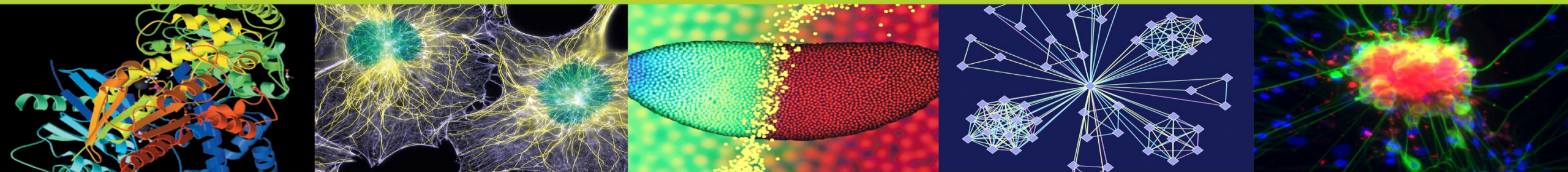


The IDeA Program: Building Research Capacity Where Needs Are the Greatest

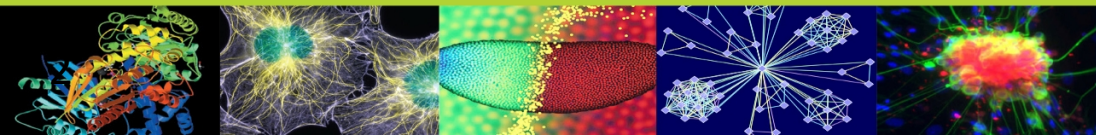
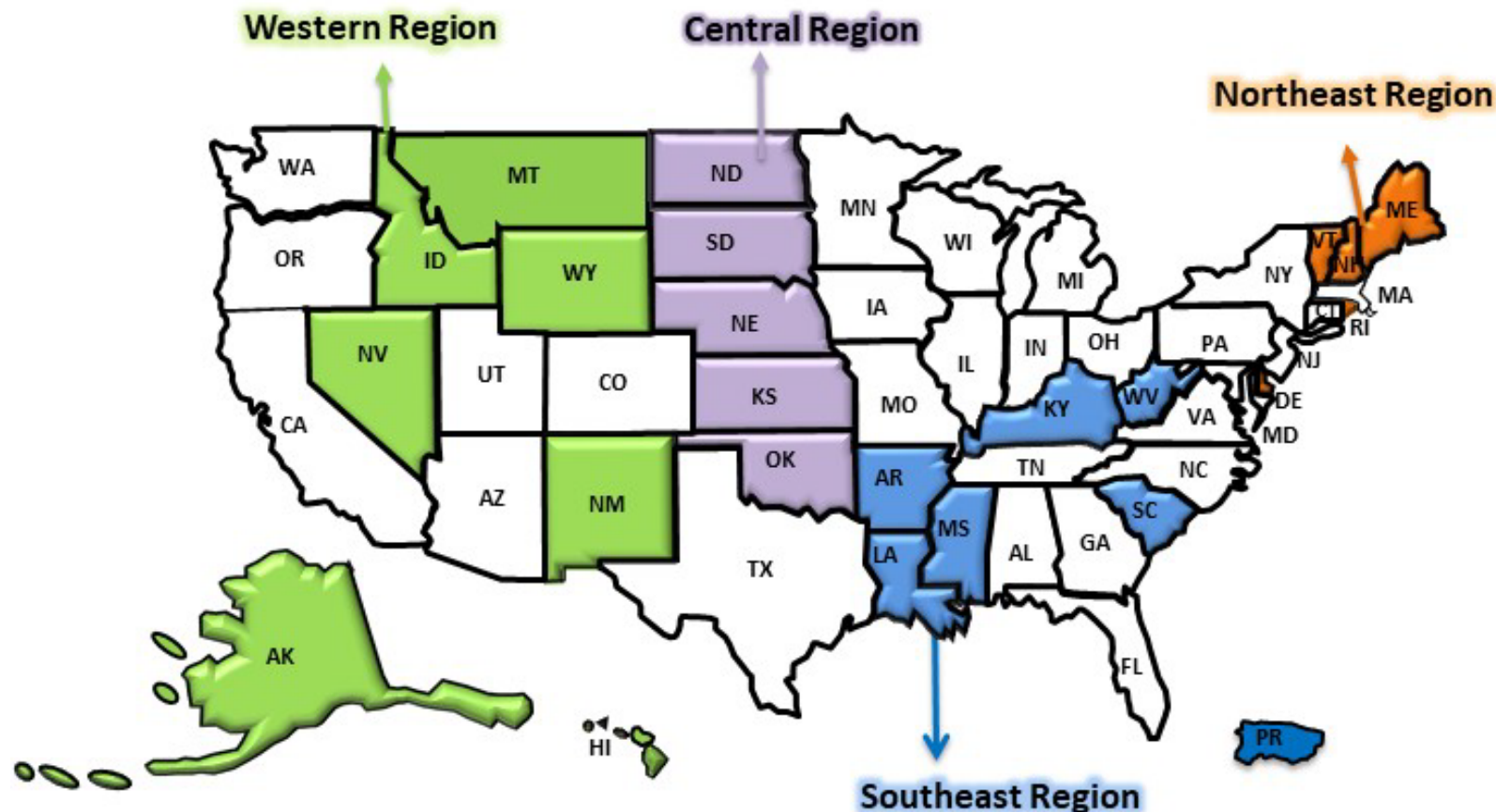
Ming Lei, PhD

Director, Division for Research Capacity Building, NIGMS/NIH



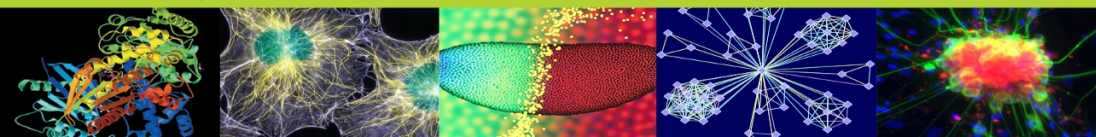
The IDeA (Institutional Development Award) Program

- Authorized by Congress in 1993 to strengthen biomedical research in 23 US States and Puerto Rico that received NIH funding at low levels
- First IDeA Award funded by NCRR in 2000
- The IDeA Program was moved to NIGMS in 2012



