

YES! Newsletter

Youth Enjoy Science

January 2025 Newsletter Volume 12

University of Nebraska Medical
Center, Munroe-Meyer Institute,
Eppley Institute and College of
Public Health

University of Nebraska-Omaha,
College of Arts and Sciences

University of Arizona, College of
Medicine and Mel and Enid
Zuckerman College of Public
Health

Cancer Education Resources

The YES program offers
cancer curriculum resources,
including e-learning modules,
cancer vocabulary tools and
comic books.

Access these at:

<https://www.unmc.edu/eppley/outreach/cancer-education-resources.html>

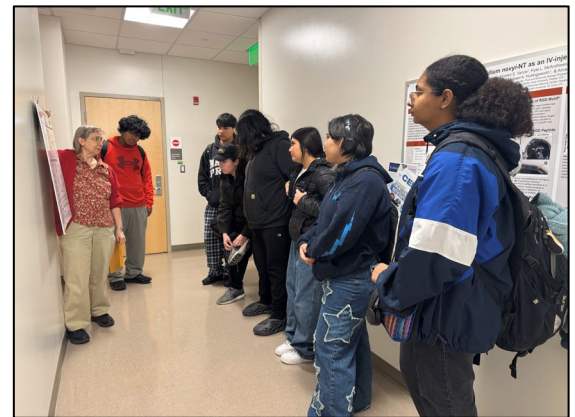
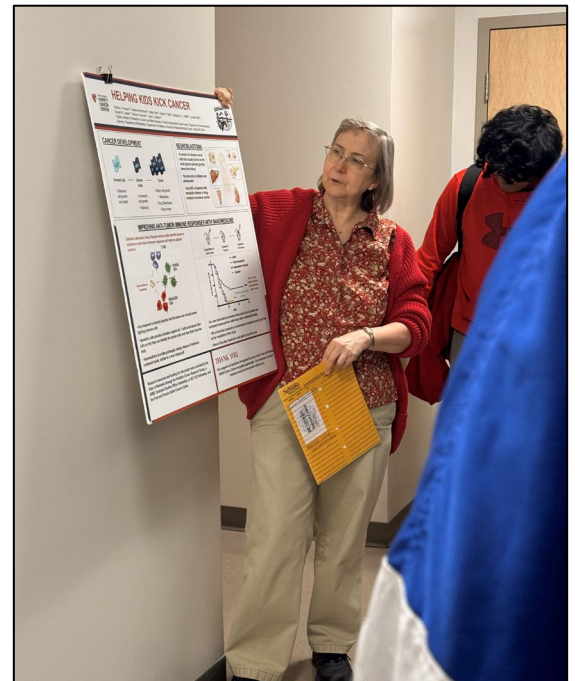
Newsletter Committee:

Genesis Saul-Hooper
Regina Idoate
Joyce Solheim
Misty Pocwierz-Gaines
Aislinn Rookwood
Maurice Godfrey

STEAHM Club Visits UNMC Buffett Cancer Center

In December, 14 members of the Science, Technology, Engineering, Arts, Humanities, and Math (STEAHM) Club gathered on the UNMC campus to take a tour of the Buffet Cancer Center with Dr. Joyce Solheim and viewed the Honoring Our Personal Experiences: Urban American Indian Cancer Stories (HOPE) digital stories produced by former YES and current UNMC MPH student, Mariah Abney.

Students were able to explore what working in cancer research looks like and see what various art media that they can use for their project which will be exhibited Fall 2025.



American Indian Cancer Foundation (AICAF) Sacred Circle: A New Tool to Create Community of Support for Cancer Survivors and Their Caretakers

AICAF recently launched Sacred Circle, a new tool that provides:

- Tools for organizing tasks and care plans
- A space for sharing updates and encouragement
- A culturally sensitive approach to community support

Who Uses AICAF Sacred Circle?



Caregivers

You need help organizing care for a loved one or family member.



Friends & Family

You know someone caring for others and want to help.



Volunteers

You want to help people in your neighborhood.



Survivors

You've been diagnosed with cancer and are on your journey to healing and support.

**ARE YOU AN
INDIGENOUS
CANCER
SURVIVOR,
CAREGIVER,
FAMILY MEMBER,
OR FRIEND?**



If you or someone in your community is interested in learning more about AICAF Sacred Circle, get started by creating a community through this link or scan the QR code to learn more from the AICAF Sacred Circle website:
<https://aicafsacredcircle.com/>



YES! Outstanding Research & Creative Activity Award Winner – Cooper Baines

On the behalf of the Youth Enjoy Science Program, we would love to present the winner of the YES! Outstanding Research and Creative Activity Award to Arizona State University Senior, Cooper Baines. Cooper Baines is a proud Member of the L'ingit and Ts'msyen nations from Southeast Alaska. He was adopted into the wolf clan by the late Frank Haldane and gifted the name Suwiliinsk.



