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The IDeA Program: New Features & Activities for New Needs

IDeA Central Regional Conference, 2023
Kansas City, KS

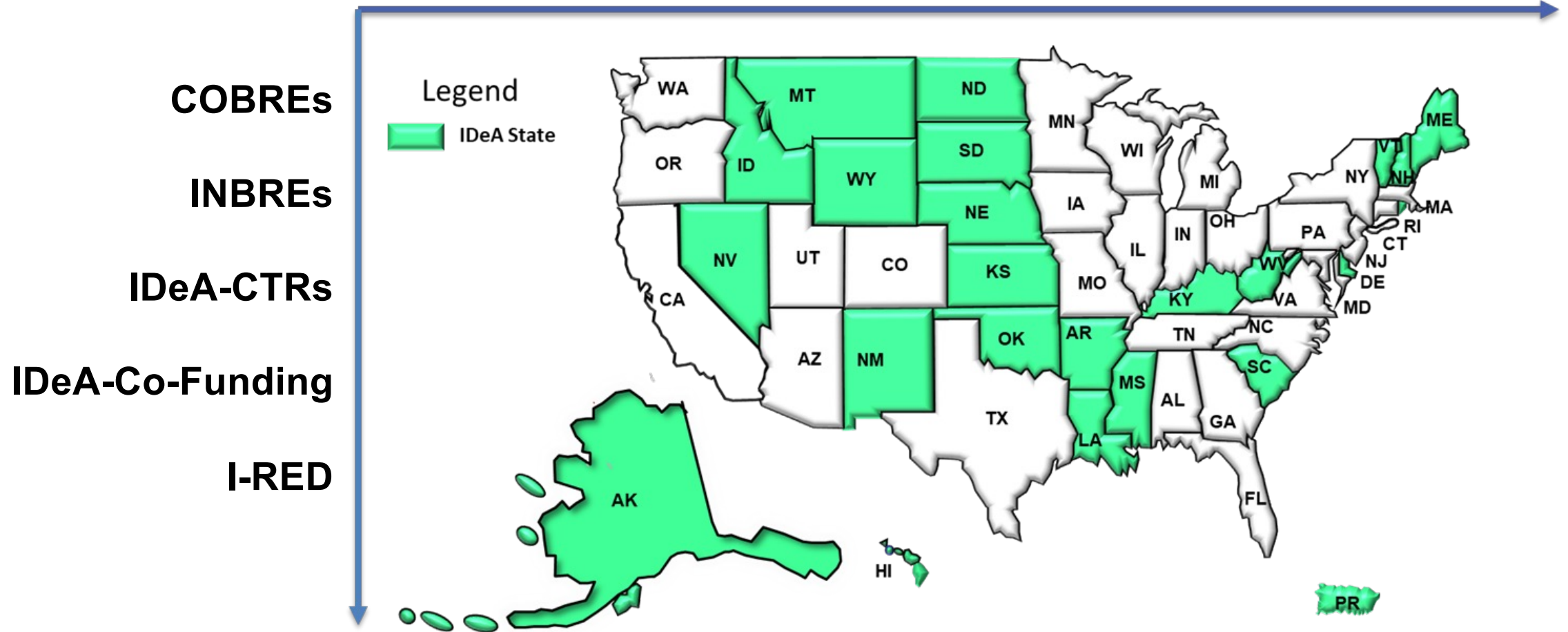
IDeA Program Supports Research Capacity Building

- **Competitive basic, clinical, behavioral, and translational research in all NIH Institutes and Centers' mission areas**
- **Research workforce development**
- **Infrastructure enhancement**

FY	IDeA Appropriations
2023	\$425,956,000
2022	\$410,453,000
2021	\$396,573,000
2020	\$386,573,000
2019	\$361,573,000
2018	\$350,575,000
2017	\$333,361,000
2016	\$320,840,000
2015	\$273,325,000
2014	\$273,325,000
2013	\$261,554,421

