Analyzing and utilizing NIH award data for your strategic advantage

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What decisions can be informed through the use of NIH data?

Selection of home IC Selection of study section Selection of program officer Preparing for future proposals

Institute and Center (IC) abbreviations

AA	NIH National Institute on Alcohol Abuse and Alcoholism (NIAAA)
AG	NIH National Institute on Aging (NIA)
AI	NIH National Institute of Allergy and Infectious Diseases (NIAID)
AR	NIH National Institute of Arthritis and Musculoskeletal and Skin
	Diseases (NIAMS)
AT	NIH National Center for Complementary and Integrative Health
	(NCCIH)
CA	NIH National Cancer Institute (NCI)
DA	NIH National Institute on Drug Abuse (NIDA)
DC	NIH National Institute on Deafness and Other Communication
	Disorders (NIDCD)
DE	NIH National Institute of Dental & Craniofacial Research (NIDCR)
DK	NIH National Institute of Diabetes and Digestive and Kidney Disease
	(NIDDK)
EB	NIH National Institute of Biomedical Imaging and Bioengineering
	(NIBIB)
ES	NIH National Institute of Environmental Health Sciences (NIEHS)
FV	NIH National Eva Instituta (NFI)

Institute and Center (IC) abbreviations

GM	NIH National Institute of General Medical Sciences (NIGMS)
HD	NIH Eunice Kennedy Shriver National Institute of Child Health and
	Human Development (NICHD)
HG	NIH National Human Genome Research Institute (NHGRI)
HL	NIH National Heart, Lung and Blood Institute (NHLBI)
LM	NIH National Library of Medicine (NLM)
MD	NIH National Institute on Minority Health and Health Disparities
	(NIMHD)
MH	NIH National Institute of Mental Health (NIMH)
NR	NIH National Institute of Nursing Research (NINR)
NS	NIH National Institute of Neurological Disorders and Stroke (NINDS)
RM	NIH Roadmap
RR	National Center for Research Resources (NCRR) (dissolved 12/2011)
TR	NIH National Center for Advancing translational Sciences (NCATS)
TW	NIH Fogarty International Center (FIC)

FIC	154	15	\$2,148,616	9.7%	2015
<u>NCATS</u>	6	4	\$2,997,788	66.7%	2015
NCCIH	274	34	\$14,365,935	12.4%	2015
NCI 3	9,513	1,236	\$508,125,718	13%	2015
<u>NEI</u>	1,278	273	\$107,010,419	21.4%	2015
NHGRI	320	60	\$46,248,195	18.8%	2015
NHLBI	4,233	928	\$497,923,174	21.9%	2015
NIA	2,557	452	\$271,221,653	17.7%	2015
NIAAA	950	156	\$52,827,526	16.4%	2015
NIAID	5,932	1,272	\$577,320,121	21.4%	2015
<u>NIAMS</u>	1,675	279	\$92,928,202	16.7%	2015
<u>NIBIB</u>	1,537	185	\$59,218,487	12%	2015
NICHD	3,439	397	\$149,468,763	11.5%	2015
NIDA	1,835	359	\$170,392,090	19.6%	2015
NIDCD	723	180	\$65,219,899	24.9%	2015
NIDCR	776	171	\$68,527,796	22%	2015
NIDDK	3,391	689	\$396,866,819	20.3%	2015
<u>NIEHS</u>	1,245	183	\$59,721,530	14.7%	2015
<u>NIGMS</u>	3,626	1,074	\$404,894,040	29.6%	2015
NIMH	2,480	507	\$241,050,941	20.4%	2015
NIMHD	219	30	\$13,982,202	13.7%	2015
NINDS	3,992	819	\$310,868,609	20.5%	2015
NINR	575	46	\$22,271,166	8%	2015
NLM ²	101	20	\$7,621,621	19.8%	2015

NIH budget by IC, FY2016 (\$ in thousands)