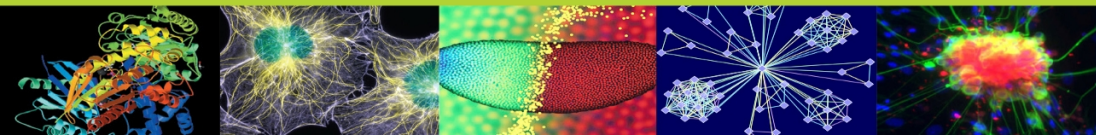
Steady Congressional Support for IDeA Program

FY	IDeA Appropriations	NIH Appropriations	IDeA/NIH (%)
2023	\$425,956,000	\$47,459,000,000	0.90
2022	\$410,453,000	\$45,000,000,000	0.91
2021	\$396,573,000	\$43,010,500,000	0.92
2020	\$386,573,000	\$41,760,000,000	0.93
2019	\$361,573,000	\$39,306,349,000	0.92
2018	\$350,575,000	\$37,311,349,000	0.94
2017	\$333,361,000	\$34,300,999,000	0.97
2016	\$320,840,000	\$32,311,349,000	0.99
2015	\$273,325,000	\$30,311,349,000	0.90
2014	\$273,325,000	\$30,142,653,000	0.91
2013	\$261,554,421	\$29,315,822,000	0.89



IDeA Program Supports Research Capacity Building

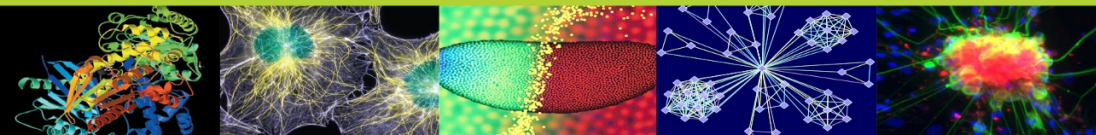
- **Infrastructure enhancement**
 - **Research workforce development**
 - **Competitive research**
-
- **In all NIH mission areas including basic, clinical, behavioral, and translational research**
 - **Primarily through institutional center and regional network grants**



IDeA Program Supports Five Funding Initiatives

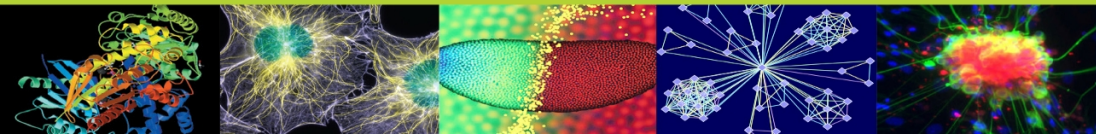
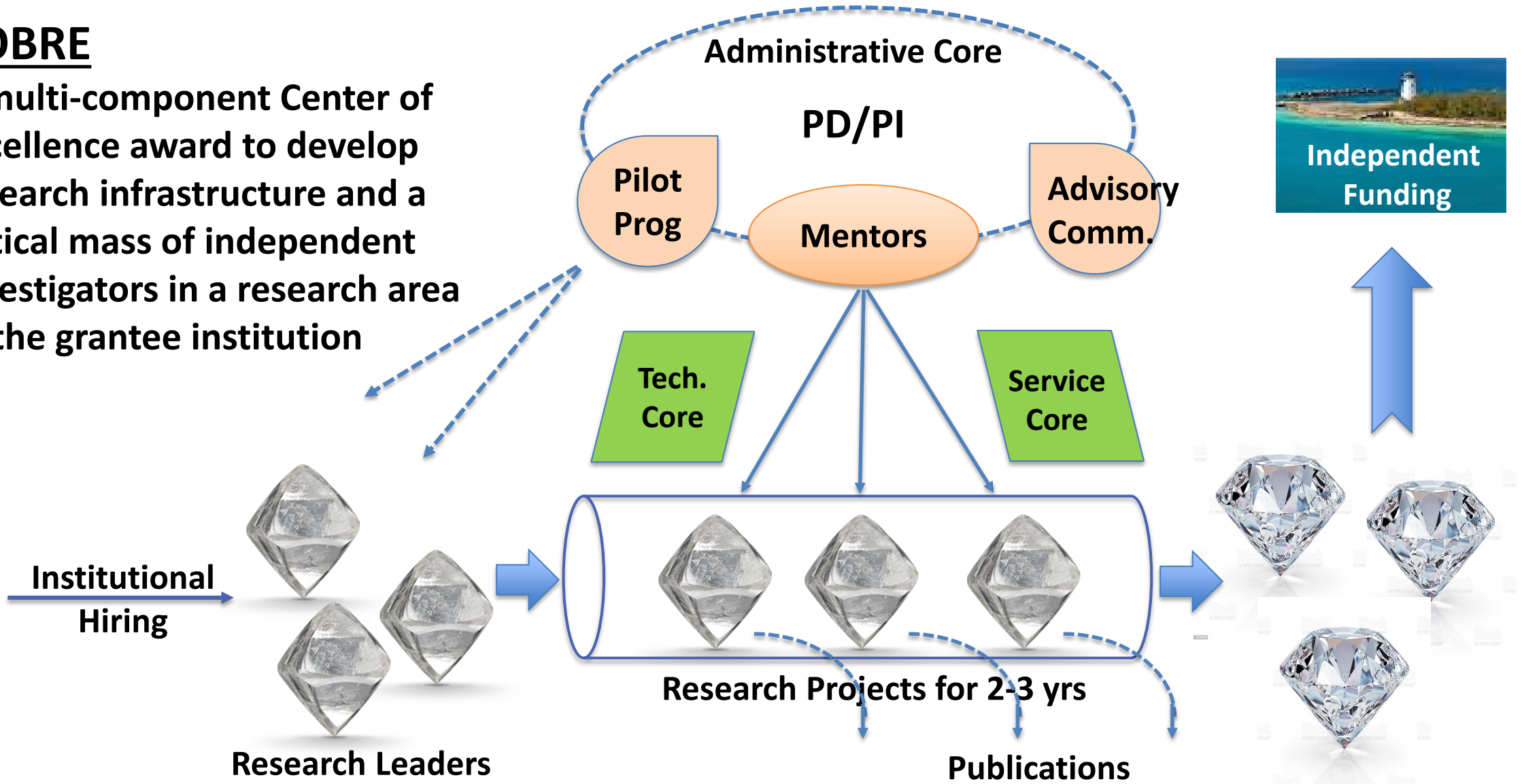
- Centers of Biomedical Research Excellence (**COBRE**) program (137 active awards)
- IDeA Clinical and Translational Research (**IDeA-CTR**) program (12 awards)

