

# OVERVIEW

## CENTER TO REDUCE CANCER HEALTH DISPARITIES

*Sanya A. Springfield, PhD*

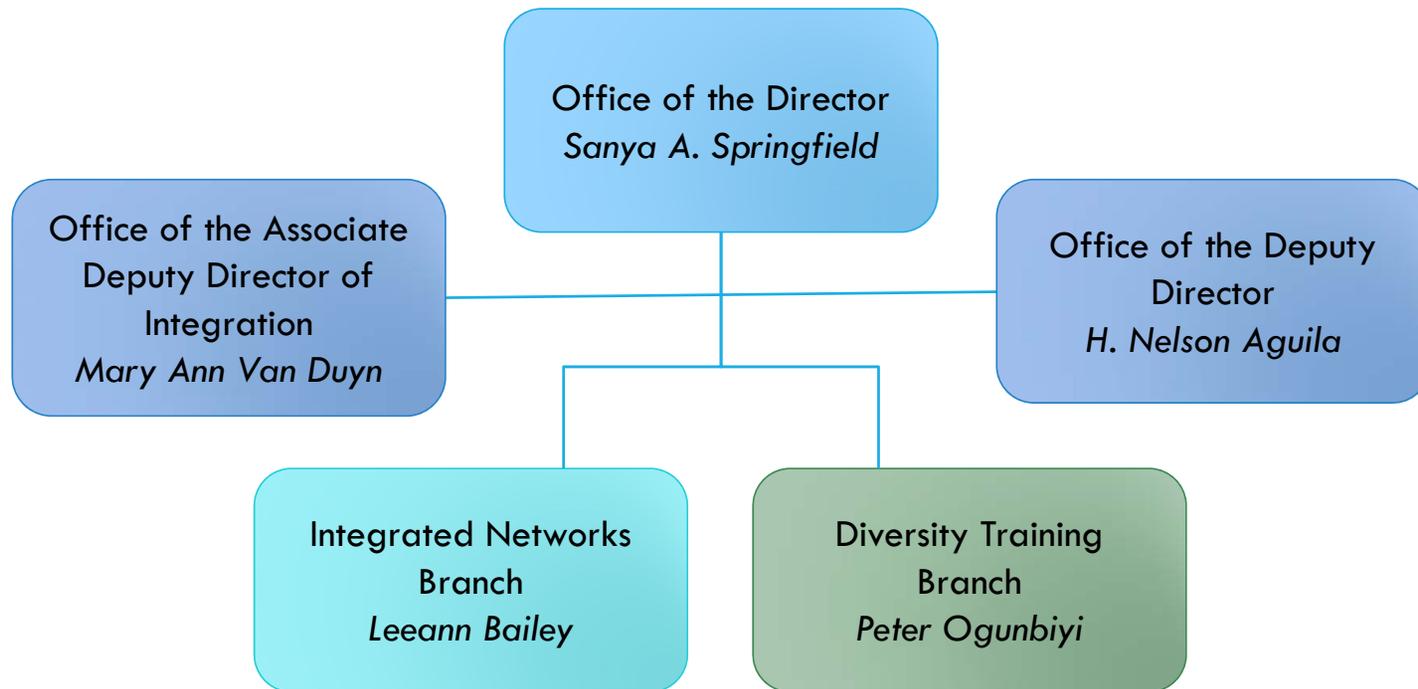
*Director*

*June 19, 2017*



- (1) Strengthens the NCI cancer research portfolio in basic, clinical, translational, and population-based research to address cancer health disparities through collaborations with NCI Divisions, Offices, and Centers.
- (2) Advises on strategic priorities, program direction, and scientific policy to strengthen cancer disparities research, diversity training, women's health, and sexual and gender minority opportunities.
- (3) Leads NCI's efforts in workforce diversity through the training of students and investigators from diverse backgrounds.

