

CAIRHE

CENTER FOR AMERICAN INDIAN AND RURAL HEALTH EQUITY



MONTANA'S CHANGING CLIMATE AND HUMAN HEALTH



Alex Adams

Montana Climate Assessment in 2017 by the Montana Institute on Ecosystems (IoE), we are now aware of the potential for more hot days, expanding wildfires, and changes to seasonal water availability in Montana. From this work, it didn't take long to turn attention to the impacts on human health in our state. It's a story that relates to us all.

IoE, CAIRHE, and a partnership of more than 40 institutes and experts

have come together to produce a special report, C2H2: Impacts of Montana's Changing Climate on Human Health, for release in early 2020. Health and climate science partner groups include the Montana Climate Office, the Montana Department of Public Health and Human Services, Montana Healthcare Foundation, Montana INBRE, MSU Extension, tribal communities, area physicians, and other health researchers and organizations. The report will present our current understanding of climate-health links in Montana and offer an analysis of health impacts posed by climate change projected for mid-century and the end of this century. The goal is to provide up-to-date information, highlight gaps in our knowledge, identify areas for further research and monitoring, and suggest adaptation strategies to ensure positive health outcomes for communities.

Though the report will emphasize the effects of wildfires and

heat, it will also address impacts related to the spread of infectious diseases, food insecurity, extreme weather events, mental illness, and any potential positive impacts. Nationally and regionally, we know that climate-health links are many, including mortality related to cardiovascular and respiratory conditions and heat stress, premature births, spread of infectious disease, and sickness and mortality from gastrointestinal disease due to mold and flood contamination of water supplies. The new report will examine our situation here in Montana.

Local climate changes that could be at play include:

- more-rapid melting of mountain snowpack;
- more late-summer drought and water shortages; and
- changes in water availability impacting access to traditional plants, which threatens cultural well-being for tribal communities.

CAIRHE's part in the collaborative effort has been led by Community Research Associate **Susan Higgins**, M.S., who for years has studied water resources and their impact on communities. Anyone interested in more information may reach her at susan.higgins@montana.edu.

Understanding the effects of climate change on health is critical for our communities so they can begin to adapt now and into the future. CAIRHE is excited to be part of this important addition to the Montana Climate Assessment, and we look forward to statewide discussions about this topic once it's complete.

Alexandra Adams, M.D., Ph.D. Director and Principal Investigator

EDUCATION

CAIRHE CO-HOSTS CHEF SEAN SHERMAN IN RETURN TO MONTANA STATE

ean Sherman, a renowned chef of Native American cuisine and CEO of the company he founded known as The Sioux Chef, returned to Montana State University on June 27-28 for a public lecture and book-signing, as well as related events, sponsored by CAIRHE and others.

Sherman's lecture, "Ancestral Foods Across Generations," delighted an audience of 180 people on June 27 in the Hager Auditorium at the Museum of the Rockies. The talk was a broad overview of contemporary issues in food sovereignty that have roots in a history of colonialism and trauma toward Native people across the continent.

"A war against indigenous people became a war on indigenous food ways," Sherman said, citing past destruction of crops and seeds, bison herds, and local ecosystems as a way to weaken Native cultures. The suppression of indigenous education during the boarding school era nearly erased Native knowledge of plants that were once the mainstay of healthy diets and medicine for tribes in every region of North America.

As a result, Native communities today are largely dependent on federal food assistance programs consisting largely of processed foods. "We have real-time evidence of

what happens to whole communities that don't have access to healthy foods," Sherman said.

"CONTROL YOUR FOOD, CONTROL YOUR DESTINY"

Today, Sherman's company and its nonprofit arm, North American Traditional Indigenous Food Systems, or <u>NATIFS</u>, are leaders in the Native food sovereignty movement. But Sherman's passion for the cause is a relatively recent development.

Although he began working in restaurants at a young age, he said, his experience and training related mostly to foods from the European tradition. He didn't know much about

the food of his own heritage. "It was kind of eye-opening to think, 'What were my ancestors eating?'" he said.

Then in 2012 Sherman started experimenting with indigenous foods and conducting research into Native history, culture, and trauma. In 2014 he opened The Sioux Chef as a caterer and food educator in Minnesota. He and his business partner, Dana Thompson, also designed and opened the Tatanka Truck, which featured foods common in the Dakota and Minnesota territories before Europeans arrived.