Cooper Baines started his bachelor's degree in Biological Sciences at the Arizona State University in 2021. To begin his journey as a researcher, Cooper started working as a chemical engineering researcher in the Nielsen Lab during his sophomore year. In the lab, he conducted protein engineering tests to improve cyanobacterial bicarbonate transporter functionality. His time at this lab also allowed him to perform plasmid and strain construction, PCR reaction, electrophoresis, Gibson Assembly, nanodrop spectroscopy and bacterial transformation in *E. coli*. After fulfilling his research internship with the Nielsen Lab, Cooper has been able to join the Hasting's Lab through the YES Research Intern Program. His work, which focuses on skin expression data, was recently showcased at the national conference for the Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS). Working in the Hasting's lab, Cooper has been able to analyze, manipulate, and visualize RNA-sequences using R. He also led an independent research project using GTEx skin expression data collaborating with Dr. Hasting and senior researchers to search for patterns between sex, age, and sun exposure. Along with lab experience, Cooper has worked for Borealis Life LLC, an OB/GYN practice, as a medical scribe during his summers in Alaska. At the practice, he would document patient-provider interactions and manage health records. Along with scribing, Baines would assist in clinical procedures and maximizing patient comfort during visits. Beyond academics and work, Cooper stays connected to his roots as a member of the Lequinm Gumilgit Gagoadim (Our Own Dance in Our Hearts) Tsimshian dance group in Anchorage, Alaska. Cooper also enjoys spending time volunteering at the Native Health Phoenix Food Bank. Cooper also stays active by playing rugby for the ASU Men's Rugby Club and serves as their treasurer within their leadership team. After graduation in Spring, Cooper plans to apply for medical school in hopes of becoming a health care provider for rural and Native American communities.

Team Spotlight: Tiffany Hegdahl – Graduate Research Assistant, Animal Science Department



Tiffany R. Hegdahl, M.S., is currently in the first year of her doctoral program at the University of Nebraska at Lincoln in animal science. In 2020, she obtained a B.S. in biology from the University of Nebraska at Omaha. She stayed at UNO to obtain a M.S. in 2022, characterizing the genetic basis for melanism in the local squirrel populations. From 2022 to 2024, she has served as the research technologist for the Robbins Lab at UNO, where she assists in research projects that range from microbiomics to epigenetics to physiological ecology to evolutionary biology. Ms. Hegdahl also managed the UNO genomics core from 2023 – 2024. Ms. Hegdahl served as a research mentor to YES Cancer research interns in the Robbins Lab where she has facilitated opportunities for interns to work on collaborative and independent research projects, including research with lizards that involves DNA extraction, data analysis and other lab techniques to explore thermal adaptation. She also taught lab techniques (e.g., pipetting) to YES participants in the 2024 SHPEP WISH summer camp. In her Ph.D. studies, her research focuses on the genetics and genomics of draught horse populations, as well as investigating the genetic basis for chronic progressive lymphedema, which affects some 85% of certain draught horse breeds. In her spare time, she loves to explore the natural beauty of Nebraska with her husband and son.

Current YES Research & Creative Activity

Presenting at the International Cancer Education Conference (ICEC) in Lexington, KY – September 24-27th

Dr. Maurice Godfrey, Dr. Aislinn Rookwood, Misty Pocwierz-Gaines, and Genesis Saul, traveled to Kentucky to deliver poster presentations on YES! activities, such as *uBEATS Online Cancer Education Modules*, *Increasing Community Readiness to Address Cancer in an Urban American Indian and Alaska Native Community in the Northern Plains* and *Evaluation of a Professional Development Program for Trainees and Faculty from Minoritized Groups at a National Cancer Institute (NCI) – Designated Cancer Center*. Other activities of the team included judging poster sessions and attending sessions with other YES! grantees. The poster, *Increasing Community Readiness to Address Cancer in an Urban American Indian and Alaska Native Community in the Northern Plains*, received 2nd place in the conference's Research Category.