# CRCHD ORGANIZATION



# HOW CRCHD ACHIEVES ITS MISSION...

## Training – CURE

3,041+ CURE Scholars

Training and career development opportunities to enhance diversity in cancer and cancer health disparities research



## Forming Partnerships – PACHE

24 Partnerships (13 U54 – 11 P20)

Multidisciplinary research projects in CHD

Outreach, education, clinical trial recruitment

Institutions Serving  
Underserved  
Communities



NCI-Designated  
Cancer Centers

Comprehensive Partnership Grant (U54)  
Feasibility Studies (P20)

## Spawning CHD Research

R21/R01 Basic CHD Research

Cancer Models

P01/SPORE Development Workshop



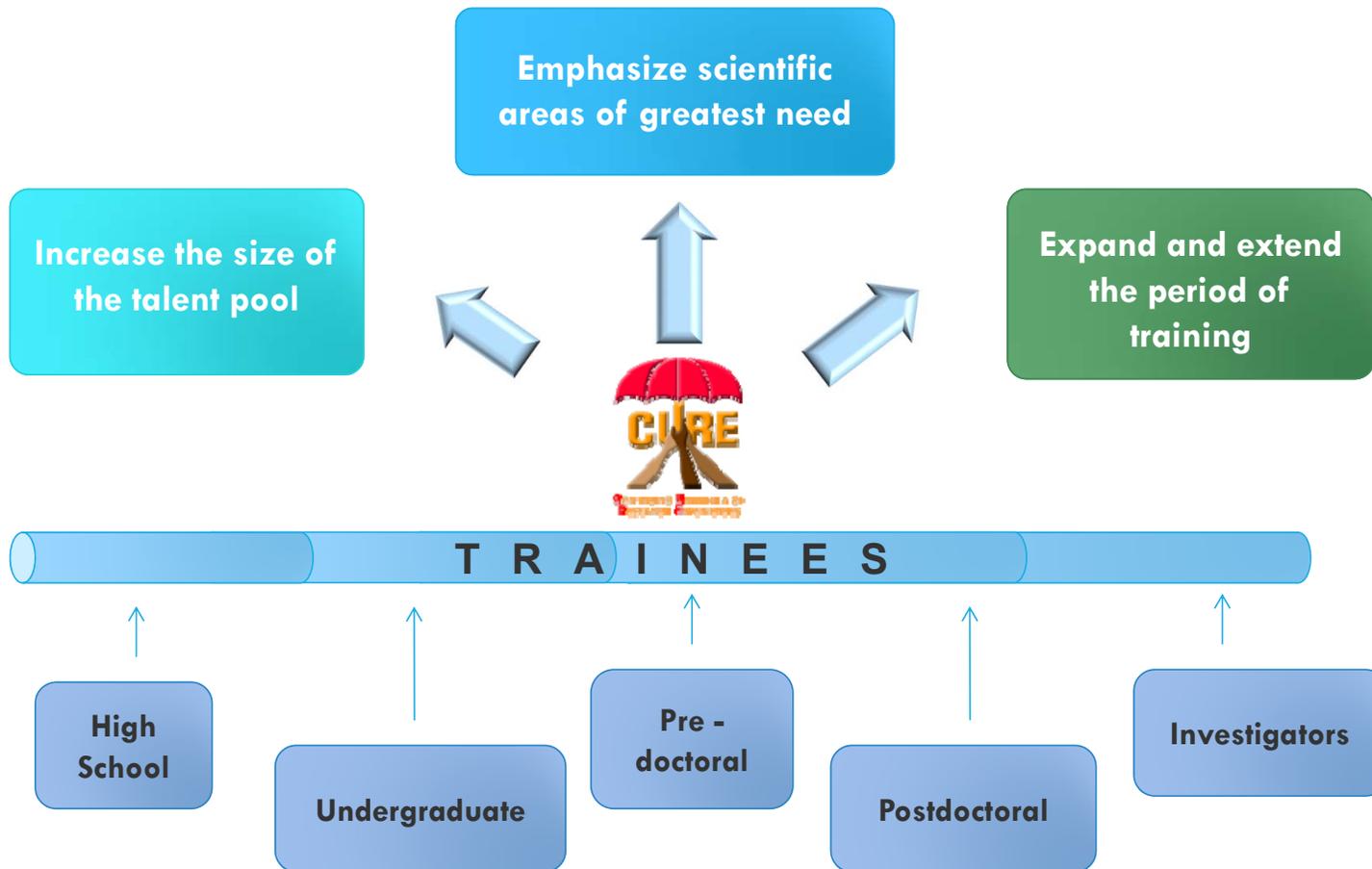
## Networks for Research, Training & Outreach – GMaP and NON