Now the main focus of the company, Sherman said, is



Chef Sean Sherman (center) teaches participants in the cooking class at MSU on June 27. The participants showed off their creations at the end of the three-hour class (next page).



reclaiming indigenous health and culture through food. He and his colleagues collaborate with seed banks, indigenous farms, Native restaurateurs and chefs, and indigenous educators to design and sustain an indigenous culinary infrastructure. "We wanted to be leaders, and have been leaders, in that movement," he said, adding, "If you can control your food, you can control your destiny."

www.montana.edu/cairhe

The next step is the 2020 launch of the NATIFS Indigenous Food Lab, a Minneapolis center that will house an indigenous restaurant and training center; oversee research and development in indigenous food identification, gathering, cultivation, and preparation; and teach all components of starting and running a successful culinary business based around Native traditions and indigenous foods.



Sherman, who is Oglala Lakota, was born in Pine Ridge, S.D., and has been cooking across the United States and Mexico over the past 30 years. His first book, *The Sioux Chef's Indigenous Kitchen*, was awarded the medal for best American cookbook in 2018 from the James Beard Foundation, the famed New York-based nonprofit focused on the culinary

Sherman is eager to pass along all he's learned. Just hours

before his June 27 lecture, he led a three-hour cooking class in MSU's Rendezvous Dining Pavilion that included invited participants from five tribal nations across Montana, as well as representatives from MSU Culinary Services. The menu included artful dishes of elk, trout, rabbit, and duck, as well as a variety of plant foods native to Montana. The thorough use of plants found within easy reach of everyday life—for food, medicine, and crafting—is especially important to Sherman, who often says, "Plant knowledge is power."

The morning after the cooking class and lecture, Sherman and Thompson held a one-hour question-andanswer session for the public in Inspiration Hall, located inside MSU's new Norm Asbjornson Hall. He then met with MSU faculty and other officials interested in advancing the indigenous foods movement on campus.

Throughout his visit, Sherman touted MSU as a national leader in incorporating indigenous foods into its campus food operations, which serve 10,000 meals a day in its dining halls. "We tell others to look at the example you're setting here," he said.

Sherman's visit was cosponsored by CAIRHE, Montana INBRE, MSU Culinary Services, and the MSU Department of Native American Studies.

ADAMS PROJECT FILM PREMIERES AT SHERMAN LECTURE

Audience members who turned out to see Chef Sean Sherman at the Museum of the Rockies on June 27 were treated to a special film premiere. Prior to the talk, CAIRHE Director Alex Adams introduced the first showing of *Igmu's Tipi Dream*,



exciting to finally see it up on the big screen," Adams said. The film can be viewed

Island Tales website: www. turtleislandtales.org.



RESEARCH HIGHLIGHTS

Here's just a sampling of what CAIRHE's faculty investigators have been up to during the winter and spring months.

Vanessa Simonds, Sc.D. (Guardians of the Living Water), continued her project's afterschool programs on the Crow Reservation during Fall 2018 and Spring 2019, followed by its annual summer camp in June. Over the past year, her research programs have implemented projects undertaken by children—collecting and interpreting data to build new knowledge and determine needed action related to water quality and the cultural importance of water. The CAIRHE project, which will conclude this August, has developed several activities to teach students about the cultural significance of local springs and how to protect them. These activities have contributed to a curriculum, booklet, video, and activities that will be resources for local schools for years to come.

Carmen Byker Shanks, Ph.D., RDN (The UnProcessed Pantry Project [UP3]: A Novel Approach to Improving Dietary Quality for Low-Income Adults Served by Rural Food Pantries), worked last fall to create the UnProcessed Pantry Framework, protocol, and process for conducting a single-group, 16-week trial called UP3, designed to change the food supplies at two rural food pantries in Bozeman and Livingston, Mont., and deliver a behavioral intervention to participants. Recruitment of 45 participants began in January, and the 16-week trial occurred during February through June. The two food pantries changed policies and practices around donations and ordering of unprocessed and ultra-processed foods, Byker Shanks said. UP3 was conducted in partnership between Bozeman Health, the Gallatin Valley Food Bank, the Food and Health Lab, Healthy Gallatin, and the Livingston Food Resource Center. Preliminary results suggest that UP3 registered significant changes in socialecological outcomes, health outcomes, and dietary intake among participants. Analysis of data will continue over the coming months.

