



NIGMS Programs

NIH Tribal Advisory Committee Meeting

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National Institutes of Health



National Institutes of Health
Office of Extramural Research

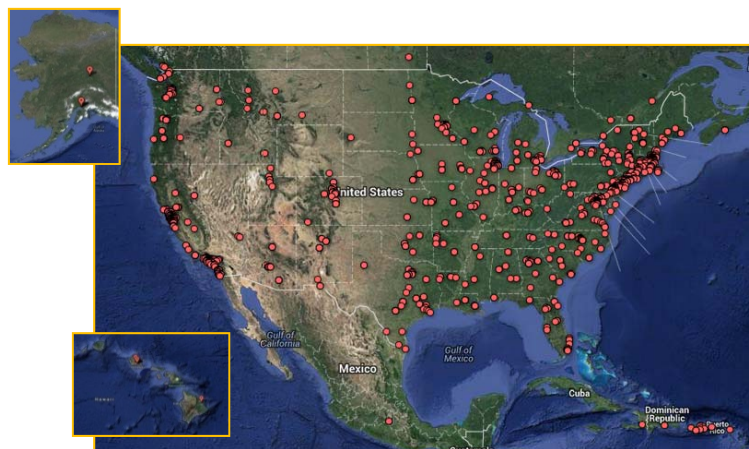
Understanding the Dual Nature of NIH



NIH has **Intramural Research**

- Approx. 6,000 scientists
- Approx. 11% of NIH's budget

All of NIH Fosters communication of medical information.



NIH has **Extramural Research**

- Supports research and training of scientists located in universities, medical schools, hospitals, and research institutions throughout the United States and overseas
- >2,500 institutions
- >400,000 scientists & research personnel
- Approx. 70,000 applications and 40,000 awards annually
- Approx. 81% of the NIH budget

NIGMS Programs Supporting Research in and by the AI/AN Community

• NARCH

- Supports collaborations between federally recognized American Indian/Alaska Native (AI/AN) tribes/tribal organizations and research intensive academic institutions.
- NARCH grants support health research projects prioritized by the tribal communities.
- The NARCH program also aims toward supporting the development of a cadre of AI/AN scientists and health professionals engaged in biomedical, clinical, and behavioral research.
- The program also aims to increase the capacity of both AI/AN organizations and research-intensive institutions to allow for sustainability in health research.



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NARCH Model

- Components may include:
 - Administrative Core
 - Student Development Project
 - Faculty Development Project
 - Capacity Building Project
 - Research Project (including pilot projects)
- No overarching scientific theme is required for the application. Rather the overarching goal of the application should be focused on the health research needs and requests of the AI/AN community.



NARCH Scientific Highlight

Oklahoma Native American Research Centers for Health

Background:

- Rheumatic diseases cause significant morbidity within American Indian populations.
- Clinical disease presentations, as well as historically associated autoantibodies, are not always useful in making a rapid diagnosis or assessing prognosis.
- The purpose of this study is to identify autoantibody associations among Oklahoma tribal populations with rheumatic disease.



NIH Public Access

Author Manuscript

J Rheumatol. Author manuscript; available in PMC 2013 October 01.

Published in final edited form as:

J Rheumatol. 2012 October ; 39(10): 1934–1941. doi:10.3899/jrheum.110984.

Rheumatic Disease among Oklahoma Tribal Populations: A Cross-Sectional Study

Jasmine R. Gaddy, Evan S. Vista, Julie M. Robertson, Amy B. Dedeke, Virginia C. Roberts, Wendy S. Klein, Jeremy H. Levin, Fabio H. Mota, Tina M. Cooper, Gloria A. Grim, Sohail Khan, and Judith A. James

Department of Arthritis and Clinical Immunology, Oklahoma Medical Research Foundation, Oklahoma City OK, Division of Rheumatology/Allergy/Immunology, University of Oklahoma Health Sciences Center, Oklahoma City OK, Chickasaw National Medical Center, Ada, OK, and the Cherokee Nation Health Services, Tahlequah, OK.

Scientific Advance:

- Results published by this study indicate that cyclic citrullinated protein IgG (anti-CCP) may serve as a more specific rheumatoid arthritis (RA) biomarker in American Indian patients (*J Rheumatol.* 2012. Oct;39(10): 1934-41. PMCID: PMC3468952).