- IDeA Networks of Biomedical Research Excellence (**INBRE**) program (24 awards)
 - Statewide networks that link research institutions with all PUIs to support faculty research and provide students opportunities to be engaged in research
- IDeA **Co-Funding**: Co-funds R01/R15 applications submitted to NIH (~40/yr)
 - Incentivizes all NIH Institutes/Centers/Offices to expand research funding for IDeA states
- IDeA Regional Entrepreneurship Development (**I-RED**) program (4 awards)
 - Develop educational products/services and provide training to promote entrepreneurship at IDeA institutions



COBRE

A multi-component Center of Excellence award to develop research infrastructure and a critical mass of independent investigators in a research area at the grantee institution



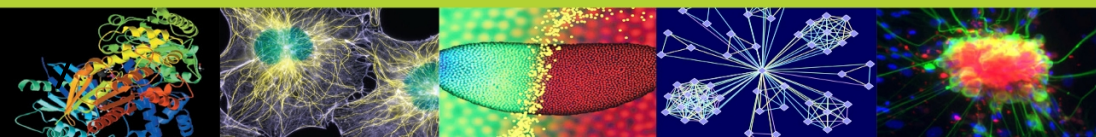
COBRE: Develop Research Excellence in Funded Areas at Institutions

Key Features:

- An Admin Core, Technology/Service Cores, & Research Projects, each evaluated (and scored separately) in review
- 3 consecutive 5-yr awards. Phase 1 & 2: \$1.5 M/ yr; Phase 3: \$750K/yr
- Research Project Leaders, typically ESIs or NIs, are supported for 2-3 yrs
- A mentor is assigned to each Research Project Leader
- An institution leader and external experts serve on the Advisory Committee
- A pilot program to further broaden the base and develop the bench

Key Lessons:

- Research area aligns with institutional priority
- Research area focused enough for developing excellence in the area and broad enough for the institution to build, i.e., maintaining the pipeline of faculty investigators
- Effective mentoring and evaluation of the performances and progression of the RPLs



The Impact of the COBRE at University of New England

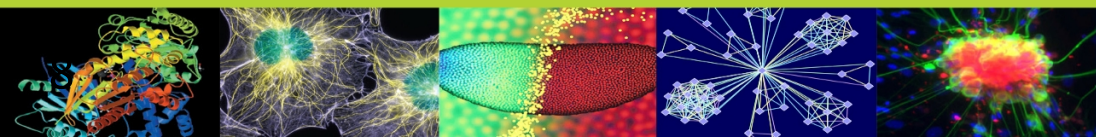
Award: Interdisciplinary center of excellence for the study of pain and sensory function

Duration: 08/15/2012 – 5/31/2022

Budget: \$2,424,844 TC (year-01); \$2,142,323 TC/year (years 02-10)

Impact:

- Supported two research cores (Behavior; Histology and Imaging) for 10 years
- Supported 10 tenure-track faculty investigators as Research Project Leaders (RPLs)
- Five of these RPLs have been promoted to full Professors
- RPLs received two R01s, one R21, five R15s, and four foundation grants
- COBRE supported investigators published 93 research articles
- COBRE supported research activities led to UNE's elevation to R2 classification from Carnegie Classification of Institutes of Higher Learning

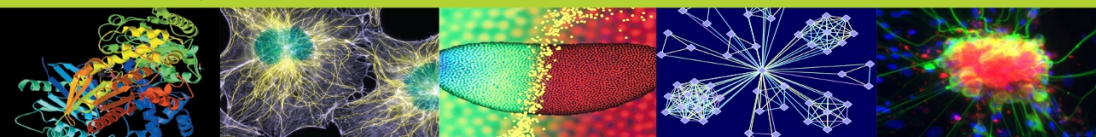


IDeA-Clinical and Translational Research Program

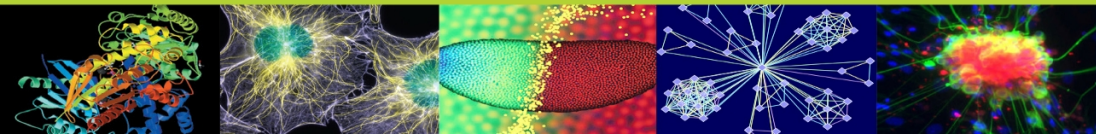
Mission: Build Clinical and Translational Research Capacity in IDeA States by supporting state-wide or multi-state regional networks to:

- Develop and expand infrastructure for clinical and translational research,
- Develop research workforce and enhance network institutions' ability to design and implement clinical and translational research programs, and
- Coordinate clinical research activities across IDeA institutions and organizations.

