



Strong Heart Study Newsletter

Investigating Cardiovascular Disease in American Indians
Updates for Community Members and Strong Heart Study Participants

Volume 32, Issue 1 Summer 2022

THANK YOU FROM THE STRONG HEART STUDY (SHS) TEAM AND UPDATES OF PHASE 7

Dear participants,

For over three decades, you have contributed to the understanding of the burden, prevention, and treatment of cardio-metabolic diseases, such as heart diseases, stroke, and Type 2 diabetes in American Indian communities. **The entire SHS research team thank you for your dedication and selfless efforts in improving heart and general health for generations to come.**

You continue to support this study with remarkable resilience amid the COVID19 pandemic. **Without you, it is not possible to understand how COVID19 impacts Native community members physically and mentally, especially the impact to their blood vessel and lung systems.**

In this newsletter, you may find some of the following topics of the **ongoing research activities** interesting.

- 1) Funded pilot (**STAR**) projects led by SHS community members.
- 2) Newly funded research projects to study the association between cardio-metabolic diseases and gut microorganisms (such as fungi, bacteria and viruses) and individual resilience.
- 3) Native investigators who will participate the 50th Annual Conference of the Association of American Indian Physicians.



COMMUNITY MEMBERS' RESEARCH PROJECTS IN THEIR OWN WORDS

ARIZONA **STAR** GRANTEE:

MARIA NAVARO, DBH, LPC

Dr. Maria Navaro grew up in Hermosillo Sonora, Mexico as part of a Yaqui family (maternal side) and lived for several years in Vicam, one of the main Yaqui population centers. After moving to the US for her education, Maria eventually earned her doctorate in Behavioral Health from Arizona State University. Her STAR project, titled "**Anxiety, Weight and Cardiovascular Health in American Indian Women**" is based on her experience as a trauma counselor. She recognized that native women suffer disproportionately from trauma based weight gain. Her study will test an intervention called Storyplay, a program founded on the

principles of Milton H. Erickson and Indigenous teachings, with the power and spirit of therapeutic storytelling and creativity at its center. She is certified in Storyplay and a facilitator for Internal Family Systems (ISF).

Dr. Navaro will report her findings from this study to the Strong Heart Study communities upon the conclusion of this one year program.



The Wichita Walking Club

My name is **Terry Tartsah Jr.** and I work in the **Health Department of the Wichita and Affiliated Tribes of Oklahoma**. I have been employed with the tribe going on 5 years. My career began as a Fitness technician and then Fitness and Tobacco Coordinator. My current job title is the Community Health Aide Program Coordinator. I have an associate's degree in Sports Management/ Administration from Cowley College.

The title of my Strongheart Tribal Approach to Research (STAR) Project is "**The Wichita Walking Club**". The goal of this project is to promote a healthy lifestyle among our community members by encouraging them to be physically active and to participate in project-sponsored walking events.

We will track participants' progress by measuring body mass index (BMI) and blood pressure at the beginning of the program and every 3 months thereafter for up to 9 months.

We hope to see a substantial improvement in these health indicators by the end of our program

If you are interested in participating in this program, please contact me at 405.247.2425 x 161 or email me at terry.tartsah@wichitatribe.com.

In addition to paying for participants' registration fees for the walking events, participants will also receive other incentive, including t-shirts, pedometers, water bottles, and sweat towels. The Wichita and Affiliated Tribes would like to thank everyone who was involved to make this possible.



Investigators Participate the 50th Annual Conference of the Association of American Indian Physicians Jason F. Deen M.D.

Oki relatives! Summer is upon us, and for many in our communities it is a time for harvest, ceremony and connectiveness.

For American Indian and Alaska Native health professionals, summer is also a time to share information about lessons learned over the year, rekindle relationships, and foster new opportunities for collaboration in professional practice. After a 3 year gap due to the COVID-19 pandemic, the **Association of American Indian Physicians' 50th annual meeting has been held in person in Washington DC.**



Two Strong Heart Study Investigators (Dr. Dorothy Rhoades and myself) are among the presenters for this year's conference. Dr. Rhoades presented a talk with Ms. Keri Harjo entitled, "Development of Financial Hardship Screening among Native American Patients with Cancer." I presented a talk entitled "*Cardiovascular Risk Factors and Subclinical Cardiovascular Disease in American Indian Youth*".