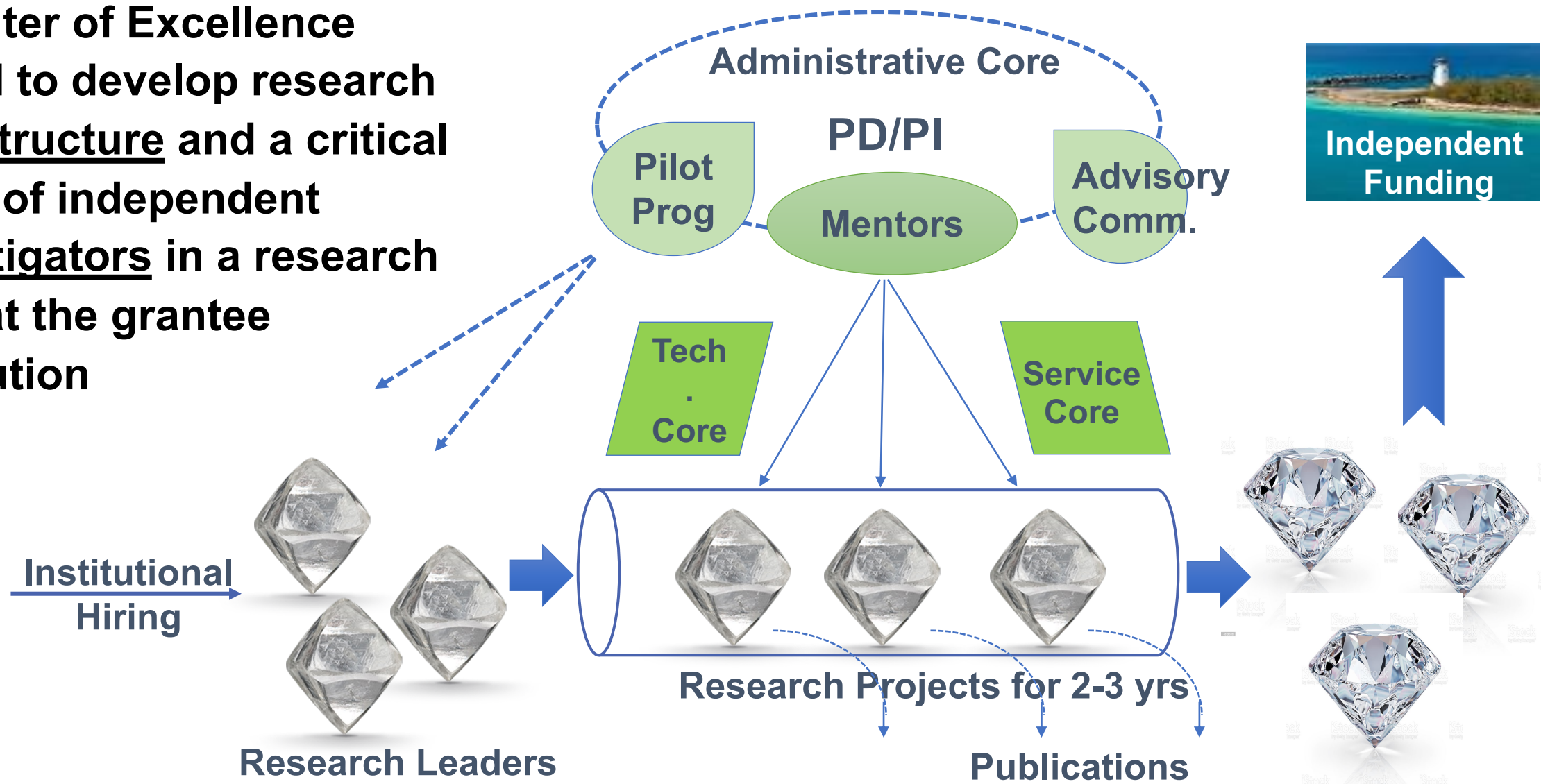
Maximizing Impact through Creativity, Synergy, & Efficiency

Collaborations & Participation in NIH-Wide Initiatives



COBRE Objectives & Organization

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



COBRE: Significant Programmatic Changes

- **Scope:** A research area that the applicant institution is committed to build
- **Advisory Committee:** A single advisory committee, including a senior institutional leader as a member
- **Institutional Cap:** An institution may have up to 4 active COBRE 1 and 2 awards ([NOT-GM-23-040](#))
- **PI Eligibility:** An active research grant in the research area of the COBRE
- **Research Project Leader (RPL) Eligibility:** faculty investigators who are ESIs or NIs as defined by the NIH
- **Strengthening the Pilot Project Program (PPP):** A PPP is required starting in Phase 2
- **Commitment beyond COBRE:** Phase 3 must have a sustainability plan

Strategic Alliances to Fund More COBREs

NOT-GM-23-011

- Supporting Data Sciences Research in the IDeA States through the COBRE Program
- NIH Office of Data Science Strategies (ODSS) will fund additional COBRE awards with its own funds

