



Mission

To alleviate the unequal burden of cancer among Native Americans of the Southwest through research, training, and community outreach programs in collaboration with the communities we serve.

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The Partnership for Native American Cancer Prevention (NACP) is a partnership of Native American communities, Northern Arizona University, the University of Arizona Cancer Center, and the National Cancer Institute to address cancer health disparities in Native Americans.

Greetings!

October is time for changing tree colors in parts of the country – vivid reds, yellows and oranges. You may also see people wearing more pink to honor the National Breast Cancer Awareness Month. That is a reminder for all of us to follow cancer screening guidelines and encourage family members to do the same.

We hope you enjoy reading this issue.

Jani Ingram

Margaret Briebl

Francine Gachupin

Dr. Jennifer Erdrich’s Training Award

NACP has been awarded a Diversity Supplement from the National Cancer Institute to support the research training of Jennifer Erdrich, MD, MPH. She is a University of Arizona early stage investigator, assistant professor, and surgical oncologist specializing in melanoma and breast cancer. Dr. Erdrich is currently working on arrangements to provide general surgical oncology care to tribal populations in southern Arizona. Dr. Erdrich is a tribal descendant of the Turtle Mountain Ojibwe with a medical degree from Harvard Medical School.

Diversity Supplements provide additional funds to support the research training of individuals from racial and ethnic groups that have been shown by the National Science Foundation to be underrepresented in health related sciences, individuals with disabilities or individuals from financially or educationally disadvantaged backgrounds. These investigators can range from high school level candidates to investigators developing independent research careers. The award provides funds for the individual’s salary, research supplies and travel to scientific meetings.



Dr. Jennifer Erdrich

Dr. Erdrich’s project for the supplement is titled, “Addressing breast cancer health disparities in American Indians through translational and dissemination/ implementation science.” It is connected to the NACP research project titled, “Nitric oxide in the tumor microenvironment of triple negative breast cancer.” Through this research, Dr. Erdrich will have the opportunity to refine her skills in translational research, a type of research that bridges work done in a basic science laboratory into applications for the clinical setting. In addition, this support will develop her as a physician-scientist, working on behalf of Native American communities, focused on the topic of breast cancer. Dr. Erdrich plans to utilize this award to implement a project that includes an ambitious strategy of community outreach, developed with the rigorous input from the community, in order to improve breast cancer screening in that community. This award will enhance Dr. Erdrich’s development as a future independent investigator and simultaneously benefit the Arizona tribal communities.



AACR Cancer Health Disparities Conference

The American Association for Cancer Research, or AACR is the largest cancer-focused professional organization in the U.S. One service that this organization provides is to host scientific meetings that bring together people who are working on similar cancer problems. Three NACP teams participated in a virtual American Association for Cancer Research meeting that was held from October 2nd – 4th. The meeting was titled, *The Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved*. Below, is the topic of each team's presentation, the team members who contributed, and the work that was presented:

Refining a breast and cervical cancer screening program for Native American women with disabilities. J. Armin, H. Williamson, J. Rothers, J. Baldwin, M. Adams, M. Becenti, A. Begay, T. Chico-Jarillo, J. Etcitty, M. Lee, L. Lelli, B. Lockwood, C. Núñez, S. Sasse and N. Rodriguez—This presentation described how the research team has engaged stakeholders in discussions with the goal of developing appropriate breast and cervical cancer educational programs. The stakeholders included health care providers, Native American women with intellectual and developmental disabilities, and their caregivers.

Community Focused Research, Application and Translation Academy for Investigators. C. Goldtooth, A. Begay and N. Teufel-Shone – This presentation described a training workshop that the Outreach Core has developed for research teams. The goal of the training is to improve the research teams' ability to communicate knowledge, gained through health research, back to the communities who can benefit from this knowledge.

***Helicobacter pylori* in Native Americans in Northern Arizona.** F. Monroy, H. Brown, P. Sanderson, G. Jarrin, M. Mbegbu, S. Kyman, C. Chief and R. Harris – This presentation described what the research team has learned about a bacteria called *Helicobacter pylori* that can infect the stomach. They have discovered features of the bacteria that appear to be linked with worse infections and could lead to stomach cancer.