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NARCH Highlight

Southwest Tribal American Research Center for Health (Albuquerque Area Indian Health Board)

Aims:

- Support research internships for American Indian higher education to develop skills to conduct behavioral and health science research
- Provide mentoring and social support to students

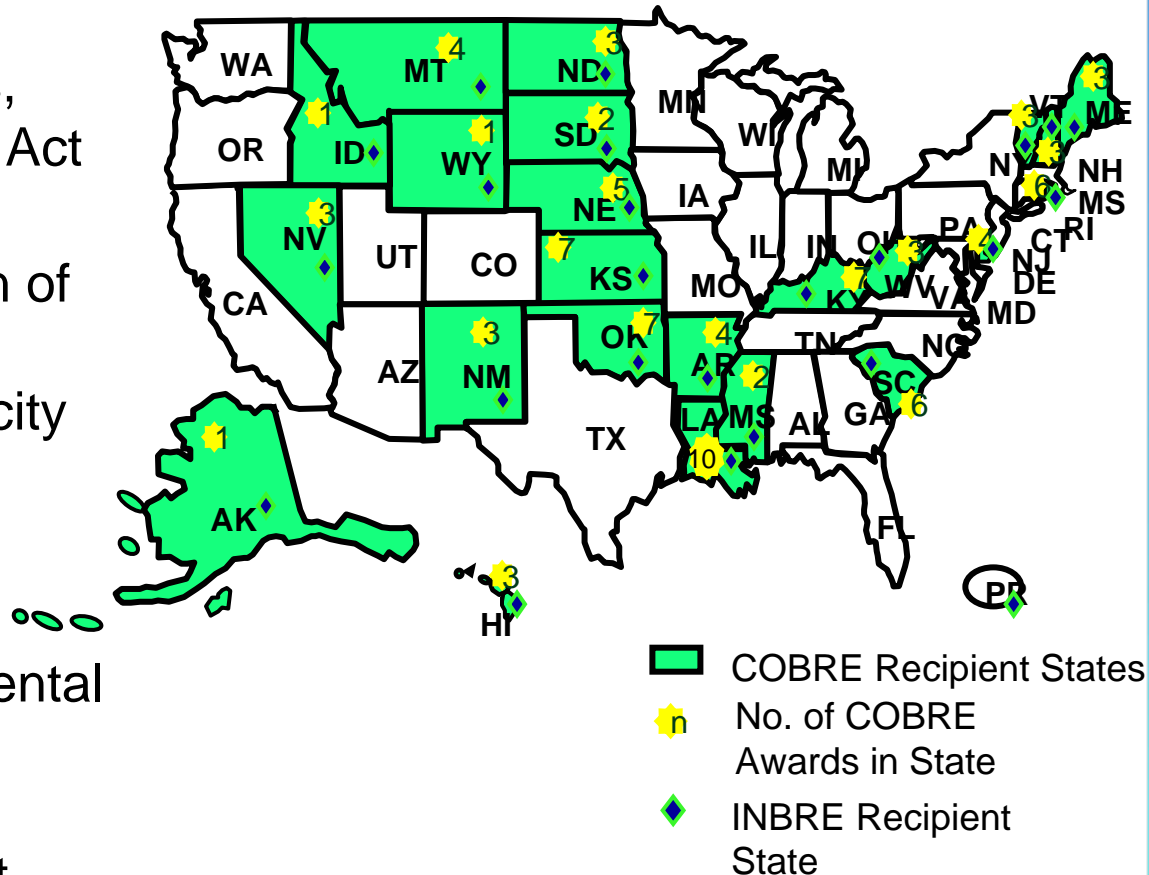
Successes:

- Provided tuition scholarships to 33 AI/AN graduate-level students
- Supported 18 AI/AN students through graduation with health science degrees.



Institutional Development Award

- Authorized by Congress, 1993 NIH Revitalization Act
- Intent to enhance geographical distribution of NIH research funds and increase research capacity
- Currently 23 states and Puerto Rico are IDeA eligible
- Similar to NSF Experimental Program to Stimulate Competitiveness in Research (EPSCoR, est. 1980)

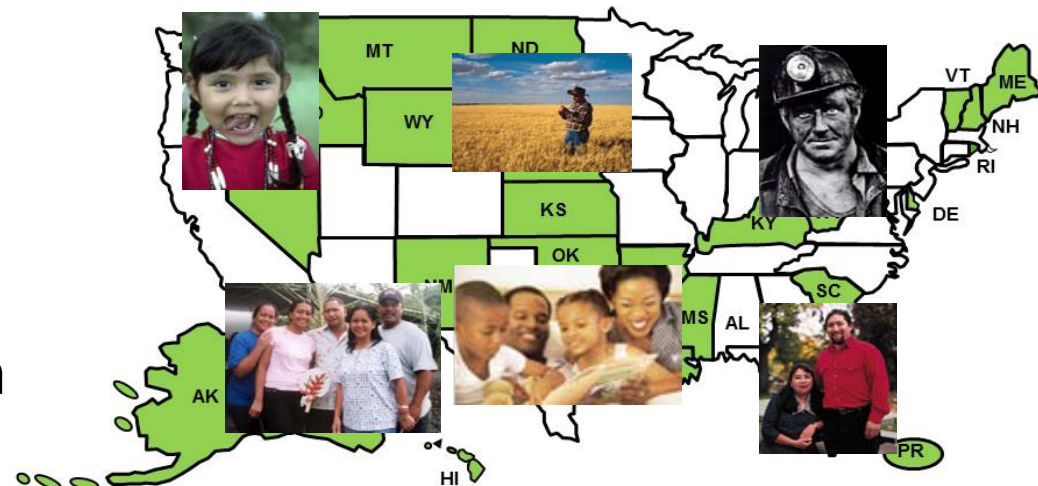


Increasing Competitiveness of Investigators and Institutions in IDeA States

NIGMS Programs Supporting Research in and by the AI/AN Community

• INBRE

- A program under IDeA which supports the development of a statewide multi-disciplinary research network of doctoral degree-granting, undergraduate institutions and community colleges. INBRE grants work to build and increase research capacity by supporting faculty, fellows and students at participating institutions. Currently over 20 Tribal Community Colleges are networked with supported INBRE grants