6 GMaP Regions

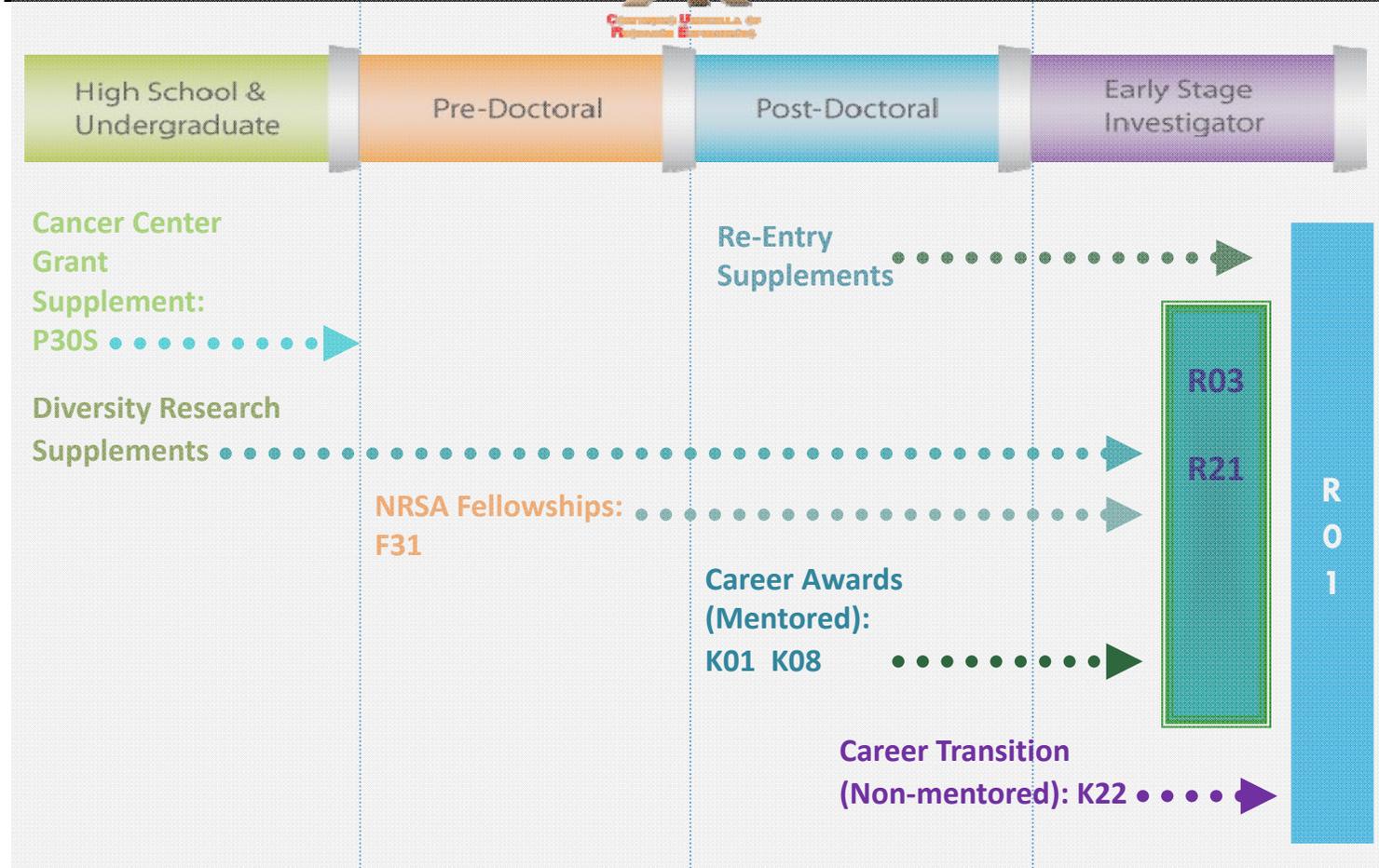
37 NON Cancer Centers with CHEs



# CONTINUING UMBRELLA OF RESEARCH EXPERIENCES (CURE)



Continuing Umbrella Research Experiences

# EARLY INTERVENTION



High School/  
Undergraduate



Predoctoral



Postdoctoral



Investigator

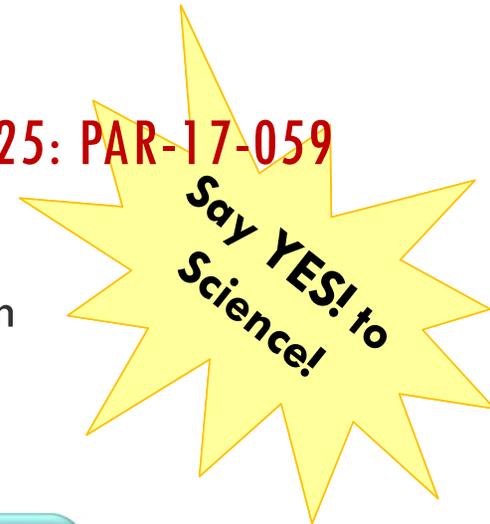
...and now...  
**Middle School**



Photo credit: UMB CURE

## NCI YOUTH ENJOY SCIENCE (YES) RESEARCH EDUCATION PROGRAM R25: PAR-17-059

**Goal:** Provide support for institutions to develop innovative **early intervention** strategies to **attract** and **engage** underrepresented youth in active research environments, and to help prepare them for a career in biomedical research.



Research Experiences

Curriculum or Methods Development

Outreach

Participants: 2 years commitment	Budget	Contact
<ul style="list-style-type: none"><li>• Grades 6-12 students and teachers</li><li>• Undergraduate students and faculty</li><li>• Students must be US citizens or PR</li></ul>	Max direct cost: \$500k per year; F&A 8%; max five years	<a href="mailto:linaj@mail.nih.gov">linaj@mail.nih.gov</a>

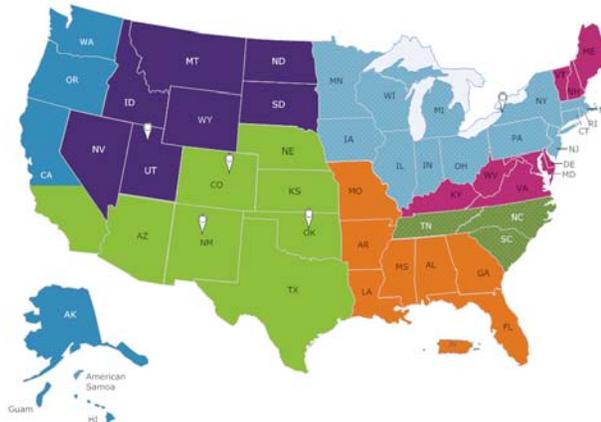
# NATIVE AMERICAN TRAINING PROGRAM

American Indian/Alaska Natives are dramatically underrepresented in biomedical and cancer research