Institu	ute	FY2015	FY2016
NCI		4,950	5,098
NHLBI		2,997	3,071
NIDDK		1,749	1,788
NINDS		1,605	1,660
NIAID		4,358	4,614
NIGMS		2,371	2,433
NICHD		1,286	1,318
NIEHS		667	681
NIA		1,199	1,267
NIAMS		521	533
NIDCD		405	416
NIAAA		447	459
NIDA		1,028	1,047
NIMH		1,463	1,489
NIBIB		330	337
NCCIH		124	127

- R01 NIH Research Project Grant Program (R01)
 - •Used to support a discrete, specified, circumscribed research project
 - •NIH's most commonly used grant program
 - •No specific dollar limit unless specified in FOA
 - •Advance permission required for \$500K or more (direct costs) in any year
 - •Generally awarded for 3 -5 years
 - Utilized by all ICs
 - •See parent FOA: PA-16-160
 - R03 NIH Small Grant Program (R03):
 - •Provides limited funding for a short period of time to support a variety of types of projects, including: pilot or feasibility studies, collection of preliminary data, secondary analysis of existing data, small, self-contained research projects, development of new research technology, etc.
 - Limited to two years of funding
 - Direct costs generally up to \$50,000 per year
 - Not renewable
 - Utilized by more than half of the NIH ICs
 - •See parent FOA: PA-16-162

- NIH Exploratory/Developmental Research Grant Award (R21) R21 •Encourages new, exploratory and developmental research projects by providing support for the early stages of project development. Sometimes used for pilot and feasibility studies. Limited to up to two years of funding Combined budget for direct costs for the two year project period usually may not exceed \$275,000. No preliminary data is generally required Most ICs utilize •See parent FOA: PA-16-161 R34 NIH Clinical Trial Planning Grant (R34) Program
- •Designed to permit early peer review of the rationale for the proposed clinical trial and support development of essential elements of a clinical trial
 - •Usually project period of one year, sometimes up to 3
 - •Usually, allows for a budget of up to \$100,000 direct costs, sometimes up to \$450,000
 - •Used only by select ICs; no parent FOA

NIH at a Glance



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Labs at NIH

Funding for Research

NIH is the nation's medical research agency—supporting scientific studies

Training at NIH

Research Portfolio Online Reporting Tools (RePORT)

REPORTS, DATA AND ANALYSES OF NIH RESEARCH ACTIVITIES

HO

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NIH DATA BOOK



FUNDING FACTS



CATEGORICAL SPENDING REF

Research Portfolio Online Reporting Tools (RePORT)



Text Search (Logic):

