#### February 2021

#### 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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# NACP INSIGHTS



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!**

We would like to open this month's newsletter by thanking Dr. Emmanuel Taylor for his commitment and wise guidance of our partnership. Dr. Taylor has been our Program Director since the Fall of 2018. He will be retiring at the end of the month.

Dr. Taylor, we wish you the very best in your next ventures. With our deep gratitude,



## Dr. Varadaraj's Group's Breast Cancer Publication



Archana Varadaraj PhD

Our lab studies the function of a protein called fibronectin, which is found in breast cancer. Fibronectin exists as individual protein units that selfassemble to form a protein meshwork, however the role of these different forms in breast cancer is not known. Most breast cancers originate from glandular units of the breast tissue called acini. A normal acinus is a hollow duct or lumen surrounded by a single layer of cells primarily functioning for milk production. During breast cancer, the hollowing of the lumen is lost, resulting in a mass of tumor cells that fail to maintain the organization of a normal acinar structure. Several prior studies have shown that cancer causing genes convert a normal acinus to a lumen-

lacking tumor. In our recent publication in the *Journal of Cellular Biochemistry*, https:// doi.org/10.1002/jcb.29885, we show for the first time that the breakdown of assembled fibronectin meshwork to their individual protein units is sufficient to create a tumor from a normal acinus. This study expands our understanding of the disease mechanisms that initiate and drive breast cancer, and sheds light on fibronectin protein assembly as a critical contributor to preventing cancer. Carina Magdaleno, who recently completed her Master's degree at NAU and Trenton House, is a post-bac student from NAU who shares the first authorship in this publication.

## Welcome Ron Speakman: NAU-UA CAB



Ron Speakman

Ronald (Ron) Speakman is a Registered Nurse living in Tucson, Arizona. He received his Nursing degree from the University of Arizona and has worked in the Indian Health Services (IHS) on the Tohono O'odham Nation for more than twenty years. As a key member of health management teams, Ron has helped redesign health care systems to enhance care and client satisfaction. He has received numerous awards for efforts, including the IHS Director's Award for Excellence and Tucson Area Director's Exceptional Performance Award.

## Welcome Nathan Esquerra: Internal Advisory Committee

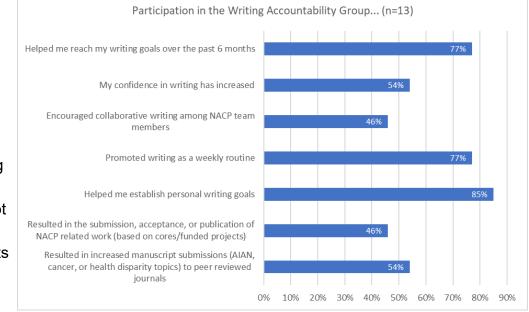


Nathan Esquerra

Nathan Levi Esquerra, a member of the Chemehuevi Indian Tribe, currently works as the senior vice president for Native American advancement and tribal engagement at the University of Arizona. Mr. Esquerra's extensive knowledge of economic development and Native American tribal relations aids in his quest to advance social and economic development for Arizona tribes. He is a firstgeneration college graduate and serves as a board member on the Arizona Rural Development Council. He most recently worked for Northern Arizona University as the director of the Center for American Indian Economic Development. Mr. Esquerra has also served as a tribal chairman for the California Chemehuevi Indian Tribe.

## Writing Accountability Group

The Writing Accountability Group is a resource that NACP Administrative Core initiated to provide a structured time and place for NACP members to exclusively focus on writing to increase NACP publications. The initial pilot lasted six months (May-Oct. 2020), the results can be found here:



## Congratulations Dr. Heather J. Williamson



Dr. Heather J. Williamson has received the designation of Fellow of the American Association on Intellectual and Developmental Disabilities (AAIDD). This distinction is a high honor and is presented after review and consideration by a committee of leaders in the Association. Individuals may be nominated for Fellow after they have had at least seven years of continuous membership in AAIDD, participation in the professional and business affairs of the Association, and are judged to have made a meritorious contribution to the field of intellectual disability. Dr. Williamson is an Assistant Professor at Northern Arizona University in the Department of Occupational Therapy and the Center for Health Equity Research.

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