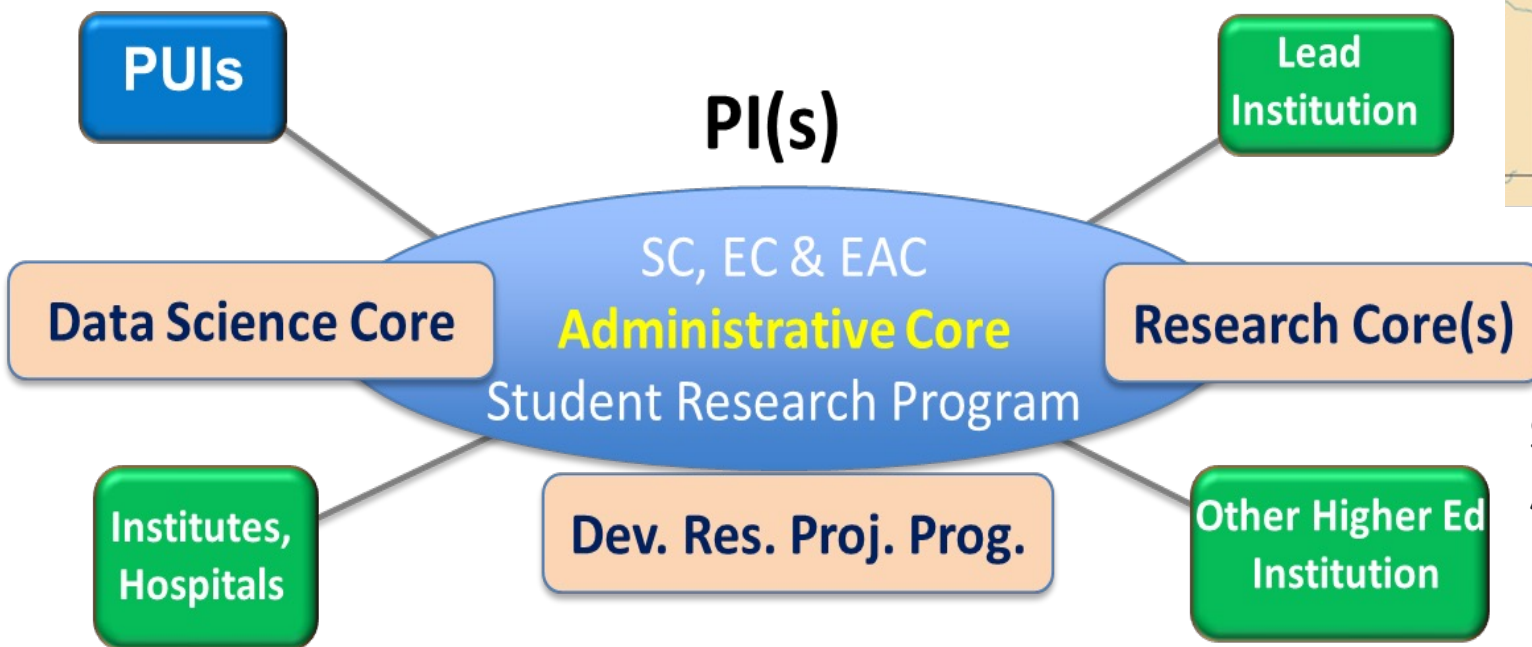
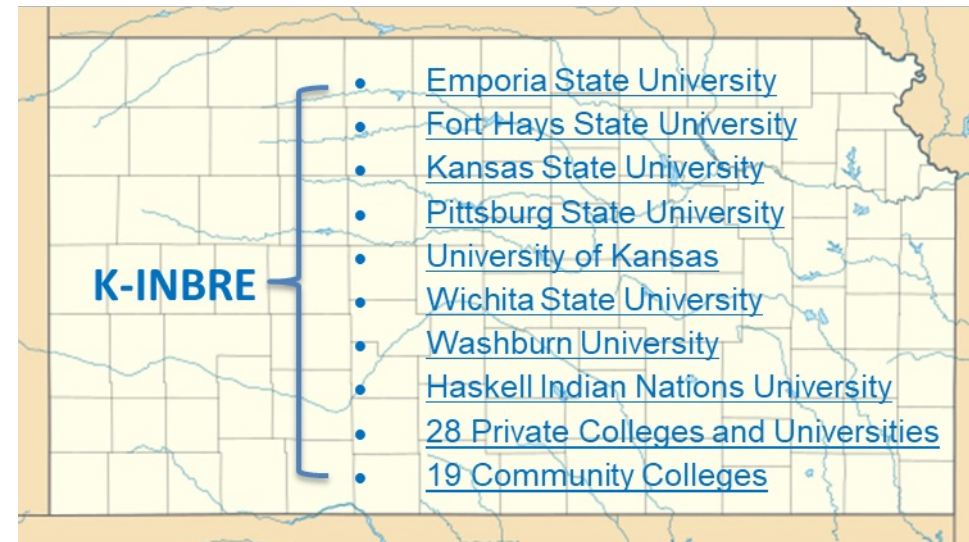
NOT-GM-23-012

- Supporting Women's Health Research in the IDeA States through the COBRE Program
- NIH Office of Research for Women's Health (ORWH) will fund additional COBRE awards with its own funds

INBRE Objectives and Organization

Build biomedical research capacity through:

- **Faculty** research and research mentoring
- **Student** participation in research
- **Infrastructure** development/enhancement



Support for Research Excellence (SuRE) R16
A nd R15 awards

INBRE: Significant Programmatic Changes

- **Membership:** All higher education institutions and organizations involved in biomedical research (not capped at 6-8)
- **Scope/Faculty Research:** All areas of biomedical research (not a theme/area) through DRPP
- **DRPP Success:** catalyze research culture; student experience; R15 or R16 SuRE awards
- **Student Research:** Student Research Program may support students year-round to work with preceptors who may or may not be DRPP awardees
- **Data Science Core:** Build Data Science expertise to support research and education
- **PI:** multiple PIs, including those from different institutions, are encouraged
- **Steering Committee (SC):** Each partner institution is represented by a senior institutional officer as a member of the SC

Inter-program Collaborations through INBREs

NOT-GM-22-001 Notice of Special Interest (NOSI): Availability of Administrative Supplements to INBRE Awards to Fund Research Collaborations

Funds are intended for INBREs to develop collaborations between investigators at the INBRE partner institutions and investigators supported by one of the following programs: COBRE, IDeA-CTR, IDeA co-funded R01s and R15s, IDeA States Pediatric Clinical Trials Network (ISPCTN), Clinical and Translational Science Awards (CTSA) and Native American Research Centers for Health (NARCH) awards to organizations located in IDeA states

Due Date, January 31, every year

NOT-GM-23-034 Notice of Special Interest (NOSI): Availability of Administrative Supplements to IDeA Awards to Fund Team Science Development Projects

This NOSI aims to support the development of team science projects that bring together two or more investigators from IDeA states with different perspectives and expertise to address complex basic, behavioral, clinical and/or translational research questions with complementary approaches.

INBRE Leads Democratization of Cloud Computing in Biomedical Research

- Training on Cloud computing fundamentals of INBRE investigators and students by GCP/AWS through 60 six-hour interactive sessions (500 participants)
- Migrating the IDeA National Resource for Quantitative Proteomics' data operation from its mainframe server to the Cloud,
“This cloud environment has been absolutely transformative for our resource.” *Alan Tackett*
- **Building the NIGMS Sandbox, A Cloud-Based Learning Platform**

Webinar for NIGMS Sandbox: A Cloud-Based Learning Platform

Lakshmi Matukumalli, Krishan Arora, and Ming Lei

Cloud computing provides access to the exponentially growing volume of biomedical research data, data analytic tools, and data storage capacity. If you're interested in learning cutting-edge biomedical research methods and/or carrying out your own research on the cloud, we welcome you to an upcoming webinar aimed to help you start or enrich your cloud-computing journey.