Monica Skewes, Ph.D. (Development and Pilot Test of Indigenist Relapse Prevention for American Indians), together with her Community Advisory Board and other members of the research team, developed and implemented a focus group study to understand community members' perceptions of the project's planned relapse prevention intervention. The team conducted sever separate focus groups and is now in the process of analyzing that data, in addition to data collected from a previous quantitative survey of 200 tribal members. Tribal members are showing strong interest in the intervention, Skewes said. Based on focus group results, the intervention will ask participants to consider what activities they might engage in to protect them from substance use and help them re-create those circumstances to maximize their chances of changing their substance use patterns. "The community's enthusiastic about this strengths-based focus, and we believe it will help us recruit and retain participants in the pilot trial," she said.

Kelly Knight, Ph.D., and Colter Ellis, Ph.D. (Responding to Secondary Trauma ...), have collected an enormous amount of data over the past year, including around 1,250 surveys from victim service providers in Montana and MSU students. Analysis is ongoing. They also piloted a five-week intervention among 30 victim service providers, and this summer they are assessing the results of that intervention. "As our analysis continues, we hope to

show that the intervention has a positive influence on participants' trauma-related health symptoms," Knight said. In related news, the team was invited to Browning, Mont., to present a day-long training on the neurophysiology of secondary trauma to a statewide group of child and family protective services. Knight and the project team also were awarded a significant program evaluation contract related to their current intervention.

Neha John-Henderson, Ph.D. (A Study of Trauma, Daily Stress, Sleep, and Blood Pressure in American Indian Adults), has collected data from more than 70 participants to date in the Blackfeet community. The project team has utilized an ecological momentary assessment app to collect data from participants as they move through their lives over a seven-day period. The project also has collected measures of sleep, ambulatory blood pressure, and immune system inflammation, and the team is examining the way in which these outcomes relate to childhood trauma and historical trauma. John-Henderson will begin analysis soon in conjunction with her Community Advisory Board.

Maggie Thorsen, Ph.D., and Andreas Thorsen, Ph.D. (Multi-Criteria Evaluation of Efficiency, Access, and Outcomes at Health Centers), have continued to examine variation in outcomes and health care delivery among community health centers related to prenatal health and chronic diseases. They have discussed their results to date with key stakeholders in the health care field. Together with their co-investigator from the University of Missouri, Dr. Ronald McGarvey, they have formulated a novel measure for determining facility locations that maximizes health care access in a way that considers equity across space, called the cumulative opportunity measure. This work will lead directly into a new CAIRHE research project that will begin in September.

The new **Translational Biomarkers Core Lab,** located in MSU's Health Sciences Building, completed equipment installation in recent months and has begun service to CAIRHE investigators and other MSU faculty under the direction of Core Director **Selena Ahmed,** Ph.D. The Core supports investigators by providing consulting and fee-based analytical services on validated biomarker assessments pertaining to lifestyle, chronic disease, and human health. For more information on lab capabilities and contacts, see the Core's webpage.



The new Translational Biomarkers Core Lab is open for business.

CENTER NEWS



"BRIDGING THE GAP" WORKSHOP BRINGS PROMISING INVESTIGATORS TO MSU

In February CAIRHE hosted a pilot program designed to mentor researchers from around the country in making successful submissions of National Institutes of Health grants involving American Indian, Alaska Native, and Native Hawaiian populations.

The workshop, titled "Bridging the Gap: From Application to Funding" and sponsored by the NIH, was held on the MSU campus on February 7-8.

"This inaugural event was a huge success for our Center, and it positioned 10 junior faculty from across the country for NIH grant success in the short- or long-term," said CAIRHE Director **Alex Adams,** M.D., Ph.D. "We hope this workshop will have a lasting impact on health research with Native communities as these investigators pursue their careers."

Faculty participants traveled to Bozeman from nine states, representing the University of Michigan, University of Illinois, University of Maryland, and University of Arizona, among others.



Participants, mentors, and CAIRHE staff are all smiles by the end of "Bridging the Gap."

The two workshop days involved mentoring with senior faculty drawn from five institutions, as well as presentations by mentors and by NIH program officers from the National Cancer Institute, the National Institute on Drug Abuse, and the National Institute of General Medical Sciences.

Each workshop participant was selected from applications received by CAIRHE last December, and each had submitted a major grant proposal to NIH last year under a program called Research to Improve Native American Health. Their proposals—seeking either a multiyear, multimillion-dollar R01 grant, or a smaller two-year R21 grant—were not awarded funding at the time.