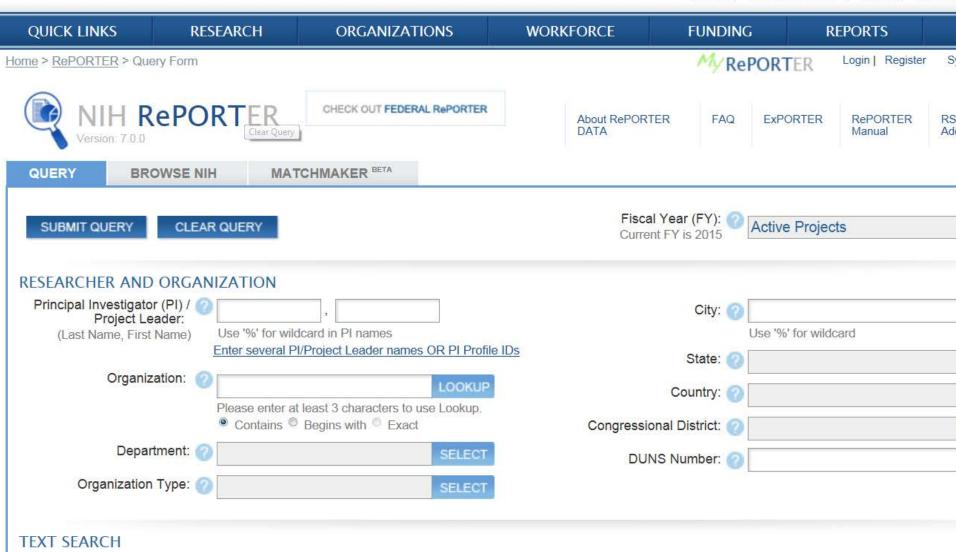
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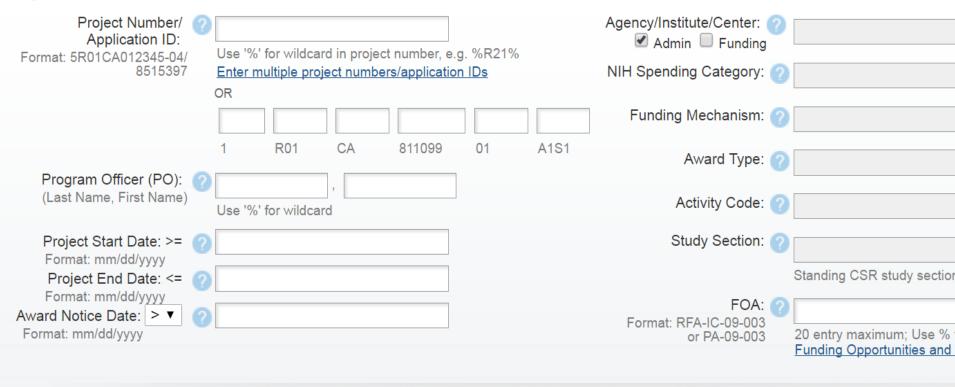
Start Year 2014 -