Friday, June 23, 1:30-3:30 p.m. ET

[Zoom meeting link](#)

IDeA-Clinical and Translational Research (IDeA-CTR) Program

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

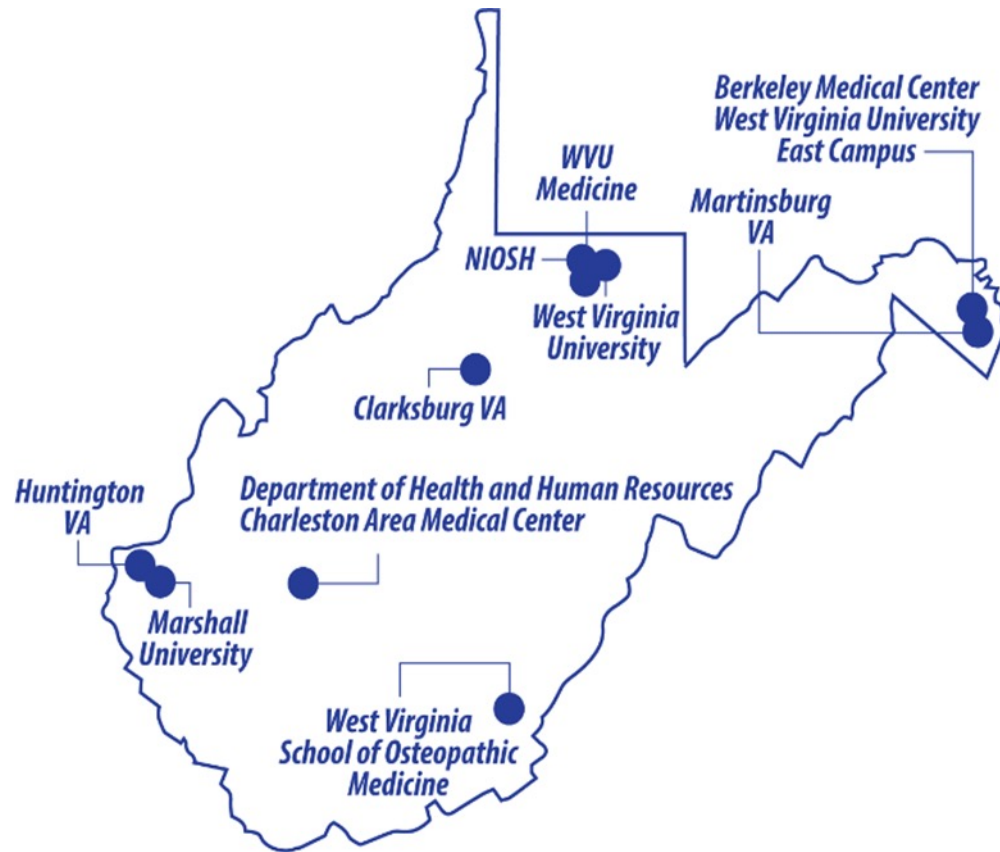
- **Develop and expand infrastructure** for clinical and translational research
- **Develop research workforce** and enhance network institutions' ability to design and implement clinical and translational research programs
- **Coordinate clinical research activities** across IDeA institutions and organizations