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TCUs involved with INBREs

- ❖ Fort Belknap College
- ❖ Chief Dull Knife College
- ❖ Fort Belknap Tribal health Administration
- ❖ Salish Kootenai College
- ❖ Stone Child College
- ❖ Fort Peck Community College
- ❖ Little Big Horn College
- ❖ Blackfeet Community College
Montana INBRE (at Montana State University-Bozeman)
- ❖ Little Priest Tribal College
Nebraska INBRE (at University of Nebraska Medical Center)
- ❖ Haskell Indian Nations University
Kansas INBRE (at University of Kansas Medical Center)
- ❖ Cankdeska Cikana Community College
- ❖ Fort Berthold Community College
- ❖ Sitting Bull College
- ❖ Turtle Mountain Community College
- ❖ United Tribes Technical College
North Dakota INBRE (at University of North Dakota)
- ❖ Commanche Nation College
Oklahoma INBRE (at University of Oklahoma)
- ❖ Oglala Lakota College
- ❖ Sisseton Wahpeton College
South Dakota INBRE (at University of South Dakota)

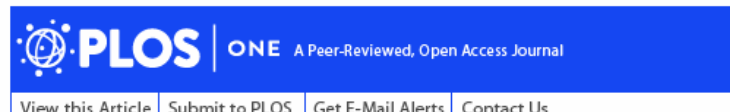


INBRE Scientific Highlight

North Dakota INBRE with Turtle Mountain Community College

Background:

- Preeclampsia is a pregnancy complication characterized by high blood pressure and can cause organ damage.
- Native American Women may have a variant of the C-reactive protein (CRP) which is associated with severe preeclampsia.
- The purpose of the study was to determine who may be at higher risk for severe pre eclampsia in order to take preventive measures during pregnancy.



PLoS One. 2013; 8(8): e71231.

PMCID: PMC3733916

Published online 2013 Aug 5. doi: [10.1371/journal.pone.0071231](https://doi.org/10.1371/journal.pone.0071231)

Two Variants of the C-Reactive Protein Gene Are Associated with Risk of Pre-Eclampsia in an American Indian Population

[Lyle G. Best](#),^{1,2,*} [Richa Saxena](#),³ [Cindy M. Anderson](#),⁴ [Michael R. Barnes](#),⁵ [Hakon Hakonarson](#),⁶ [Gilbert Falcon](#),¹ [Candelaria Martin](#),¹ [Berta Almoguera Castillo](#),⁶ [Ananth Karumanchi](#),⁷ [Kylie Keplin](#),¹ [Nichole Pearson](#),¹ [Felicia Lamb](#),¹ [Shellee Bercier](#),¹ and [Brendan J. Keating](#)⁶

Scientific Advance:

- Results published by this study indicate that two variants of the c-reactive protein are associated with a risk of preeclampsia in an American Indian Population. (PLoS One. 2013. 8(8). PMCID: PMC3733916).



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NIGMS Programs Supporting Research in and by the AI/AN Community

- Research Supplements to Promote Diversity in Health Related Research
 - The program aims to improve the diversity of the research workforce by providing supplements to on-going NIH supported grants in order to facilitate recruitment and training of students and postdoctoral fellows from diverse backgrounds (including underrepresented racial and ethnic groups, individuals with disabilities and individuals from economically or educationally disadvantaged backgrounds) to pursue careers in biomedical research.



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NIH Visit Week

Center for Research Capacity Building (NIGMS) in collaboration with the Office of Intramural Training and Education conducts a week long program to expose students to biomedical research and career opportunities.

- Activities include:
 - science career workshops
 - hands on laboratory and clinical research experiences
 - science journal club
 - informational interviews and
 - professional networking opportunities
 - Networking with fellow students from SACNAS



Research Opportunities at NIH

- [The Summer Internship Program \(SIP\)](#)
SIP welcomes eligible high school, college, graduate, and professional students to spend eight to ten weeks conducting biomedical research with NIH investigators.
- [The Undergraduate Scholarship Program \(UGSP\)](#)
The UGSP provides up to \$20,000 in scholarship support per year to eligible undergraduates who are pursuing degrees in fields related to biomedical research.
- [The Postbaccalaureate Intramural Research Training Award \(IRTA\) Program](#)
Biomedical research program that enables eligible recent college graduates planning to apply to graduate or professional school to spend one or two years working with investigators at the NIH.
- [The Graduate Partnerships Program \(GPP\)](#)
Opportunity to conduct all or part of dissertation research at NIH.
<https://www.training.nih.gov/programs>



The Men and Women of the CRCB