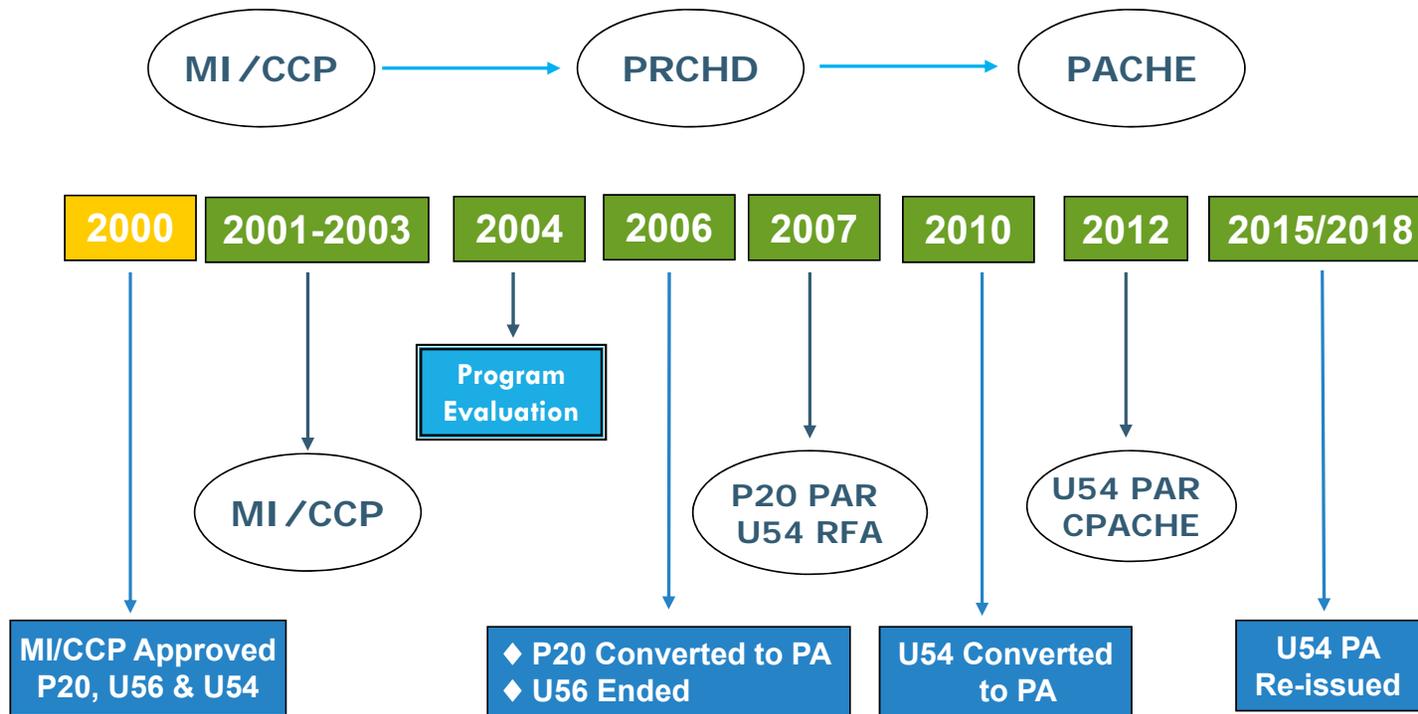
## Strategy

- NCI co-funding of NIGMS Native American Research Centers for Health (NARCH) (FY17)
- Administrative Supplements to 2–4 NCI-designated Cancer Centers (FY17)
- NCI technical assistance for preparing R25 grant applications on research experiences and Courses for Skills Development for American Indian/Alaska Natives (FY18)
- Funding competitive R25 grants with a Native American research training focus