IDeA-CTR: Organization

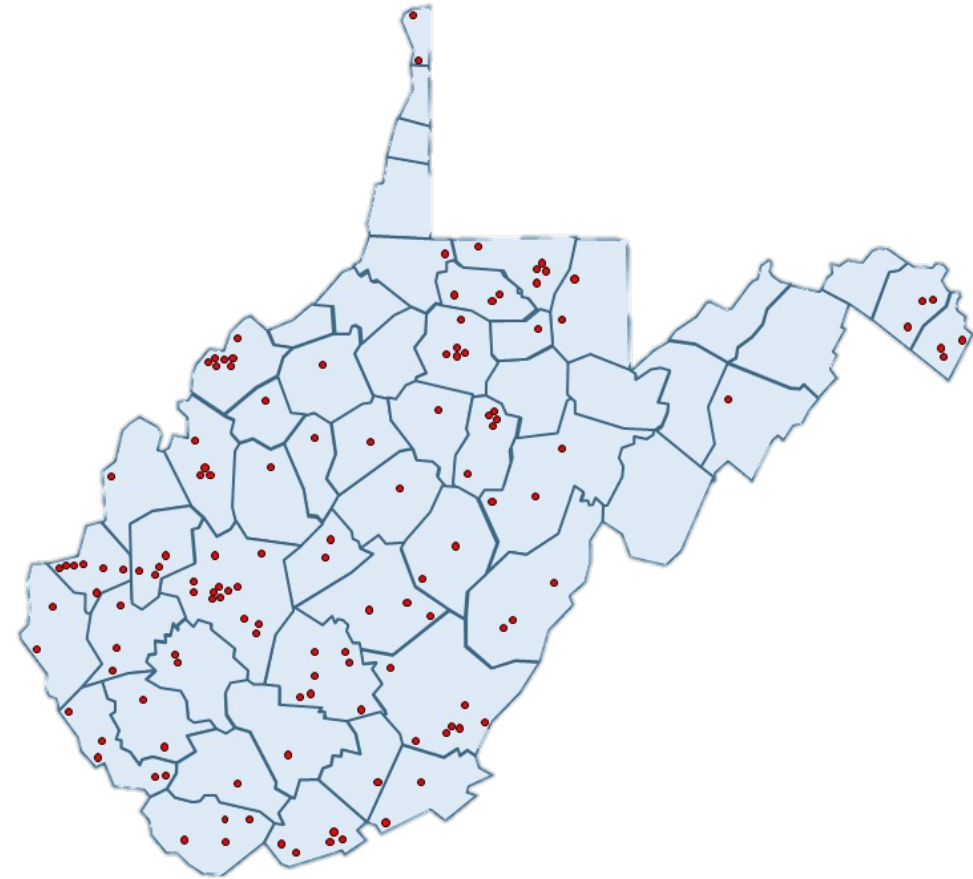


IDeA-CTR Programmatic Changes: Network Including PBRN Clinics

Partner Institutions

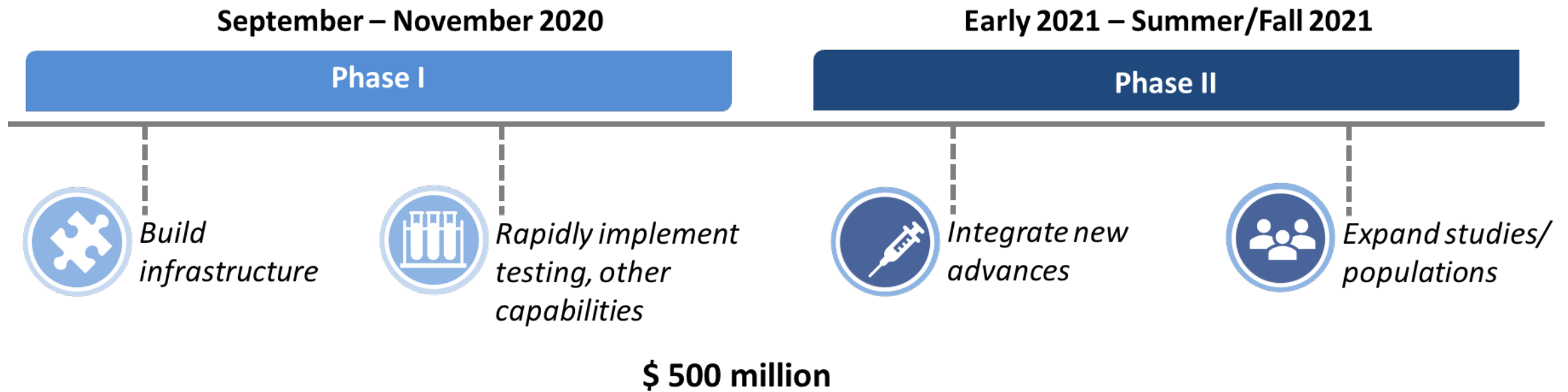


Practice Based Research Networks (clinics)

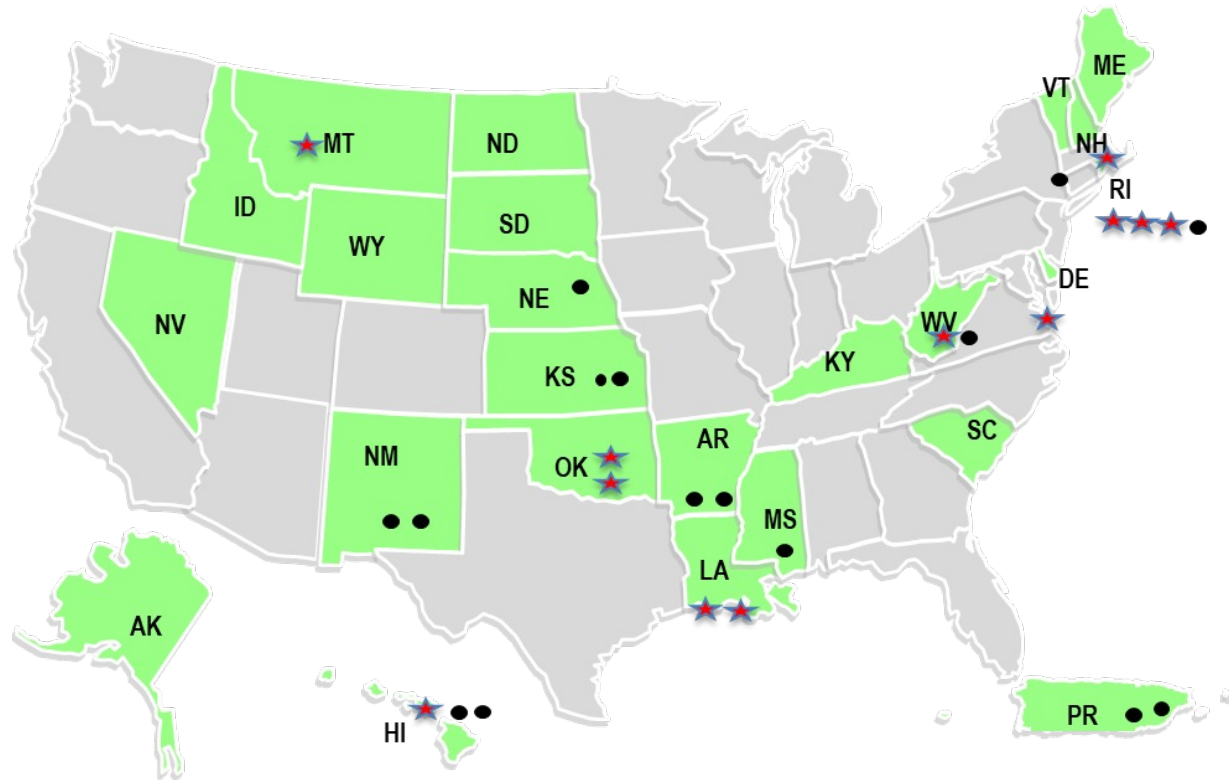


NIH RADx-Underserved Populations (RADx-UP) Initiative

- 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.