Renal cell carcinoma health disparities in American Indians Alaska Natives and Hispanic Americans. C. Valencia, F. Gachupin, C. Hsu, Juan Chipollini, Benjamin R. Lee, Ken Batai – Presentation described neighborhood characteristics based on census data. Rural/urban residence patterns partly explained diagnosis with advanced stage kidney cancer, but American Indians had an increased risk of mortality even after accounting for neighborhood characteristics.

Thesis Thursday with Shanoa Nez



Thesis Thursday is a regular program on Tucson's KXCI radio station. It features University of Arizona students, who share their research through an interview format. In June, Shanoa Nez was invited to speak on the program. She gave an account of her NACP research and how it has been impacted by the COVID pandemic.

Shanoa is from Rapid City, South Dakota, and the eldest of two siblings. She is a senior in the University of Arizona's Honors College. Her major is Molecular & Cellular Biology and her minor is in Public Health. She serves as the secretary for the University of Arizona's American Indian and Indigenous Health Alliance Club, which promotes health careers for American Indian students. Shanoa is also a student mentor for the Arizona, Science, Engineering, and Math Scholars' program.



Thesis Thursday with Shanoa Nez Cont.

For the past three years, Shanoa has been a student research assistant with Dr. Robin Harris and the *Helicobacter pylori* (*H. pylori*) group. During the Thesis Thursday program, Shanoa explains that *H. pylori* is a type of bacteria that's found in a live host. About 50% of the world's population is infected with *H. pylori* without knowing it. You can catch *H. pylori* from contaminated water. Most people don't have any symptoms of being infected, unless there are other health issues. The treatment to remove this potentially harmful bacteria is an intensive round of antibiotics. Some cases of *H. pylori* have become antibiotic-resistant. Shanoa's project was examining antibiotic-resistance among patients with *H. pylori*.

In the interview, Shanoa goes on to explain how the COVID pandemic has affected her research. "Sadly, with COVID happening, our project has been put on hold. Right now, the Navajo Nation has the highest rates of COVID." Shanoa ended the session with, "I have amazing mentors and I feel like that has definitely not only motivated me, but it has also inspired me. I definitely hope that I can continue to do the work that I'm doing so far and help my community."

Thank You Dr. Reid and Dr. Drinkwater

NACP would like to extend its appreciation to two members who have retired from our Program Steering Committee: Raymond Reid and Norman Drinkwater. As we described in the May issue of *NACP Insights*, this committee plays a very important role by evaluating our progress and recommending improvement based on the objectives and priorities of the Partnership.

Raymond Reid, MD, MPH, a Senior Research Associate from John Hopkins School of Public Health, has served on the Program Steering Committee since the start of NACP in 2003. His extensive experience in clinical trials, specifically with vaccines and prevention of infectious diseases in Native American peoples, has been invaluable in evaluating NACP research projects. Dr. Reid has advised the Partnership in issues regarding work in Native American communities and guided multiple NACP submissions to the Navajo Nation Human Research Review Board on which he served on for numerous years.

Norman Drinkwater, PhD, retired Interim Vice Chancellor Research and Graduate Education, University of Wisconsin-Madison, has served on the Program Steering Committee since 2008. Dr. Drinkwater's research experience in the identification of genetic modifiers of cancer risk and his broad experience in training students throughout his career greatly contributed to his ability to evaluate the activities of NACP. Dr. Drinkwater also served as the Program Steering Committee chair prior to his retirement.

Contact Information and Websites

Jani Ingram, PI at NAU
Jani.ingram@nau.edu
(928) 523-7877

Margaret Briehl, PI at UACC
mmbriehl@pathology.arizona.edu
(520) 626-6827

Maria Jackson, Program Manager at NAU
Maria.jackson@nau.edu
(928) 523-8383

Maria Prevatt, Research Administrator at UACC
mprevatt@uacc.arizona.edu
(520) 626-6979

NAU: <https://in.nau.edu/nacp/#>

UA: <https://cancercenter.arizona.edu/researchers/collaborative-research/nacp>