The purpose of the workshop at MSU, Adams said, was to provide those researchers with grant-writing guidance, small-group revision opportunities, and one-on-one mentoring to help them resubmit their applications successfully in May 2019. That mentoring continued during the weeks following the workshop. CAIRHE is currently evaluating how many of the faculty investigators resubmitted their grants in the spring or upgraded their submissions from R21 to R01, and what their results are. This will help CAIRHE and the NIH determine whether or not to hold the workshop again next year.

All 10 participants reported they were "very satisfied" or

"satisfied" with the workshop overall. "I would not have been ready to take the leap to submit this R01 without this workshop," said one participant in an anonymous evaluation. "It will be my first. I believe between the support of my program mentor and the support of my mentors at my institution, I will be able to do this."

The workshop included presentations by Adams and CAIRHE investigators **Suzanne Held,** Ph.D., and **Elizabeth Rink,** Ph.D.

CAIRHE SCORES WELL ON NIH RENEWAL, NOW AWAITS NOTICE OF GRANT AWARD

Earlier this spring CAIRHE received the score for its NIH renewal application and now awaits word about funding for the next five years.

In mid-March, CAIRHE received an overall impact score of 17 for the application it submitted last September for renewal of its Centers of Biomedical Research Excellence (COBRE) grant from the National Institute of General Medical Sciences. Scores range from 10 to 90, with 10 being a perfect score. CAIRHE's score is, by all accounts, an outstanding result.

"We are very happy about this score and are cautiously optimistic that this means we will be refunded," CAIRHE Director **Alex Adams,** M.D., Ph.D., announced to colleagues at the time. "This was a huge team effort, and many congratulations go out to all involved."

The Center received its review by the NIGMS Advisory Council in mid-May, and CAIRHE has supplied additional requested information as part of the routine pre-funding process. Now the final funding decision rests with the Institute's director. CAIRHE expects a Notice of Award from the Institute later this summer.

Funding for Phase 2 of CAIRHE's COBRE grant, totaling \$10.7 million, would begin September 1 and run through August 2024.

CAMPUS COMMUNITY MEETS "HERB," THANKS REIJO PERA FOR HER SUPPORT

On May 29 CAIRHE and Montana INBRE staged an open house to launch the Health Education and Research Bus, affectionately known as HERB. The event took place outside the MSU Health Sciences Building, home to CAIRHE, and included remarks by CAIRHE Director **Alex Adams**, M.D., Ph.D.

Several MSU officials and administrators attended, including Renee Reijo Pera, Vice President of Research and Economic Development; Alison Harmon, Dean of Education, Health, and Human Development; and Cody Stone, Director of MSU Extension.

"We are very excited to show you MSU's newest resource that will support our work and our research mission to pursue health equity projects across rural Montana," Adams said.

At the event CAIRHE and Montana INBRE also honored Reijo Pera with a blanket ceremony in recognition of her support of the two programs during the past six years. Reijo Pera will leave MSU this summer for a new post as Vice President of Research and Economic Development at Cal-Poly University.

PEOPLE



CAIRHE's Maya Bronston (left) and Alex Adams honor Renee Reijo Pera with a Pendleton blanket.

"I will miss our monthly meetings and her advice," Adams said

For more information on HERB, its purpose, and how to reserve it for use, faculty researchers should contact Susan Higgins at susan.higgins@montana.edu. (See photo on p. 8.)

HELD AND McCORMICK RECEIVE NATIONAL AWARD FOR CROW-MSU PARTNERSHIP

The leaders of a longtime collaborative partnership between Montana State University and members of the Apsáalooke (Crow) Nation have been recognized nationally for their work to promote health equity and social justice.

Last fall, Messengers for Health Co-Directors Suzanne Held, Ph.D., a CAIRHE mentor, and Alma McCormick received the



Robert Wood Johnson Foundation Award for Health Equity presented by Community-Campus Partnerships for Health. McCormick is a member of the Apsáalooke Nation, and Held is a community health professor in the MSU College of Education, Health, and Human Development.

Messengers for Health, which is not a CAIRHE project, originally focused on culturally appropriate ways to increase cancer screening rates among Apsáalooke

women. The partnership has since expanded to multiple topic areas including women's health, men's health, healthcare provider cultural competency, healthy relationships, and chronic illness selfmanagement.