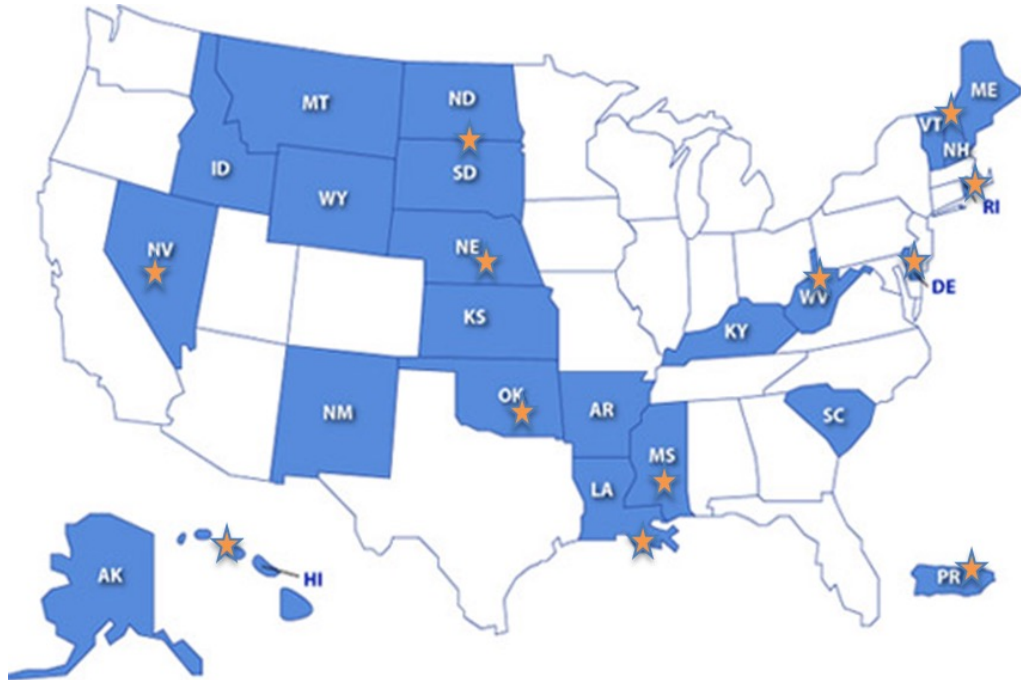


CTRs & Other IDeA Programs Made Key Contributions to RADx-UP



- ★ 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)
- *Predicting increases in COVID-19 incidence to identify locations for targeted testing in West Virginia: A machine learning enhanced approach.* BS Price et al, PLoS ONE. 2021; 16(11)
- *If you build it, will they come? Is test site availability a root cause of geographic disparities in COVID-19 testing?* Hendricks et al Public Health. 2023; 216:21-26