Budget: 5-yr awards; ~\$4 million/yr; renewable

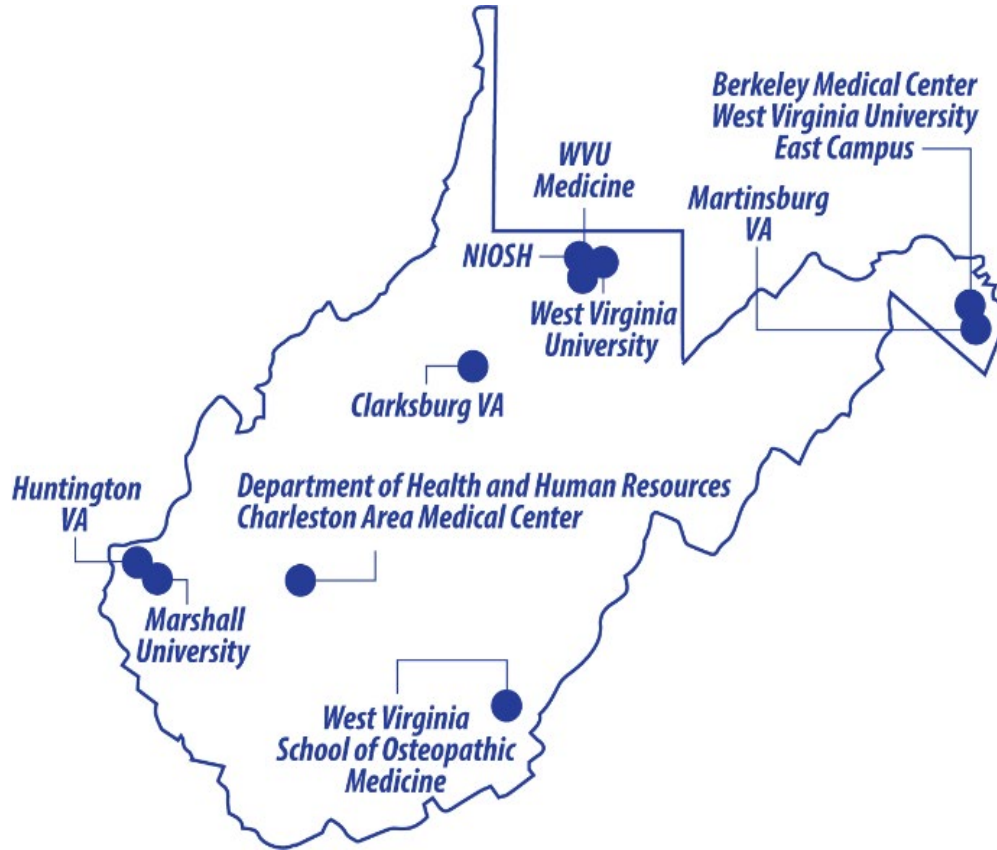


IDeA-CTR: Components and Organization

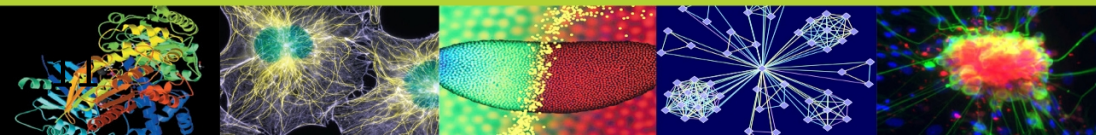
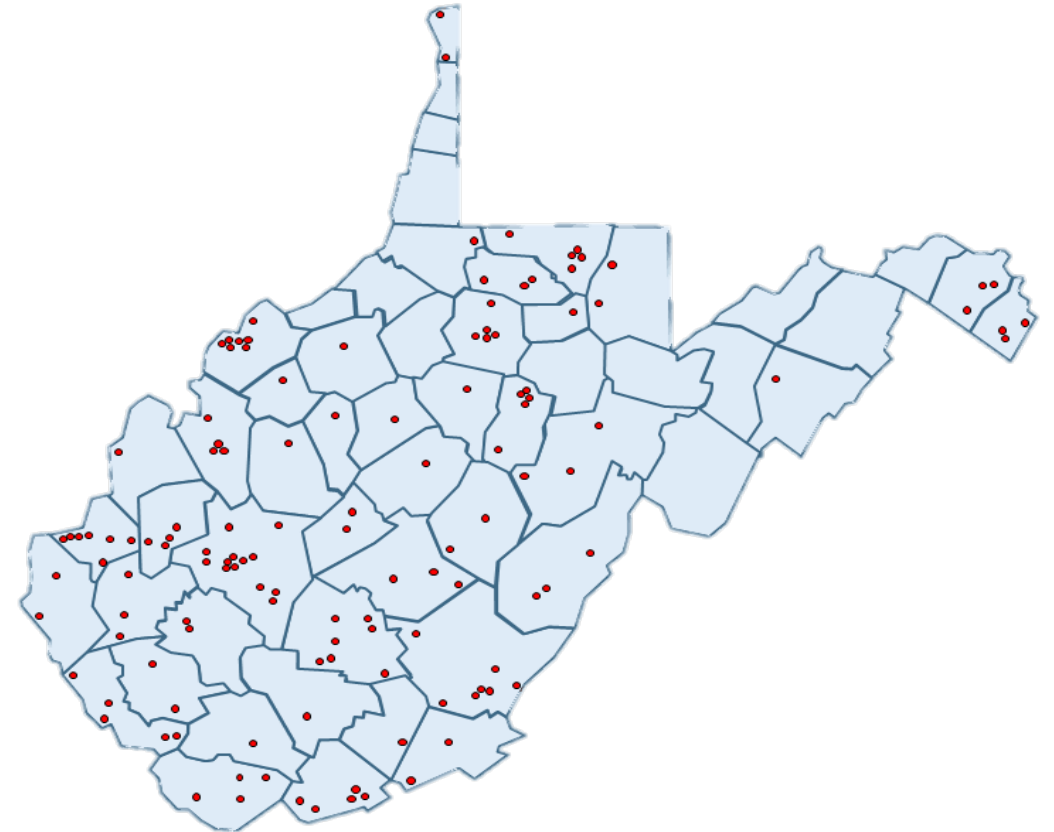


Multiple Partner Institutions of the WVU IDeA-CTR

Partner Institutions



Practice-Based Research Network Clinics



NIH RADx-Underserved Populations (RADx-UP) Initiative

- Enhance COVID-19 testing among underserved and vulnerable populations across the US.
- Develop/create a consortium of community-engaged research projects for **rapid implementation of testing interventions and vaccination.**
- Strengthen the available data on disparities in infection rates, disease progression and outcomes, and identify strategies to reduce these disparities in COVID-19 diagnostics.