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Projects

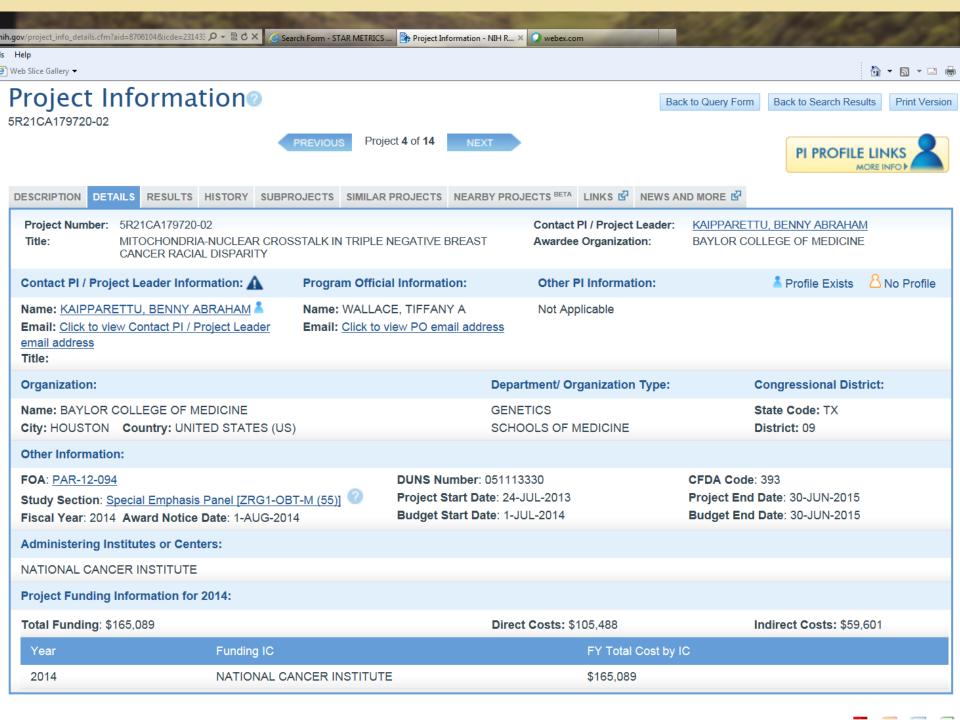
PROJECT DETAILS



ADDITIONAL FILTERS



T Act Project Year Sub #	Project Title	Contact PI/ Project Leader	Organization	FY	Admin IC	Funding IC	FY Total Cost by IC	Simila Proje
5 R21 CA175783 02	HGF SIGNALING IN AFRICAN- AMERICAN AND BASAL-LIKE BREAST CANCER	FLEMING, JODIE MICHELLE et al.	NORTH CAROLINA CENTRAL UNIVERSITY	2014	NCI	NCI	\$151,040	
5 R21 CA179720 02	MITOCHONDRIA-NUCLEAR CROSSTALK IN TRIPLE NEGATIVE BREAST CANCER RACIAL DISPARITY	KAIPPARETTU, BENNY ABRAHAM	BAYLOR COLLEGE OF MEDICINE	2014	NCI	NCI	\$165,089	
1 R21 CA179733 01A1	RACIAL DISPARITY OF MIC-1 GENE IN PROSTATE TUMOR BIOLOGY	KARAN, DEV	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA	2014	NCI	NCI	\$174,218	
1 R21 CA183892 01	METABOTROPIC GLUTAMATE RECEPTOR 1 IN AFRICAN AMERICAN PROSTATE CANCER	KOOCHEKPOUR, SHAHRIAR	ROSWELL PARK CANCER INSTITUTE CORP	2014	NCI	NCI	\$221,589	
1 R21 CA176555 01A1	OBESITY AND IGF-AXIS ACTIVATION IN NATIVE HAWAIIAN WOMEN WITH BREAST CANCER	LOO, LENORA WM	UNIVERSITY OF HAWAII AT MANOA	2014	4 NCI	NCI	\$165,300	
5 R21 CA175916 02	RACIAL DISPARITY IN COLORECTAL CANCER: MOLECULAR MECHANISMS	MAJUMDAR, ADHIP P. N.	WAYNE STATE UNIVERSITY	2014	NCI	NCI	\$132,915	
5 R21 CA178152 02	RACIAL DISPARITIES IN BREAST CANCER AND THE ROLE OF MICRO- RNAS	REDDY, KALADHAR B.	WAYNE STATE UNIVERSITY	2014	NCI	NCI	\$192,409	
1 R21 CA184778 01	PROFILING GENETIC ALTERATIONS IN NSCLC IN AFRICAN AMERICANS	SCHWARTZ, ANN G et al.	WAYNE STATE UNIVERSITY	2014	NCI	NCI	\$132,240	
5 R21 CA176054 02	MITOCHONDRIAL DNA AND PROSTATE CANCER IN AFRICAN AMERICAN	SINGH, KESHAV K.	UNIVERSITY OF ALABAMA AT BIRMINGHAM	2014	NCI	NCI	\$154,539	
1 R21 CA185516 01	HIGH KYNURENINE IN AGRESSIVE TRIPLE NEGATIVE AFRICAN AMERICAN RREAST CANCER	SREEKUMAR, ARUN	BAYLOR COLLEGE OF MEDICINE	2014	NCI	NCI	\$204,233	



PREVIOUS

Project 4 of 14

NEARBY PROJECTS BETA LINKS ☑ NEWS AND MORE ☑ DESCRIPTION DETAILS RESULTS HISTORY SUBPROJECTS SIMILAR PROJECTS

Project Number: 5R21CA179720-02

we expect these to be translated to identify new drug targets for AA TN BCa.