IDeA-CTR Programmatic Changes: CTR Expansion



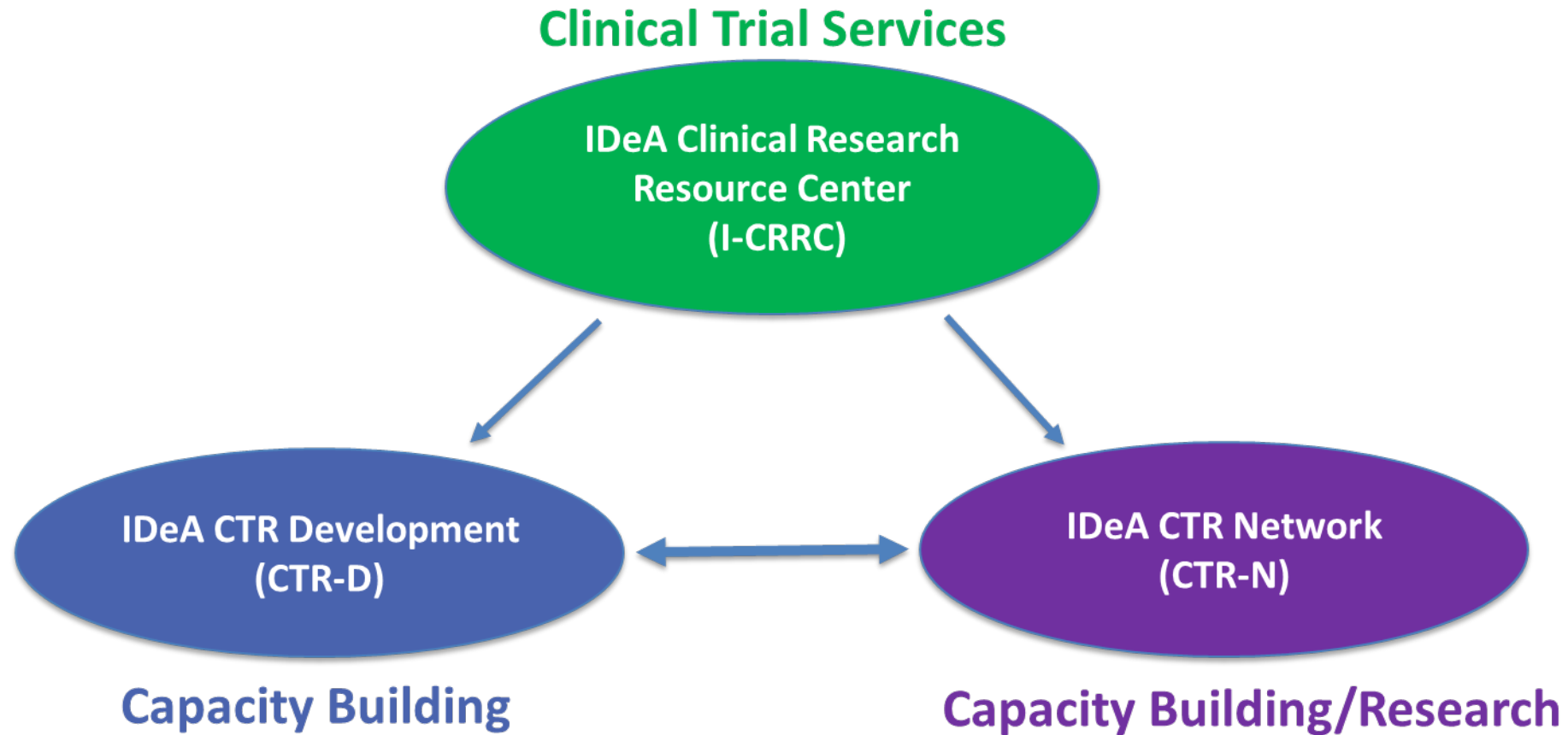
CTR-Development (CTR-D) Awards

- To build C & T research capacity in states and institutions that are not supported by IDeA-CTRs

IDeA Clinical Research Resource Center (I-CRRC)

- To strengthen communication and develop collaborations with clinical trial sponsors
- To develop clinical research coordinators with knowledge and skills to manage clinical trials in IDeA states

A Strengthened C&T Research Network in IDeA States



Expanded IDeA Co-Funding

Co-fund R01 and R15 applications submitted to all NIH ICs by IDeA state investigators that fall out of those ICs' paylines

- Collaborated with NIH ICs to appoint an IDeA-co-funding coordinator at each IC
- Increased allowable application nominations by each IC from 4 to 8 each year

Co-fund applications from IDeA institutions with NIH Office of Research Infrastructure Programs (ORIP)

- S10 shared instrumentation grants program
- S10 high-end instrumentation grants program
- S10 basic instrumentation grants program
- R24 equipment grants program
- C06 research construction grants program

New IDeA-Regional Entrepreneurship Development (I-RED) Program

- Completed the IDeA-Regional STTR Accelerator Hubs program (2018-2022)
- Re-launched the program as I-RED to develop entrepreneurship educational products and conduct entrepreneurship training and education
- I-RED awards have been issued (or to be issued) to small businesses and their academic partners within the IDeA regions that they primarily serve
- **The Central Region I-RED award:**

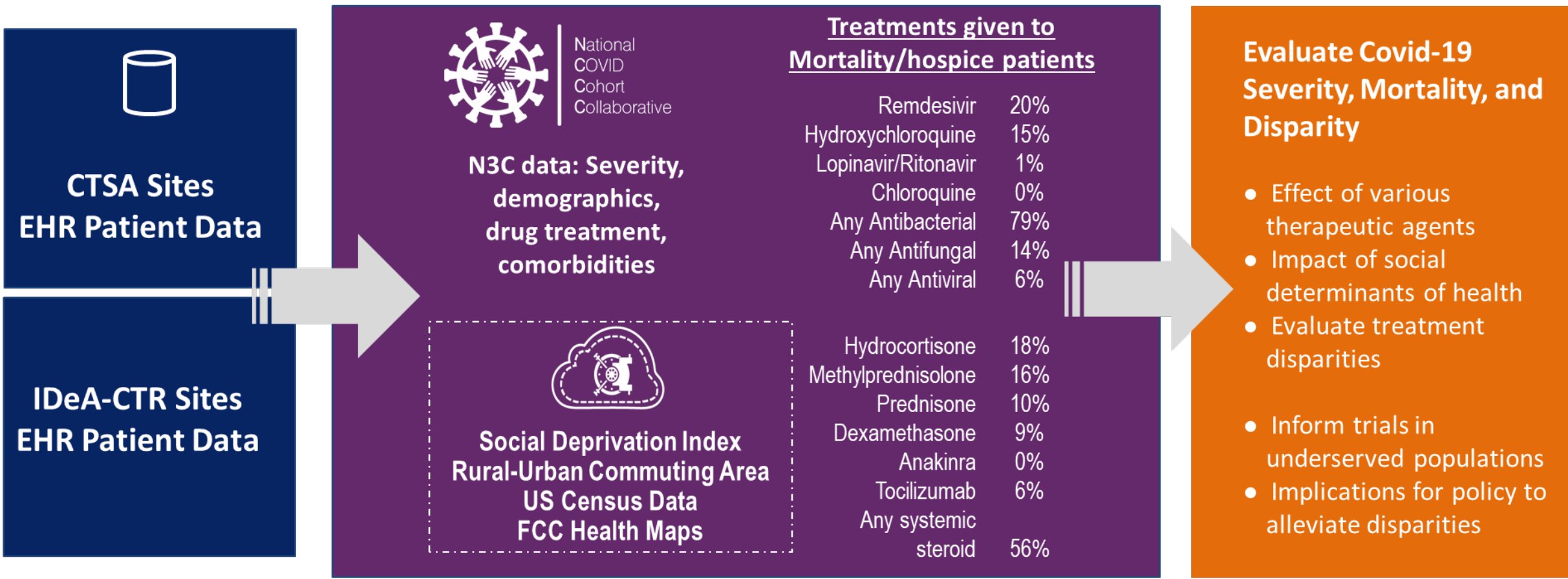
Smart Tools to Accelerate Research Translation by Uplifting Participants for the Central IDeA State Region (STARTUP Central)