None of this would be possible without our Strong Heart Study communities—you all remain the best teachers for our Native doctors! Nitsiniyi'taki!

Left: Dr. Deen at the Blanket Ceremony for Native School of Medicine graduates, the University of Washington School of Medicine.

Resilience and Brain health : An interview with Dr. Astrid Suchy– Dicey



Why would you conduct this study?

The Strong Heart Study has shown that chronic stress is linked to cardiovascular health and mortality. Recent research is showing a connection between stress and risk of dementia, as well. However, psychological

resilience – the ability to bounce back and maintain a healthy outlook despite stressful conditions – may provide a positive influence against these effects.

What do you want to accomplish?

We aim to collect new data on: resilience, including personal perspective, factors that contribute to resilience, and cognitive and functional status. We will use these new data to evaluate positive features in relation to risk of

dementia. Our ultimate goal is to identify targets for healthy aging and dementia prevention.

How is this study different?

Our study will be the first to examine many of these features in American Indians, but is also unique in its focus on positive aspects of aging. We believe that health can be improved by increasing resilience.

How will you conduct this study?

We are partnering with the Strong Heart Study Phase 7 examinations to conduct these data collections.



Who is funding this study?

The National Institutes of Health have funded this study through the National Institute on Aging, as part of an initiative to increase research on behavioral and social factors related to health. <https://oppnet.nih.gov/>

Preventing Diabetes in Tribal Communities: A Local Approach



My name is **Amber Karty**. I am a Comanche Nation tribal member and Kiowa descent from Oklahoma. I am a certified personal trainer (by the National Academy of Sports

Medicine) and certified Association of Diabetes Care & Education Specialist Lifestyle Coach.

I worked at the Lawton Indian Hospital Diabetes Program as a Health Fitness Tech with patients of all ages. I started my own training business in 2021, Karty Fitness and Performance. Many thanks to the Strong Heart Study for the opportunity of conducting my own research study.

The goal of the study is to prevent diabetes in the tribal communities located the in southwest Oklahoma. I will provide participants with exercise

and nutritional plans and aim to improve their hemoglobin A1c (HbA1c) and reduce weight.

To monitor progress of my study participants, HbA1c and weight will be measured at the start of the study and then at 3 and 6 months.

Compensation will be provided at study visits, in addition to receiving a Fitbit Inspire 2 health and fitness tracker at program completion.

To participate in this program, please use the following methods to contact me: Phone: 580.678.3304 ;

Email kartyfitnessperformance@gmail.com

Social media platforms @kartyfitnessandperformance



Gut Micro-organisms and Heart Health



The human gut is home to trillions of bacteria, viruses, and fungi. A collection of all these microbes in the gut is called gut microbiota. Some of the bacteria in our gut are good; they can help us digest foods, generate energy, and maintain a strong immune system so we can fight against diseases. However, some bacteria harm our health; **an unbalanced gut microbiota can increase a person's chances of obesity, diabetes, hypertension, heart disease, colon cancer, and other chronic illnesses.** Knowing which good and harmful bacteria live in our gut is essential so that we can change dietary habits to increase the number of good bacteria.

This study was **funded by the National Institute of Health.** Dr. Jinying Zhao from the University of Florida is leading the study, which aims to examine stool samples, create a profile of all the bacteria in each sample, and identify which groups of bacteria in unbalanced quantities are linked with aging and cardiometabolic diseases. Working with the Strong Heart Study team, Dr. Zhao will eventually create nutrition and diet plans that maximize healthy gut bacteria. These nutritional interventions will be customized for the Native communities.

If you would like to participate, please contact Dr. Jinying Zhao at jzhao66@ufl.edu or her research coordinator, Ms. Cameron Qiao at cameronqiao@ufl.edu or call (352)294-5952.



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