September – November 2020

Early 2021 – Summer/Fall 2021

Phase I

Phase II



Build infrastructure



Rapidly implement testing, other capabilities



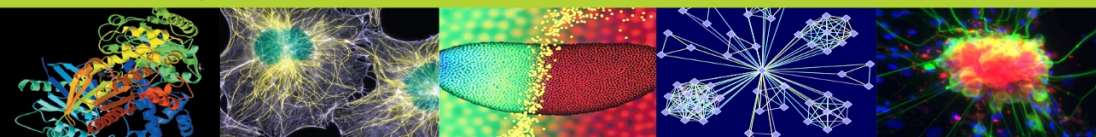
Integrate new advances



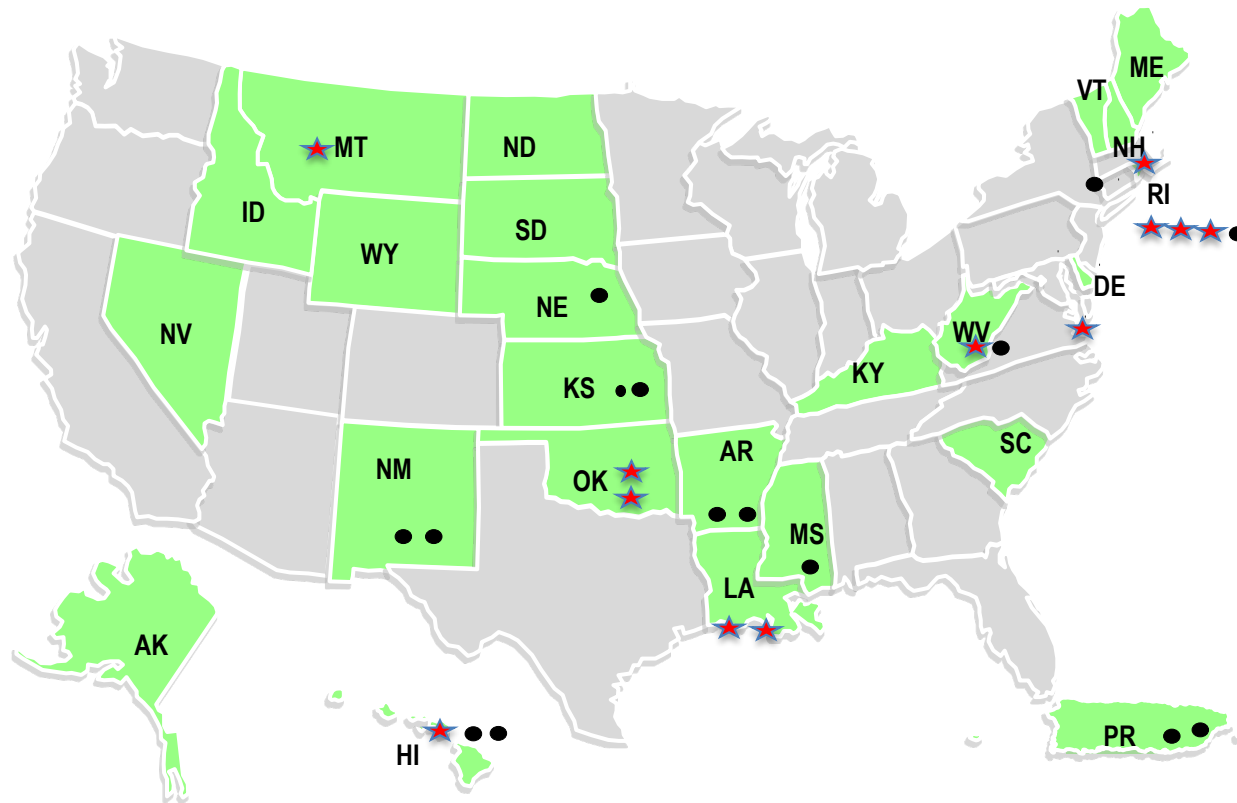
Expand studies/populations

12

\$ 500 million



Led by IDeA-CTRs, the IDeA Community Was A Force for RADx-UP

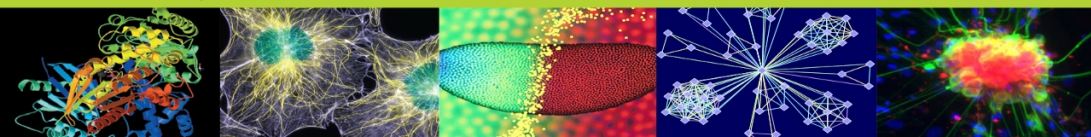


★ 2020: 12 awards to NIGMS-funded IDeA-CTR, COBRE, and NARCH grantees for Vaccine Hesitancy/Uptake and Testing

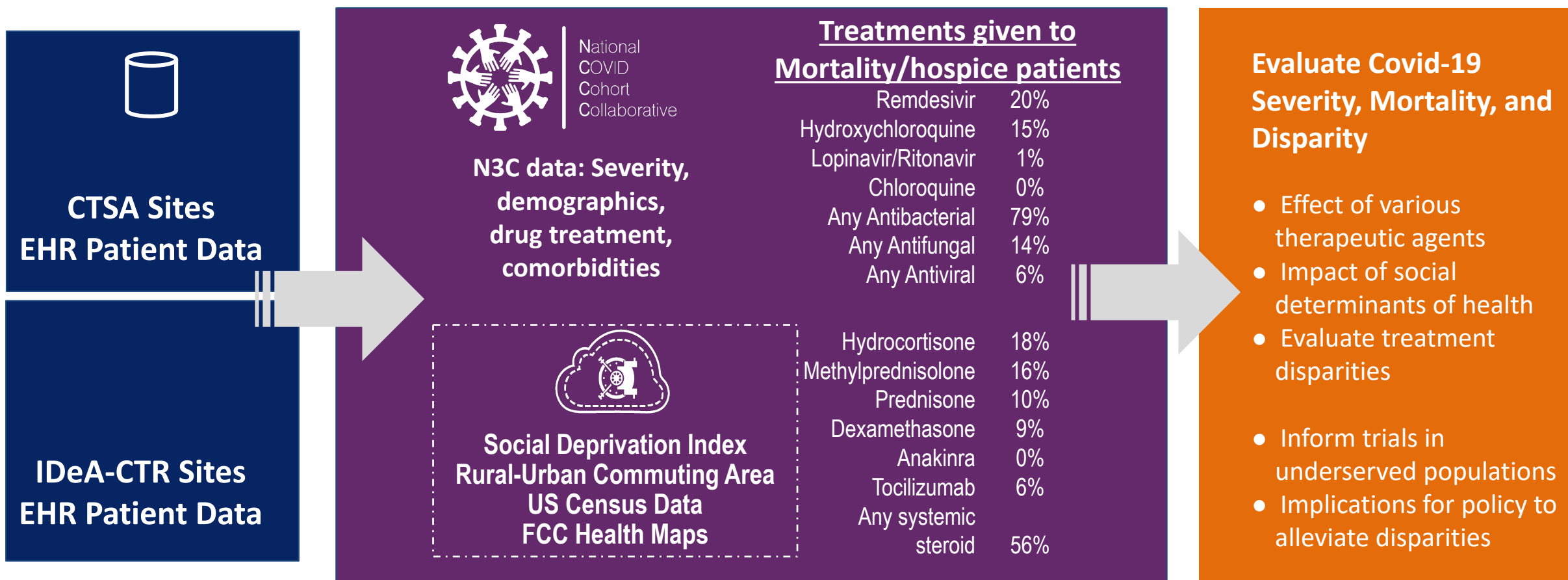
● 2021-2022: 17 more awards made to IDeA states (including NIGMS-funded grantees)

Exploring barriers to SARS-CoV-2 testing uptake in underserved black communities in Louisiana
Peter T. Katzmarzyk1 et al.