MITOCHONDRIA-NUCLEAR CROSSTALK IN TRIPLE NEGATIVE BREAST

CANCER RACIAL DISPARITY

Contact PI / Project Leader: KAIPPARETTU, BENNY ABRAHAM

Awardee Organization: BAYLOR COLLEGE OF MEDICINE

Abstract Text:

Title:

DESCRIPTION (provided by applicant): For Triple Negative BCa (TN BCa), there is a current lack of understanding of driver pathways and hence are often treated using mo generic therapies. Currently there are no clinically accepted targets for the treatment for TN BCa and to predict its potential to metastasize. while BCa incidence is higher in Caucasian (CA) women, death due to BCa is higher in African American (AA) women. Importantly, AA patients are more likely to be diagnosed with triple negative (TN) BCa at a more advanced stage than CA. Mitochondria is considered the energy house of the cell and has been strongly implicated in tumor development and progression and thu serving as a potential target for chemotherapy. With the advent of Transmitochondrial cybrid (cybrid) technology, it is now possible to examine the specific contribution of tun associated mitochondria to neoplastic growth and development under a defined nuclear background. Cybrids are constructed by fusing enucleated cells harboring mitochondria of interest with 70 recipient cells (cells harboring ablated mitochondrial DNA). Using this technology in both an in vitro and in vivo setting, we have demonstrated a key role for mitochondrial retrograde regulation (MRR) progression of TN BCa. We have also identified critical regulation of post-translational modification of Src oncogenic pathway by

cancer mitochondria. Our preliminary analysis using cybrids with mitochondria from AA and CA TN BCa cell lines suggest that mitochondrial retrograde regulation (MRR) of nuclear genes are different in AA and CA cells. Here we propose to combine Dr. Kaipparettu's (PI) expertise in BCa and cybrid technology with Dr. Lewis expertize in general patient derived xenografts and Dr. Creighton's expertise in bioinformatics to evaluate a clinically challenging question, "How can we better distinguish AA and CA TN BCa by MRR?" Strategically, we will use cybrid system generated from AA and CA TN BCa patients-derived xenografts to analyze the mitochondria specific alterations in metastatic

mitochondrial function, nuclear origin by next-gen sequencing and evaluated for phenotypic changes using in vitro and in vivo tumor forming/invasion assays. Following this, cybrids with AA and CA mitochondria will be profiled for their Src pathway modification. To identify novel pathways, the MRR of cybrids will be analyzed by microarray and the gene expression will be examined using an established biostatistics and bioinformatics pipelines (Oncomine Concept Mapping) together with the biostatistician Dr. Creightor generate oncogenic signatures and pathways associated with AA and CA TN BCa metastasis. The nominated pathways will be evaluated for their role in TN BCa progressic

using cell line and xenograft models. Overall, we expect to develop the first- of-its-kind mitochondria-driven oncogenic signature for AA and CA TN BCa progression. Clinical

BCa. ?0 cells from different TN breast-derived AA and CA nuclear background are already available in Kaipparettu lab. The cybrids thus generated will be confirmed for their

Public Health Relevance Statement:

PUBLIC HEALTH RELEVANCE: Racial disparity exists in triple negative breast cancer, which is one of the aggressive subtypes of cancer, with higher number of incidence mortality in young African American women. Though mitochondria play an important role in promoting cancer progression by retrograde regulation of nuclear genes and pos