"We are honored to receive this award, as it showcases the power of a true partnership, where all members contribute, and of using the strengths of the community to effect positive change and see significant results," Held said.

Held and McCormick accepted the award November 11 at the annual American Public Health Association meeting in San Diego, and again at the Robert Wood Johnson Foundation's Awards for

Health Equity Recognition and Learning event in December in Princeton, N.J. —MSU News Service

SIMONDS APPOINTED TO NATIONAL PANEL ON HEALTH LITERACY

Vanessa Simonds, Sc.D., a CAIRHE investigator who is regarded as an expert in health literacy, has been appointed to a prestigious national roundtable that works to bridge health literacy-related research and practice.

An associate professor of community health in the MSU Department of Health and Human Development, Simonds was appointed in January to the National Academies of Sciences' Roundtable on Health Literacy. Composed of 30 experts who are

nominated for the position, the roundtable works to support the development, implementation, and sharing of evidencebased health literacy practices and policies, with a goal of improving the health and wellbeing of all people. Simonds will serve on the roundtable for three years.

"I was honored to be selected," Simonds said. "Well-known researchers in the field are on that roundtable, and it connects me to new people to work with."



Simonds said the roundtable brings stakeholders—such as researchers and representatives from federal agencies, foundations, and industry—together three times a year to discuss issues that are important for health literacy and to find ways to bring together research and practice.

"It helps bridge research and practice and make sure that research is reaching the communities that could benefit from it,"

Simonds uses community-based participatory research approaches to address health and health literacy issues ranging from chronic disease to environmental health among American Indians. She is especially committed to designing and evaluating strengths-based, community-centered outreach strategies designed in partnership with Native American communities.

Her CAIRHE project, Guardians of the Living Water, is in its fifth and final year. —MSU News Service

KNIGHT RECEIVES BETTY COFFEY AWARD

Kelly Knight, Ph.D., CAIRHE investigator and associate professor in the Department of Sociology and Anthropology, received the MSU Betty Coffey Award at Spring Convocation on January 8.

The annual award is given in memory of an engineering professor who was noted for her teaching excellence and championing of women's equity and minority issues in the curriculum. Knight has made contributions to the progress of women on the MSU campus and has advanced the sociology and criminology curriculum in critical ways that have a real-world impact, according to the award citation.

A leading scholar in victimology, she has published groundbreaking and highly cited research in the subdiscipline. She has www.montana.edu/cairhe

PEOPLE





Kelly Knight

brought this expertise into the classroom, developing and implementing courses in victims and society and sociology of law enforcement, while ensuring that those courses include feminist, critical race, and trauma-informed perspectives. The training and mentorship that MSU graduates receive from Knight make them better in their postgraduate careers. In turn, those graduates make Montana a more peaceful and equitable

place, the award citation said.

"I was very honored to receive the Betty Coffey Award," Knight said. "I would especially like to thank Colter Ellis for his nomination. It was a complete surprise, and I'm very grateful for the support I've received from him, my colleagues, the university, our funders, and the communities we work in."

Knight is currently finishing the second year of a two-year CAIRHE pilot project, Responding to Secondary Trauma Among Rural and American Indian Victim Service Providers in Montana, with co-PI Colter Ellis, Ph.D. —MSU News Service

SKEWES, JOHN-HENDERSON RECEIVE **COLLEGE OF LETTERS & SCIENCE HONORS**

The Montana State University College of Letters and Science honored two CAIRHE investigators, among others, at the College's annual awards ceremony on April 9.



Monica Skewes, Ph.D., associate professor in the Department of Psychology, received the Letters and Science Meritorious Research and Creativity Award.

Skewes is an applied health psychologist, with expertise in American Indian health and substance use, who has dedicated her career to understanding health disparities from a cultural perspective. Much of her work at MSU has used community-based participatory research in collaboration with

Neha John-Henderson

the Fort Peck Assiniboine and Sioux tribes to investigate substance use risk and prevention. She has consistently received funding for her research, including current CAIRHE funding for her Fort Peck project.

Neha John-Henderson, Ph.D., assistant professor in the Department of Psychology, received the Letters and Science Outstanding Teaching Award for tenure-track faculty.