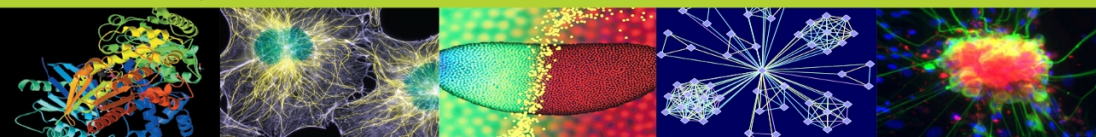
American Journal of Human Biology, 2023 e23879



The National COVID Cohort Collaborative (N3C): A Partnership with CTSA



A clinical data analytics platform to collect data from collaborating health care providers nationwide, harmonize it, and make it available for researchers to accelerate advances in COVID-19 research and clinical care.



IDeA COVID-19 EHR Data – Rich in Diversity Especially Rurality



The N3C Data Enclave is a secure platform through which the harmonized clinical data provided by our contributing members is stored. The data itself can only be accessed through a secure cloud portal hosted by NCATS and cannot be downloaded or removed. N3C invites you to begin your journey with the Enclave and join the collaborative efforts of our partners to better understand and address the most pressing COVID-19 clinical questions.

Access the Enclave

Help make science go faster and save lives.

16.4B

Total Rows

1,443.1M

Clinical Observations

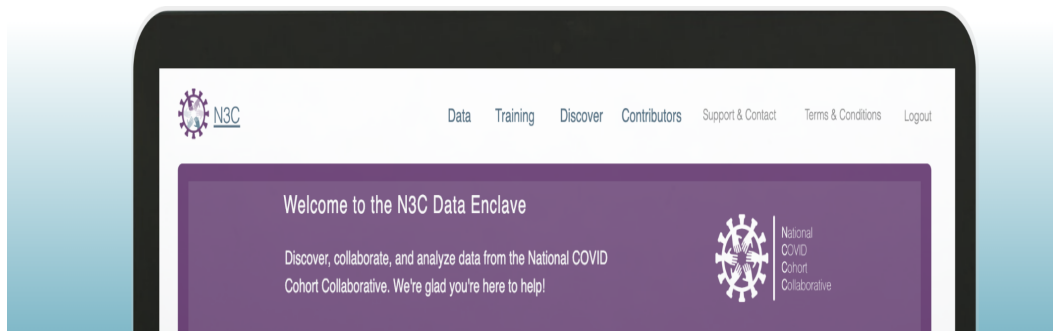
14.3M

Persons

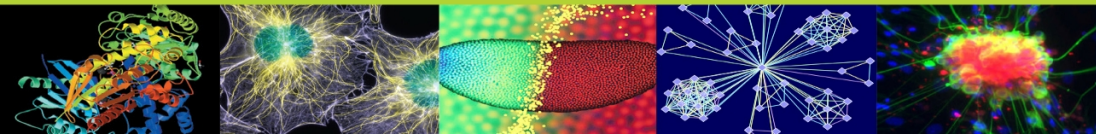
5,564,338

COVID+ Cases

Explore the Full Cohort Dashboard



CTR	Population Demographics Source: US Census
DE	Black 23.2%, Latino 9.6% (16.9% in dataset), Rural 16.7%
NE	Black 5.2%, Latino 11.4%, Rural 26.9%
HI	Black 2.2%, Latino 11.1%, AANHPI 11.0% Rural 19.1%
LA	32.8% Black, 5.3% Latino, 26.8% Rural
ME/VT	Black 1.6%, Latino 2.0%, Rural 63%
MS	Black 37.8%, Latino 3.4%, Rural 50.7%
OK	Black 7.8%, Latino 11.1%, Rural 33.8%, AI 9.4%
ND/SD	Black 12.4%, Latino 18.7%, AI/AN 1.1%, Rural 49%
RI	Black 8.5%, Latino 16.3%, Rural 9.3%
NV	Black 12.3%, Latino 18.7%, Rural 9.4%
PR	Black 11.3%, Latino 99%, Rural 6.0%
WV	Black 3.6%, Latino 1.7%, Rural 51.3%



The CTR Consortium Participating in (\$26 M) Long-COVID Research

ISCORE Enrollment (11/2022) 1,089

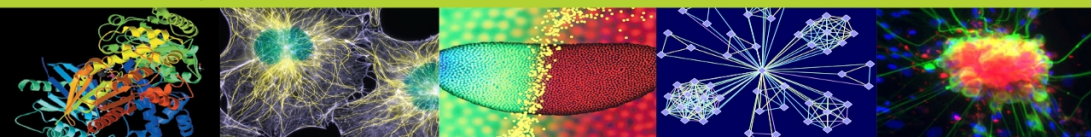
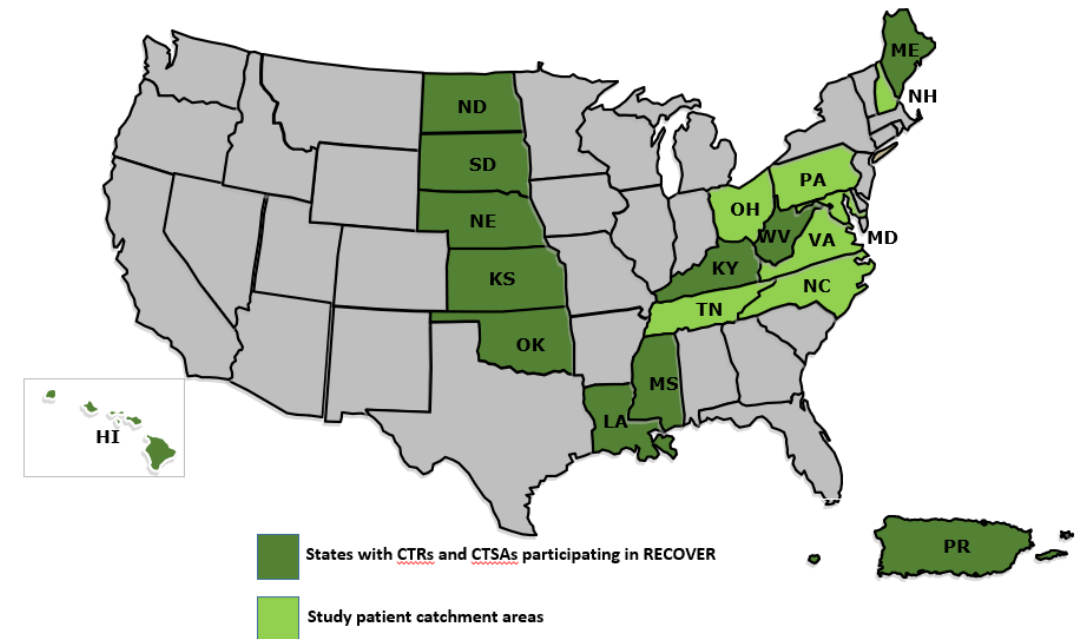
- 37% medically underserved
- 17% rural
- 16% Hispanic

