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.
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

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)

Emphasize scientific areas of greatest need

Increase the size of the talent pool

Expand and extend the period of training

TRAINEES

High School

Undergraduate

Pre-doctoral

Postdoctoral

Investigators
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.

<table>
<thead>
<tr>
<th>Research Experiences</th>
<th>Budget</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum or Methods Development</td>
<td>Max direct cost: $500k per year; F&amp;A 8%; max five years</td>
<td><a href="mailto:linaj@mail.nih.gov">linaj@mail.nih.gov</a></td>
</tr>
<tr>
<td>Outreach</td>
<td></td>
<td></td>
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**Participants:** 2 years commitment

- Grades 6-12 students and teachers
- Undergraduate students and faculty
- Students must be US citizens or PR
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*
Comprehensive Partnership Grants (U54)
NCI-Designated Cancer Centers

Institutions Serving Underserved health disparity Populations and underrepresented Students (ISUPS)
Research • Education
Feasibility Studies (P20)
Competitive grants in cancer and cancer health disparities research and training

NCI-Designated Cancer Centers
Research • Education • Outreach
Comprehensive Partnership Grants (U54)
Competitive grants in cancer and cancer health disparities research and training
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
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 then $6 million per year in NIH funding (four of the last seven years).
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