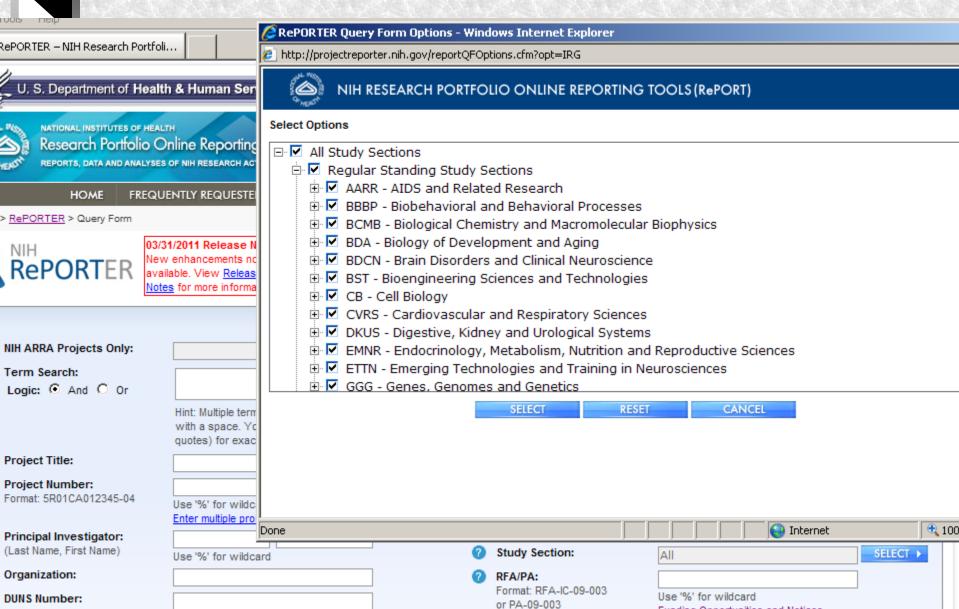
translation modification of oncoproteins, the role mitochondrial regulation in racial disparity of triple negative breast cancer has never been examined. Using a combination of cybrid technology together with oncogenic pathway analysis, this proposal aims to identify mitochondria-regulated cancer signatures for racial disparity in triple negative brea

Which program officer to contact to float ideas about a proposal?

DESCRIPTION	D	ETAILS	RESULTS	H	IISTORY	SUBPROJE	ECTS
Project Number:	5R01CA118159-	05			Contact Principal	Investigator:	ADAMS, GREGOR
Title:	DEFINING THE RO TARGETING AND		IN ANTIBODY-BASED TUMOR		Awardee Organia	zation:	FOX CHASE CAN
Contact PI Informat	ion:	Progra	m Official Information:		Other PI Inforn	nation:	
Name: ADAMS, GREGORY P C Email: gregory.adams@fccc.edu Title: PROGRAM CO-LEADER		Name: Email:	Name: MUSZYNSKI, KAREN Email:		Not Applicable		
Organization:					Department/ Ed	lucational Institu	ition Type:
Name: FOX CHASE (City: PHILADELPHIA		STATES (US)	Unavailable Unavailable				
Other Information:							
RFA/PA:				DUNS Num	ber:	073724262	CFDA Code:
Study Section:	Special Emphasi	s Panel (ZRG1)		Project Sta	art Date:	5-FEB-2007	Project End [
Fiscal Year: 2011	Award Notice	Date: 10-DEC-20	010	Budget Start Date: 1-JAN-20		1-JAN-2011	Budget End [
Administering Insti	tutes or Centers	:					
NATIONAL CANCER	INSTITUTE						
Project Funding Info	ormation for 2011	:					
Total Funding: \$28	33,895						
Ye	ar		Funding IC				FY Total
2011		NATIONAL CAN	CER INSTITUTE			\$283,895	



What awards have been made from a given study section?



What type of awards have been made in response to a PAR?

The active announcement may be a reissue of a former announcement

Part 1. Overview Information

Participating Organization(s)	National Institutes of Health (NIH) National Department of Energy (DOE) U.S. Food and Drug Administration (FDA) National Science Foundation (NSF)
Components of Participating Organizations	National Institute of Biomedical Imaging and Bioengineering (NIBIB) National Cancer Institute (NCI) National Heart, Lung, and Blood Institute (NHLBI) National Human Genome Research Institute (NHGRI) National Institute on Aging (NIA) National Institute on Alcohol Abuse and Alcoholism (NIAAA) Eunice Kennedy Shriver National Institute of Child Health and Human De National Institute on Drug Abuse (NIDA) National Institute of Environmental Health Sciences (NIEHS) National Institute of General Medical Sciences (NIGMS) National Center on Research Resources (NCRR) Office of Behavioral and Social Sciences Research (OBSSR) National Department of Energy (DOE) - Office of Biological and Environm U.S. Food and Drug Administration (FDA) - Division of Cardiovascular D National Science Foundation (NSF) - Directorate for Mathematical and Pl National Science Foundation (NSF) - Directorate for Engineering (ENG) National Science Foundation (NSF) - Office of Cyberinfrastructure (OCI)
Funding Opportunity Title	Predictive Multiscale Models for Biom Environmental and Clinical Research
Activity Code	U01 Research Project – Cooperative Agreements
Announcement Type	Reissue of PAR-08-023