Additionally funded studies

- Immulina clinical trial for long-COVID a 10-site trial Initiated by Univ. Medical Center Mississippi
- **PROMIS: Pathobiology in RECOVER Of Metabolic and Immune System**
 - Assesses viral persistence and mitochondrial dysfunction in adipose tissue

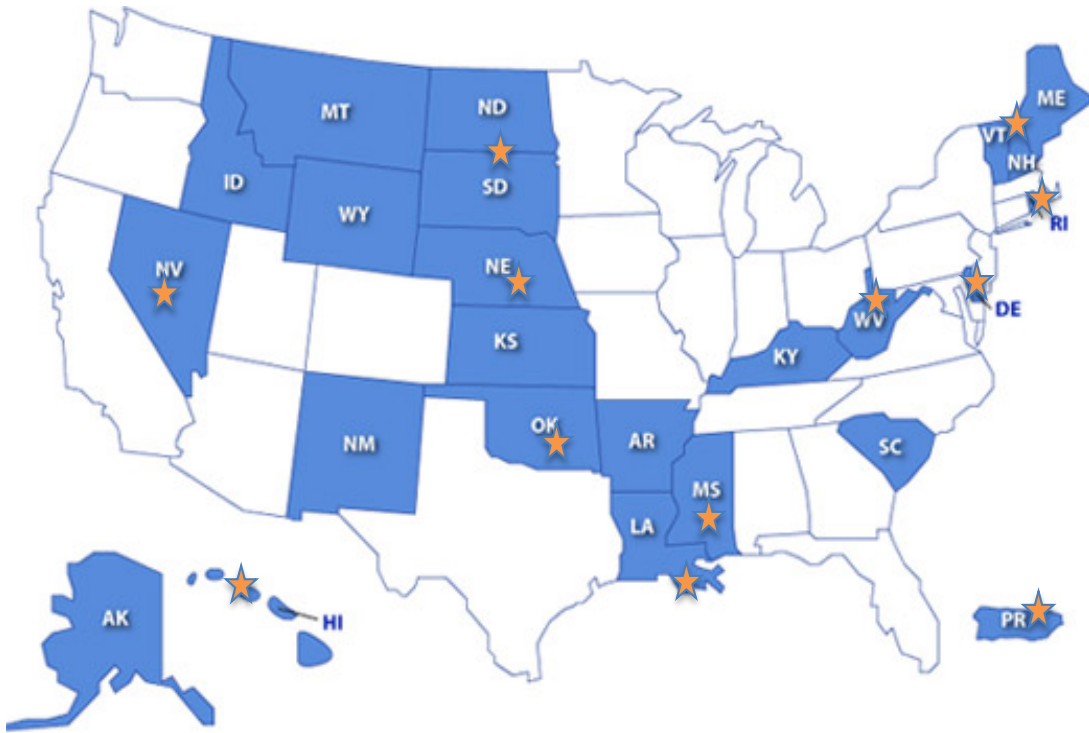


IDEA-State Consortium for Clinical Research (ISCORE) Sites



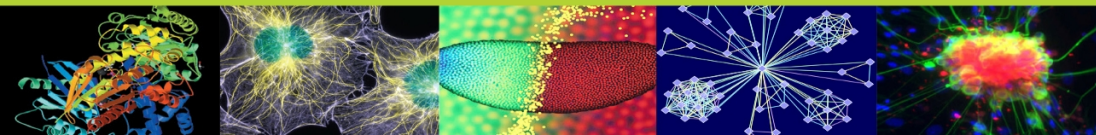
IDeA Clinical Research Resource Center (I-CRRC)