Oklahoma, New Mexico, Huntsman, Arizona, Colorado, Utah

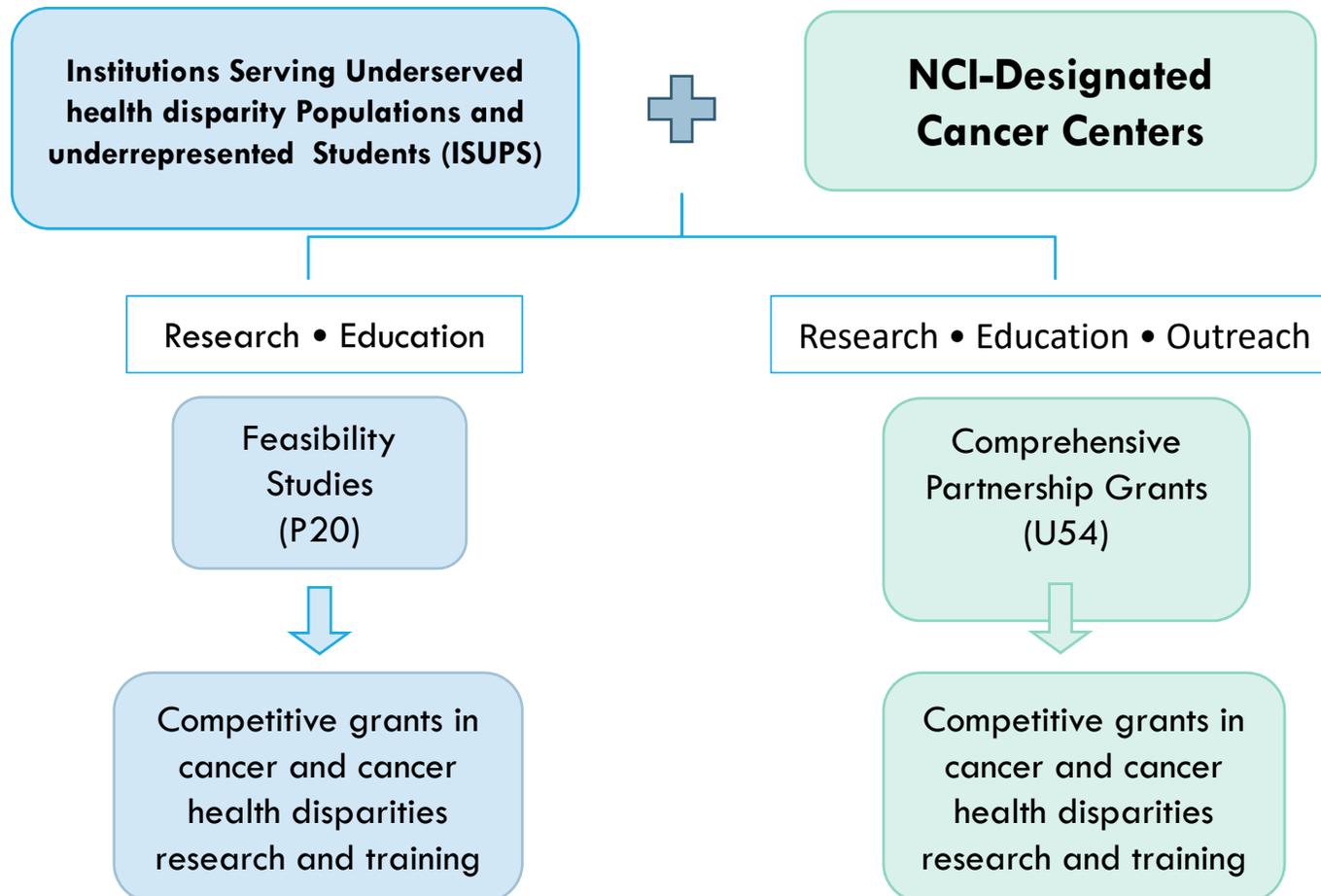


# PARTNERSHIP TO ADVANCE CANCER HEALTH EQUITY (PACHE) PROGRAM DEVELOPMENT HISTORY



*\*First technical assistance workshop- May, 2000*

## PARTNERSHIP PROGRAM STRUCTURE



## UNDERSTANDING CANCER HEALTH DISPARITIES

NCI supports mechanistic studies investigating biological/genetic bases of cancer health disparities

- Both R21 (PAR-15-092) and R01 (PAR-15-093) FOAs available
- Commenced in 2010 with over 65 projects supported to date

Research is ongoing for numerous cancer types: breast, cervical, colon, leukemia, liver, prostate, lung, lymphoma, and endometrial

Partnership with CRCHD and DCB

# RFA: PLANNING GRANTS FOR THE DEVELOPMENT OF SPORES IN CANCER HEALTH DISPARITIES (P20)- *PENDING BSA REVIEW*

**Purpose:** To provide feasibility and planning support to develop translational research programs focused on cancer health disparities. It is the expectation that the P20 programs will evolve into full Specialized Programs of Research Excellence (SPOREs), with cancer health disparities as a cross-cutting research theme.

## **Major Components of the P20 SPORE:**

- Minimum of two translational research projects with a human endpoint
- Scientific Collaborations
- Administrative Core
- Shared Resource Cores (Biospecimen/pathology core is required)
- Developmental Research Program
- Institutional Commitment