Department of Health and Human Services

Part 1. Overview Information

Participating Organization(s)

National Institutes of Health (NIH)

Components of Participating Organizations

National Cancer Institute (NCI)

Funding Opportunity Title

Exploratory/Developmental Grants Program for Basic Cancer Rese

Activity Code

R21 Exploratory/Developmental Research Grant

Announcement Type

Reissue of PAR-12-094

Related Notices

None

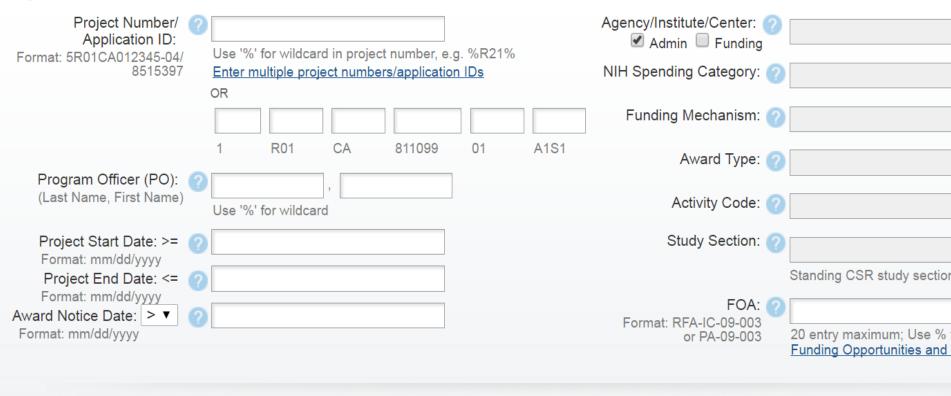
Funding Opportunity Announcement (FOA) Number

PAR-15-092

Companion Funding Opportunity

PAR-15-093, R01 Research Project Grant

PROJECT DETAILS



ADDITIONAL FILTERS



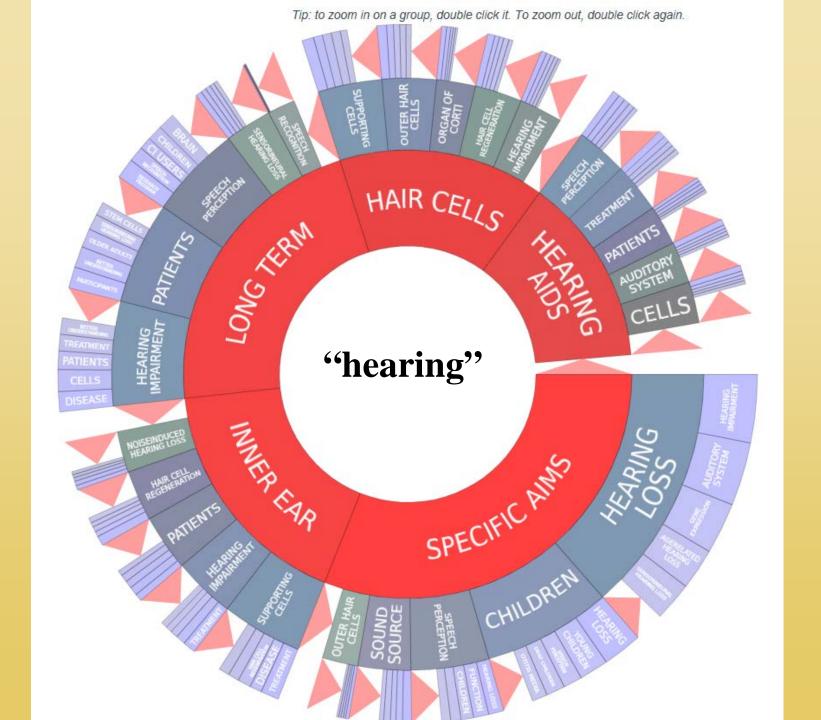
What ideas or fields are funded by the NIH in general and an institute in specific?