Serving IDeA CTRs and Other IDeA Institutions



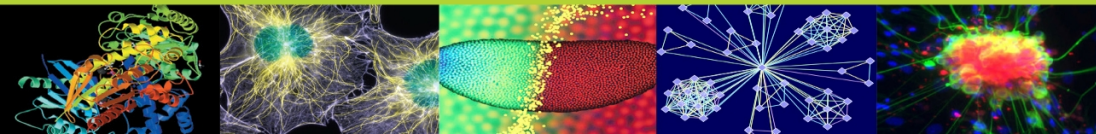
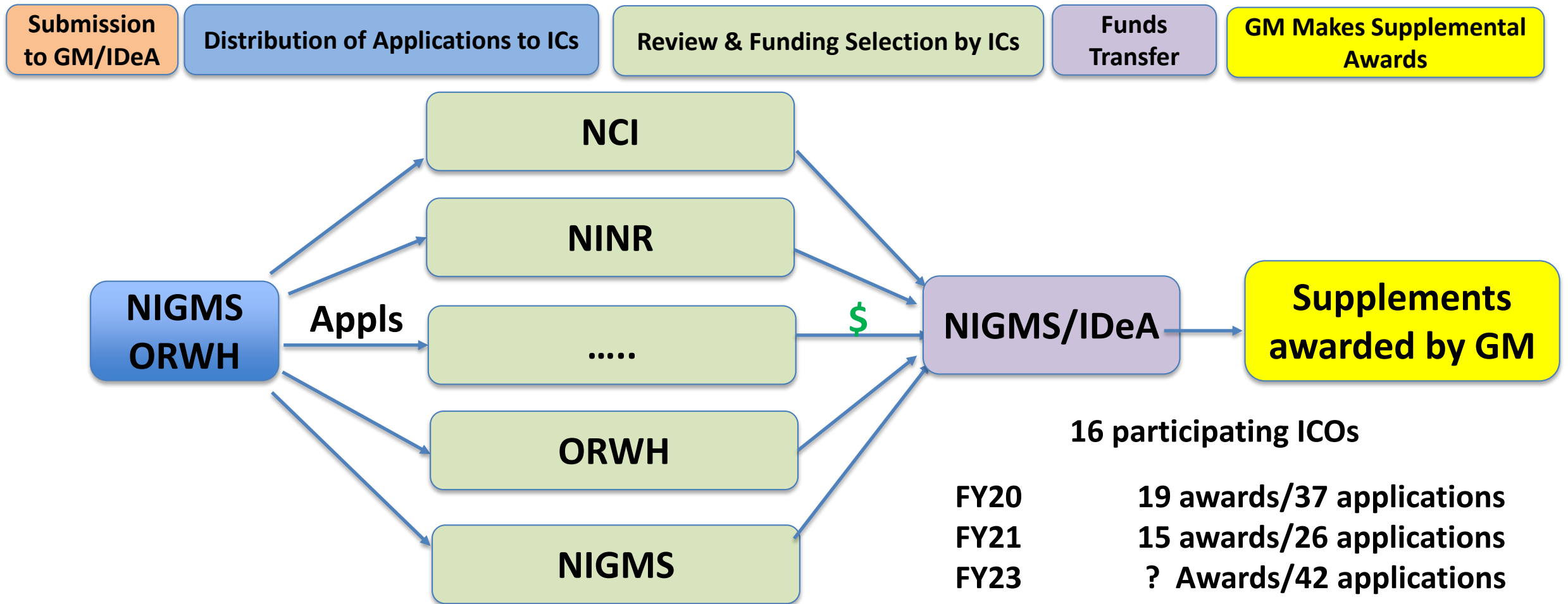
- A Clinical Trial Service Core
To strengthen communication and develop collaborations with clinical trial sponsors
- A Clinical Research Coordinator Development Program
To develop clinical research coordinators with knowledge and skills to manage clinical trials in IDeA states

Drs. S. Zenk, Y. Bryan, G. Wallen, and E. Ness contributed to the development of the concept for this program



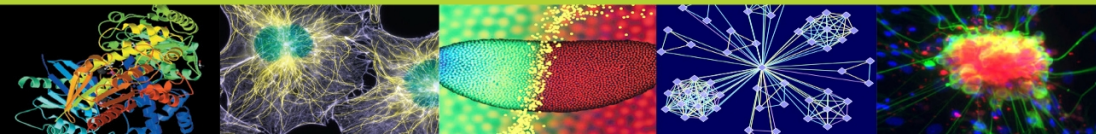
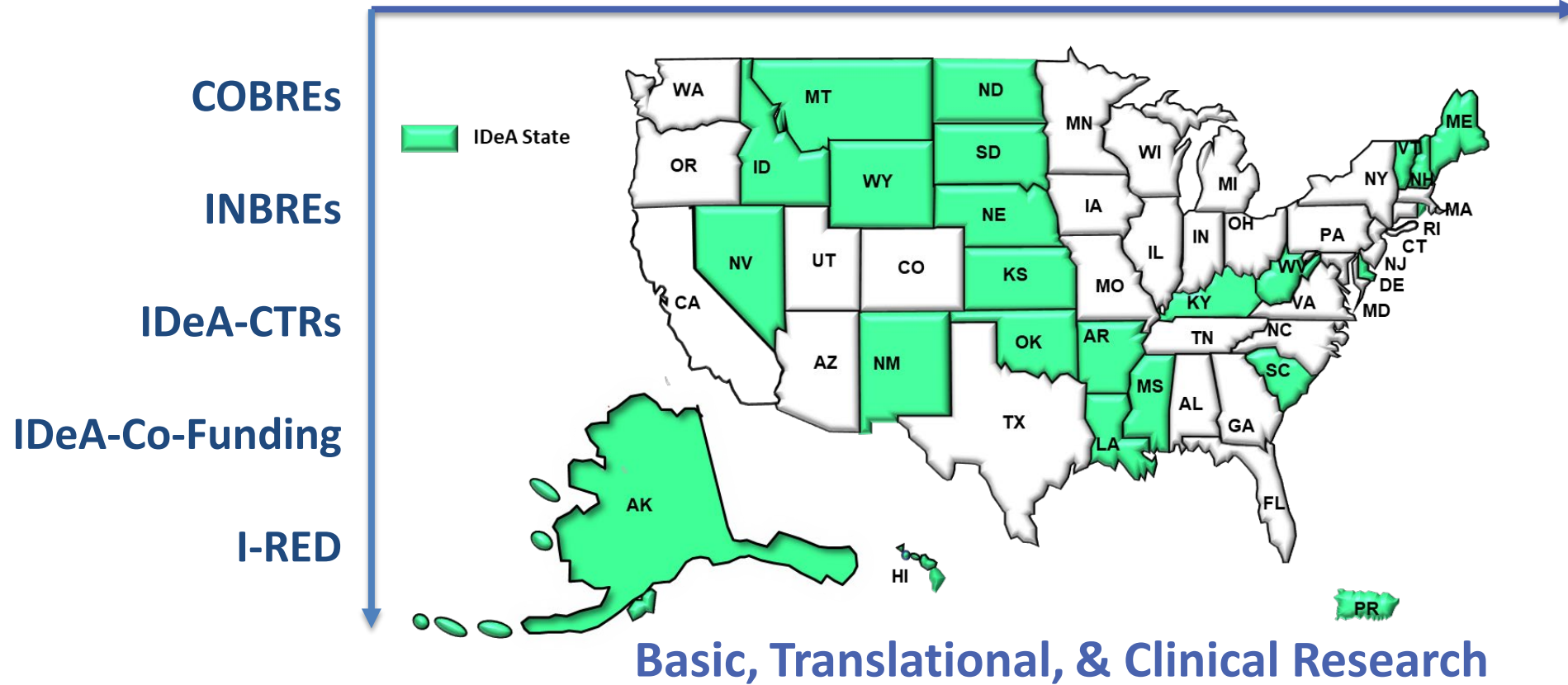
Supporting Women's Health Research in IDeA States

A Novel Trans-NIH Collaboration



Support Research and Research Capacity Building in IDeA States

Collaborations & Participation in NIH-wide Initiatives



Thank you!

<https://www.nigms.nih.gov/research-areas/areas-of-research/research-capacity-building>

leim@nih.gov