**Budget:** Up to \$1.3M total costs/year

**Project Period:** 3 years

**Three P20 awards anticipated**

# DEVELOPMENT OF CELL AND ANIMAL-BASED MODELS TO ADVANCE CANCER HEALTH DISPARITY RESEARCH



Diverse Racial/Ethnic Groups

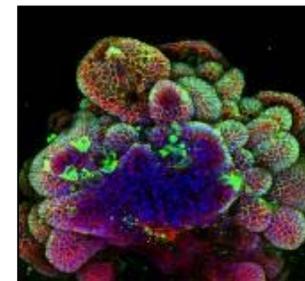


## Cell Lines/Primary Cells

- Conditionally Reprogrammed Cells
- Matched to PDX Models



## Patient Derived Xenograft Mouse Models (PDXs)



## 3D Human Tissue Model Culture Systems

# RFA: MINORITY PDX DEVELOPMENT AND TRIAL CENTERS (M-PDTC) (U54)

*PENDING BSA REVIEW*

**Purpose:** To **expand** and **diversify** the existing PDTC Network (PDXNet) (RFA-CA-17-003). The M-PDTCs will develop PDX models, with the majority of models being from racial/ethnic minority populations and research projects focused upon elucidating therapeutic outcome disparities.

## **Requirements of the M-PDTCs**

- A minimum of **60%** of the PDX models developed must be from minority populations
- 2 Full Research Projects, 1 required to focus on cancer health disparities
- Required Cores: Administrative Core, PDX Core, Bioinformatics Core, Pilot Projects Core
- All models and data must be shared with the network

**Budget:** Up to \$1.25M total costs/year

**Project Period:** 5 years

**Two U54 awards anticipated**

## INTEGRATED NETWORKS



The **National Outreach Network (NON)** leverages federal and private partners for the dissemination of evidenced-based and culturally tailored cancer-related education and outreach, working through community health educators (CHEs) located at 38 NCI-designated Cancer Centers.