Council reports
Director's budget requests
RePORTER data
Program officer

<u>Center</u> and pick "Concepts, Potential Funding Opportunities" as a topic of interest.

DAIDS	DAIT	DMID	Trans-Divisional
September 2016	September 2016	September 2016	None
<u>June 2016</u>	June 2016	<u>June 2016</u>	<u>June 2016</u>
January 2016	January 2016	January 2016	None
September 2015	September 2015	September 2015	September 2015
<u>May 2015</u>	<u>May 2015</u>	<u>May 2015</u>	None
January 2015	January 2015	January 2015	None

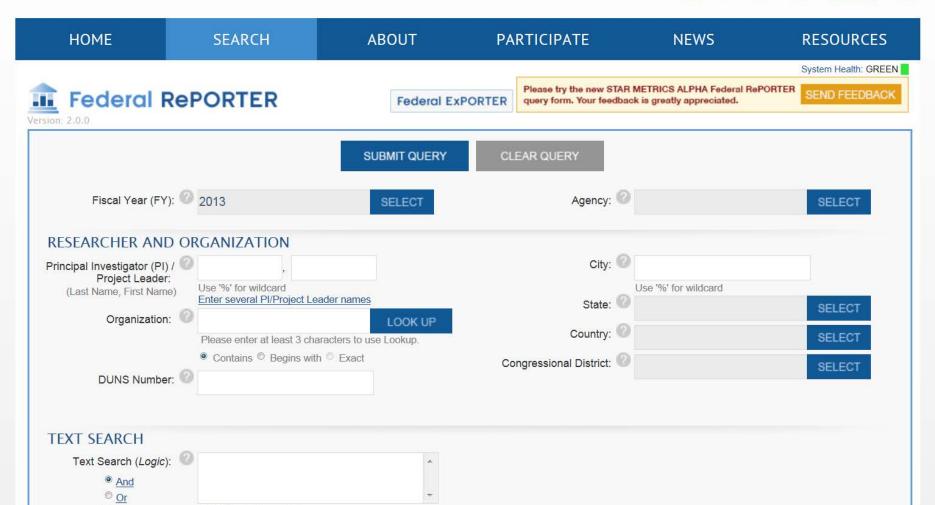
Concepts May Turn Into Initiatives



Federal RePORTER http://federalreporter.nih.gov/







PROGRAM CONTACT: Eun-Chung Park 301-496-7453 epark@niaid.nih.gov

SUMMARY STATEMENT (Privileged Communication)

Release Date: 06/15/2010

Application Number: 1 R01 Al092571-01

Principal Investigator

PARRISH, COLIN R. PHD

Applicant Organization: CORNELL UNIVERSITY ITHACA

Review Group: ZRG1 IDM-R (03)

Center for Scientific Review Special Emphasis Panel

Member Conflict: Viruses

Meeting Date: 05/25/2010 RFA/PA: PA10-067

Council: OCT 2010 PCC: M34A

Requested Start: 12/01/2010

Project Title: Structural controls of functional receptor and antibody binding to viral capsids

SRG Action: Impact/Priority Score: 20 Percentile: 7 #

Human Subjects: 10-No human subjects involved

Animal Subjects: 30-Vertebrate animals involved - no SRG concerns noted

Project	Direct Costs	Estimated
Year	Requested	Total Cost
1	250,000	388,910
2	250,000	388,910
3	250,000	388,910
4	250,000	388,910
5	250,000	388,910
TOTAL	1,250,000	1,944,550