Since arriving at MSU in 2016, John-Henderson has consistently received outstanding teaching evaluations from

students who describe her as engaging and passionate about the material. In addition to being highly knowledgeable about the subject matter, she incorporates effective active-learning techniques. She routinely has 10 to 15 undergraduate students working in her MSU research lab and has also mentored students at Blackfeet Community College since 2016. —MSU News Service



Eliza Webber, MPH, joined CAIRHE as research project manager on December 12.

Since her start at the Center, Webber has assisted Director Alex Adams, M.D., Ph.D., with dissemination of Adams's research



stemming from the Healthy Children, Strong Families project. She also has worked with INBRE investigator Erik Adams, MD., Ph.D., on his research examining osteoarthritis among farmers and ranchers in Montana. Webber helped administer the Bridging the Gap workshop in February (p. 5), as well as the Chef Sean Sherman events in June (p. 2).

"I'm so thankful for the opportunity to live in such a beautiful place like Bozeman,

while conducting meaningful research, working to improve the health and well-being in our communities," Webber said. "It's been inspiring to work alongside CAIRHE investigators and learn more about the many innovative projects taking place throughout the

Webber received her MPH from Yale University in 2015 and her B.A. in Community Health from Brown University in 2012.

MULTIPLE CAIRHE FACULTY HONORED WITH TENURE AND PROMOTION

At a ceremony on April 30, multiple CAIRHE investigators received tenure and promotion in recognition of their career achievements in teaching, research, and service.

Receiving tenure and promotion to associate professor were Vanessa Simonds, Sc.D. (see p. 6), and Selena Ahmed, Ph.D., of the Department of Health and Human Development; and Colter Ellis, Ph.D., and Cody Warner, Ph.D., of the Department of Sociology and

Anthropology. Elizabeth Rink, Ph.D., of the Department of Health and Human Development received promotion to full professor.

"We are incredibly proud of these faculty investigators as leaders in their fields," said CAIRHE Director Alex Adams, M.D., Ph.D., "and we look forward to supporting them as they move into the next stages of their careers."



Cody Warner







Flizabeth Rink



OUTREACH



HERB has a new look! The Health Education and Research Bus now features a mountainous landscape on one side (shown) and a Montana plains scene on the opposite side. For more, see p. 5.

Center for American Indian and Rural Health Equity (CAIRHE)

Health Sciences Building P.O. Box 173485 Montana State University Bozeman, MT 59717-3485 Web: www.montana.edu/cairhe



Center for American Indian and Rural Health Equity

ADMINISTRATION

Alexandra Adams, M.D., Ph.D., Director and Principal Investigator James Burroughs, Program Coordinator Tel: (406) 994-4407; E-mail: jburroughs@montana.edu

Maya Bronston, *Grants Management Specialist*Selena Ahmed, Ph.D., *Director, Translational Biomarkers Core*Eliza Webber, MPH, *Research Project Manager*Nicole Carnegie, Ph.D., *Statistical Consultant*

CAIRHE PROJECT LEADERS

Carmen Byker Shanks, Ph.D., Department of Health and Human Development Colter Ellis, Ph.D., Department of Sociology and Anthropology
Vernon Grant, Ph.D., Center for American Indian and Rural Health Equity
Neha John-Henderson, Ph.D., Department of Psychology
Kelly Knight, Ph.D., Department of Sociology and Anthropology
Vanessa Simonds, Sc.D., Department of Health and Human Development
Monica Skewes, Ph.D., Department of Psychology
Andreas Thorsen, Ph.D., Jake Jabs College of Business and Entrepreneurship
Maggie Thorsen, Ph.D., Department of Sociology and Anthropology

CAIRHE MENTORS

Alexandra Adams, M.D., Ph.D.

Suzanne Held, Ph.D., *Department of Health and Human Development* Elizabeth Rink, Ph.D., MSW, *Department of Health and Human Development*

COMMUNITY RESEARCH ASSOCIATES

Emily Matt Salois, MSW Susan Higgins, M.S.

EXTERNAL ADVISORY COMMITTEE

Dennis Donovan, Ph.D., *University of Washington*Donald Warne, M.D., MPH, *University of North Dakota*Jack Westfall, M.D., MPH, *Santa Clara Valley Medical Center*

Research reported in this publication is supported by a Centers of Biomedical Research Excellence (COBRE) award from the National Institute of General Medical Sciences of the National Institutes of Health, award number P20GM104417. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Writer, Editor, Layout: James Burroughs Design: Kristen Drumheller, MSU

Copyright © 2019 by the Center for American Indian and Rural Health Equity