Continuum Educational Technologies, PBC, Lawrence, KS & the University of Kansas

Elizabeth Friis and Erik Blume

Collaboration with NCATS: National COVID Cohort Collaborative (N3C)

N3C: A clinical data analytics platform to collect EHR data 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 and Rurality

As of May 2023, IDeA-CTRs have deposited EHR from more than 2.3 M unique patients into N3C

National COVID Cohort Collaborative

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

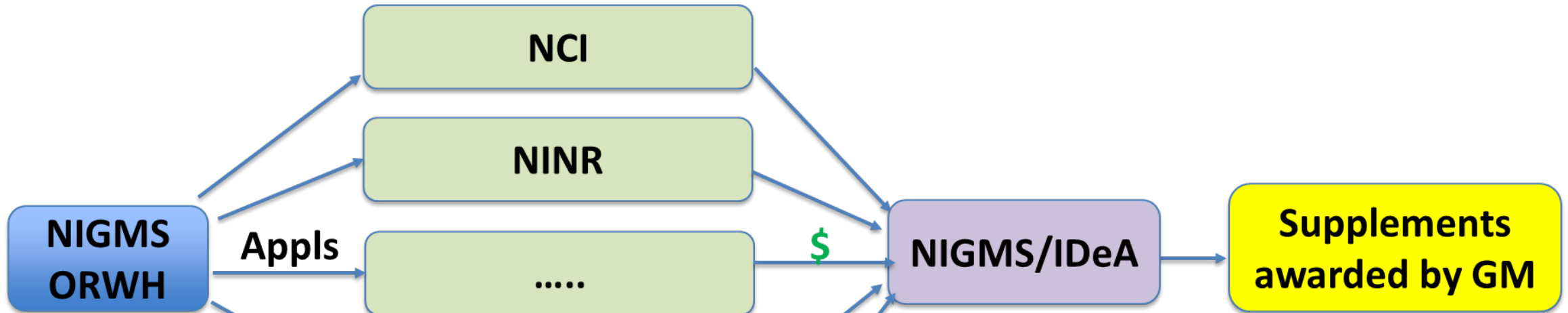
[Explore the Full Cohort Dashboard](#)

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%

Continued Efforts to Strengthen EHR-based Research

- **Fast Healthcare Interoperability Resources (FHIR) Training**
 - NIH seeks to promote the FHIR standard for EHR-based research
 - IDeA-CTRs were selected to help map out the way
 - Training of IDeA-CTR investigators started on May 2nd with more to come
- **Supplements to strengthen infrastructure for EHR-based research ([NOT-23-035](#))**
 - Adoption of FHIR-Compliant Software at clinical sites including PBRN clinics
 - Harmonizing EHR Data to a Single CDM
- **Tracking and sequencing SARS-CoV-2 Variant genomes and linking data to N3C**
 - 21 funded groups sequenced >70,000 variant genomes and deposited data to NCBI in 1 year
 - > 32,000 of these variant sequencing data have been linked to N3C in 2 years

Collaboration with ORWH: Women's Health Research in IDeA States



16 participating ICOs

FY20	19 awards/37 applications
FY21	15 awards/26 applications
FY23	? Awards/42 applications

Resources Developed for Investigators and Students

Available on NIGMS/DRCB Website

- A [DRCB Weekly Update](#) with information tailored for our programs is sent to PIs every Monday afternoon.
- [Interactive Dashboards](#) that track all IDeA awards with publicly available information in “real time” has been developed for the community
- An inventory of IDeA-supported core facilities has been developed for the community to take advantage of their services with IDeA discounts
- Pre-application Webinar recordings and slides for all Notices of Funding Opportunities

NIGMS Home

- Research Areas (+)
- Research Training (+)
- Capacity Building (+)
- Grants and Funding (+)
- Science Education (+)
- News and Events (+)
- About NIGMS (+)

Latest Program News/Events

★ [DRCB Weekly Updates](#)

Resources

- ★ [IDeA Interactive Portfolio Dashboard](#)
- [NARCH Interactive Portfolio Dashboard](#)
- [SCORE Interactive Portfolio Dashboard](#)
- [SEPA Interactive Portfolio Dashboard](#)
- ★ [IDeA-Supported Research Cores](#)

Division for Research Capacity Building

DRCB administers the Institutional Development Award (IDeA) program that supports research development, and research infrastructure improvement in states where levels of NIH funding are low.

Award Info

IC	NOT-GM-22-005 Women's Health NOSI	SARS-CoV-2 Surveillance NOSI Awards
IDe sup	Supplemental Awards for Women's Health in IDeA States	DRCB RADx-UP Awards (Phase 1)
imp con adc	Supplemental Award for NIAID Regional Biocontainment Laboratories (RBL)	

Related Info

N	AAMC webinar featuring the IDeA program	LEAD MSTP Webinar
The head	NOT-GM-23-034 Team Science NOSI Webinar Slides	NOT-GM-23-034 Team Science NOSI Webinar
	IDeA Clinical Research Resource Center	NOT-OD-23-123: NOSI to Enhance Institutional Data Science Capacity
SURTL	Building the NIGMS Sandbox for Cloud-based Learning	

Guide Notice Regarding SIRS Reporting

**Watch out for a Guide Notice from NIGMS Regarding Reporting through SIRS
in the next two weeks,
and updated instructions for reporting through RPPR subsequently**

Thank you!

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

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