empower talented intramural postdoctoral trainees, including but not limited to those from underrepresented groups in biomedical research, to achieve their full potential at NCI.

NCI Transition Career Development Award to Promote Diversity (K22 Clinical Trial Required) https://grants.nih.gov/grants/guide/pa-files/PAR-21-302.html

NCI Equity and Inclusion Program



Funding Opportunities to promote workforce diversity

https://www.cancer.gov/research/key-initiatives/nci-equity-inclusion-program/funding



https://dctd.cancer.gov/NewsEvents/News-2022.htm

Questions??