The **Geographic Management of Cancer Health Disparities Program (GMAP)** is a seven-region network that fosters collaboration, resource-sharing, and capacity-building among cancer health disparities researchers, trainees, community health educators, and organizations.



**Screen to Save (S2S):** NCI's Colorectal Cancer (CRC) Outreach & Screening Initiative

**NON and GMAP** are integrating resources to implement a culturally sensitive, evidence-based nationwide CRC outreach and screening. Implementation is done through partnerships with local community, clinic, and academic centers.

# FY 17 AND BEYOND:

- **Mechanisms of Disparities in Chronic Liver Disease and Cancer**
  - PAR 17-150/151 (R01/R21)
  - Started as a partnership with NIMHD and CRCHD and is now a trans-NCI activity
- **Planned:**
- **Mentored Clinical Scientist Development Program (K12)**
- **Biospecimen Education and Awareness for American Indian and Alaska Natives**
- **Community Outreach and Education: Genetic literacy, clinical trials and precision medicine**
- **Activities to Promote Disparity Research Collaborations (APDRC)**
  - **Admin supplements to** support new cancer health disparity (CHD)-focused collaborations among NCI-funded grantees with other members of the scientific community.
- **K Award Training Support (KATS)**
  - The proposed R25 funding opportunity aims to increase the competitiveness of postdoctoral fellows applying for NCI CURE K awards (e.g.K01, K23, K08) within colleges/universities that receive less than \$6 million per year in NIH funding (four of the last seven years).

**2017/2018  
CURE  
Distinguished Scholars Seminar Series**

NCI's Center to Reduce Cancer Health Disparities (CRCHD) is celebrating 21 years of the Continuing Umbrella of Research Experiences (CURE) program this year! In honor of this milestone, CRCHD is launching a new series of seminars, the CURE Distinguished Scholars Seminar Series which will recognize outstanding, former CURE scholars and their research. These scientific seminars will highlight leading edge cancer and cancer health disparities research along with new advancements, ideas, and trends in the field of cancer disparities — ideally, inspiring innovation and providing a forum from which new collaborations can begin.

**June 28, 2017**

**Dr. Lewis R. Roberts,  
M.B., Ch.B., Ph.D.**

Peter and Frances Georgeson Professor in Gastroenterology Cancer Research  
Mayo Clinic

**October 5, 2017**

**Dr. John M. Carethers, M.D., MACP**

John G. Searle Professor and Chair, Department of Internal Medicine, Professor of Human Genetics  
University of Michigan

**May 23, 2018**

**Dr. Levi Garraway,  
M.D., Ph.D.**

Senior Vice President of Global Oncology  
Eli Lilly and Company



# TENTH AACR CONFERENCE ON THE SCIENCE OF CANCER HEALTH DISPARITIES IN RACIAL/ETHNIC MINORITIES AND THE MEDICALLY UNDERSERVED

Monday, September 25

Welcome and Opening Session (Keynote / Komen Distinguished Lecturer)

Tuesday, September 26

Plenary Session 1: Inflammation, Microbiome, and Cancer Disparities

Plenary Session 2: Forum and Town Hall – Cancer Health Disparities Research in 2017 and Beyond

Concurrent Session 1: Racial Disparities in Pediatric Cancers

Concurrent Session 2: Multi-Level Social Determinants of Cancer Health Disparities

Hot Topics in Cancer Health Disparities 1

Educational Session 1: Global Health and Environmental Exposures

Educational Session 2: New Biological Models to Advance Cancer Health Disparities Research



Wednesday, September 27

Plenary Session 3: Financial Burden/Toxicity and the Economy of Cancer Care

Plenary Session 4: Forum and Town Hall – Cancer Health Care for Underserved Patients in 2017 and Beyond

Concurrent Session 3: Disparities in Survivorship and Patient Outcomes

Concurrent Session 4: Cancer in Rural Areas

Hot Topics in Cancer Health Disparities 2

Educational Session 3: Forming Successful Collaborations and Building a Research Program

Educational Session 4: Structural and Social Determinants of Cancer Disparities

Thursday, September 28

Plenary Session 5: Obesity, the Obesity Paradox, and Cancer Disparities

Plenary Session 6: Environmental Exposures and Cancer Health Disparities in Underserved Communities

Plenary Session 7: Vision for the Next 10 Years of Cancer Disparities Research