OUHSC and IDeA
A Collaborative Partnership to Build Research Capacity

NIH/NIGMS IDeA Central Region Conference 2019

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Oklahoma Health Center

- 300 acre complex; $3 billion capital investment
- 3 major hospitals, including OU Medical Center, The Children’s Hospital, and Veterans Affairs Medical Center; plus OU Physicians Network, more than 600 physicians encompassing nearly every adult and child specialty
- University of Oklahoma Health Sciences Center
- Oklahoma Medical Research Foundation
University of Oklahoma Health Sciences Center

- One of Only Four Comprehensive Academic Health Sciences Centers in the United States: all six professional colleges and Graduate College
- Number of Full-Time Faculty – 1,284; Total Number of Students – 3,064
- Total Sponsored Awards: $143Mn (FY19 projected);
- NIH Funding: $60Mn (FY19 projected), 20% increase over FY18
The 2015-2020 Research Strategic Plan
Four Key Priorities

1. Provide an **environment** to advance excellence in discovery, creativity, and technology development
2. Advance **team**-based research
3. Accelerate **translational** research
4. Expand research in the **thematic** areas of Cancer, Diabetes, Geroscience, Vision, and Immunology/Infectious Disease
OUHSC IDeA Research Programs & Economic Impact

- OUHSC IDeA Programs have received over $236 million in funding
- OUHSC IDeA Programs have returned over $310 million in funding
- Every $1 million in IDeA research funding returns approximately $2.24 million*
- Impact on Oklahoma economy of over $1.2 billion

Research Capacity Building

- Functional Genomic/Proteomic Analysis of Bacterial Host Interactions (CoBRE, 2000-2010)
  - Over $43.5Mn in leveraged funds*
  - Resulted in University Genomics and Proteomics core utilized by all researchers across campus

- Mentoring Vision Research (CoBRE, 2002-2013)
  - Over $62.6Mn in leverage funds*
  - Resulted in NIH P30 Vision Core Grant that supports vision researchers as well as other researchers

- Mentoring Diabetes Research in Oklahoma (CoBRE, 2007-Phase 3)
  - Over $24.1Mn in leverage funds*
  - Assisted in developing Harold Hamm Diabetes Center and obtaining over $64Mn in philanthropic funds

*from IDeA funding of promising junior investigators
Research Capacity Building (continued)

- Mentoring Translational Cancer Research in Oklahoma (CoBRE, 2012-Phase 2)
  - CoBRE important in obtaining NCI P30 Cancer Center Support Grant and becoming an NCI Designated Cancer Center
- Cellular and Molecular Geroscience COBRE (CoBRE, 2019)
  - Critical in supporting development of University-wide Center for Geroscience and Healthy Brain Aging
- Microbial Pathogenesis and Immunity (CoBRE, Application submitted January 2019)
  - Build thematic area of immunology/infectious disease
Research Capacity Building (continued)

Oklahoma Shared Clinical Translational Resources (OSCTR) IDeA-CTR

- Oklahoma Primary Healthcare Improvement Cooperative – Infrastructure for Dissemination and Implementation Research
  - Practice-based Research Networks
  - Practice Facilitators, Academic Detailers, Health IT support

- Biostatistics, Epidemiology and Research Design (BERD) Infrastructure
  - Consultative and collaborative support and the Sooner Survey Center

- Clinical Research Infrastructure
  - Regulatory and clinical research support
  - Patient registries and sample repositories
  - Tribal Engagement Unit
  - Clinical Data Warehouse Development

- Professional Development and Training opportunities for developing mentorships skills in all researchers and research education for clinically-trained investigators
  - Oklahoma Center for Mentoring Excellence
  - MS and Certificate in CTS programs
  - Translating Practice into Research
Oklahoma Shared Clinical Translational Resources (OSCTR) IDeA-CTR

- Provides pilot grant funding for junior investigators to launch independent careers with 28 projects in first 5 years.
- Recently funded 7 pilot grants and 5 special opioid-related projects.
- Statistics for First Five Years of Pilot Grant Funding Program
  - Greater than 50% were female; 37.5% were under-represented minority investigators.
  - The first 28 funded researchers have garnered more than $24M in new federal grants; a ROI of greater than $13 for every $1 invested in pilot grant funding.
  - Over 50 faculty participated as mentors for these junior investigators.
OK-INBRE is a Statewide Network

- Research Intensive
- PUIs
- CCs
- OSRHE-funded
OK-INBRE researchers have been awarded 6 R01s, 22 other federal agency awards, and 116 state or foundation awards in the last five years.

Over the last funding period, OK-INBRE provided $3 million in infrastructure development to its 17 partner institutions throughout Oklahoma by providing equipment for labs and research opportunities for faculty and students.

OK-INBRE provides faculty with start-up equipment and centralized bioinformatics/proteomics support services at OUHSC, OMRF, and throughout the state.

OK-INBRE has provided research experiences for over 500 undergraduate students since 2001 with 95% of participants getting a STEM degree and 60% continuing on to graduate or professional school. The OK-INBRE research pipeline is aimed at providing a new generation of researchers and healthcare providers that can help to improve health and reduce health disparities in Oklahoma.
Research Capacity Building (continued)

Team Building through Partnerships with other Oklahoma Institutions with IDeA grants

- University of Oklahoma
- Oklahoma Medical Research Foundation
- Oklahoma State University
- Laureate Institute for Brain Research