AACR Conference On The Science Of Cancer Health Disparities In Racial/Ethnic Minorities And The Medically Underserved in Los Angeles, CA – September 21 – 24, 2024

Misty Pocwierz-Gaines attended the 17th Annual American Association for Cancer Research Conference (AACR) on The Science Of Cancer Health Disparities In Racial/Ethnic Minorities And The Medically Underserved, in Los Angeles where she promoted the YES! program. This conference is designed to advance the understanding of cancer disparities, bringing together experts from academia, industry, government, and the community to exchange ideas, share findings, and drive new research. This conference provided Misty with an opportunity to hear about amazing new programs being facilitated by the Fred & Pamela Buffett Cancer Center's (FPBCC) peer institutions to connect and serve racial/ethnic minority populations. Misty said that one of her favorite parts of this work is getting to speak with others that are truly passionate about improving cancer care and education. She came back from this meeting with many ideas on ways to improve our program. While at the meeting Misty spent some time speaking with officials from the National Cancer Institute that fund the YES! Program. Each of them was very excited about the success YES! Program and hopes to see the FPBCC build on this program to create stronger and sustainable pathway programs for Native Americans in Nebraska.

Promoting YES! at the Society for the Advancement of Chicanos/Hispanics and Native Americans in Science for their National Diversity in STEM Conference (NDiSTEM-SACNAS) – October 31- November 2, 2024, in Phoenix, AZ

In October 2024, Dr. Regina Idoate (UNMC-YES) and Dr. Karen Hastings (UA) plus research interns Lisa Williams and Cooper Baines presented at the National Diversity in STEM conference hosted by Society for Advancement of Chicanos/Hispanics & Native Americans in Science (SACNAS) in Phoenix, Arizona on Curing the Incurable: Finding the Achilles' Heel of Skin Cancer and to promote the Youth Enjoy Science Program to the students and faculty attending the event.

Also, at SACNAS, Dr. Regina Idoate worked with fellows in the Northwest Native American Research Center for Health (NW NARCH) Tribal Researchers' Cancer Control Fellowship Program's workshop, Writing Key Sections of a Manuscript: A Strategy for Success.

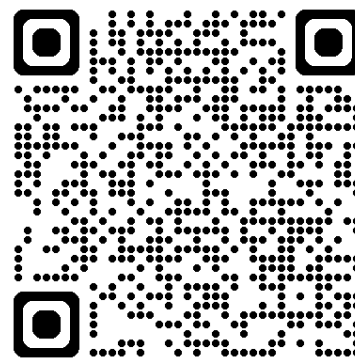
Dr. Idoate and the attending group were able to connect with other schools, 2,800 college students and listen to inspirational keynote speakers about diversity in STEM.



Cancer Digital Stories Encouragement and Honoring Ceremony – December 10th, 2024

On December 10th, YES! Partnered with past research intern, Mariah Abney through her organization, Promising Hope, and Bluebird Cultural Initiative to host an Encouragement and Honoring Ceremony for the cancer survivors who shared their stories through the SEPA- and YES-funded, *Honoring Our Personal Experiences (HOPE): Urban American Indian Cancer Stories* digital storytelling project. During the event, community members shared a meal, Mariah Abney and Steve Tamayo delivered keynote presentations, the stories were viewed, Bluebird Cultural Initiative's youth drum group performed the first ever composed Lakota Cancer Song by Israel Tamayo, and the survivors were honored with shawls made by Bluebird Cultural Initiative Executive Director, Nicole Tamayo.

The HOPE Digital Storytelling Series by Promising Hope Productions is a collection of powerful narratives from Urban Indigenous Individuals, sharing stories of resilience, healing, and cultural strength. This series shines a light on the lived experiences of individuals facing health challenges, such as cancer, while also exploring broader themes of overcoming adversity and drawing on cultural traditions for support and healing. Each story is told through a unique lens, combining personal narrative, Indigenous perspectives, and artistic expression to inspire hope and foster understanding. From personal testimonies and traditional songs to reflections on the power of community and culture, the HOPE series serves as a testament to the strength found in cultural heritage, community, and storytelling. Explore the series to discover a variety of perspectives, including songs of healing, stories of survival, and deep connections to ancestral wisdom through the QR code or hyperlink provided to the right.



<https://promisinghopeproductions.com/hope-honoring-our-personal-experiences/>

IRESEARCH Club Soil Sampling in Omaha, NE – December 2024



This year, Indigenous Research Education Science Experiences and Real Community Habitats (IRESEARCH) Club middle school students from the Bluebird Cultural Initiative's Youth Group and the Native Indigenous Centered Education (NICE) program's schools (Norris, Lewis and Clark, and Bryan) are learning about Heavy Metals and Metalloids (Arsenic, Chromium, Cadmium, Lead) that increase our risk of cancer in soils. In December, students completed composite soil core samples that they prepared for analysis at Midwest Laboratories here in Omaha. In coming meetings, students will be comparing their results across sites, learning about the Environmental Protection Agency's work with the City of Omaha, and planning a visit to a college campus for their final field trip.



AMERICAN INDIAN SCIENCE AND ENGINEERING SOCIETY

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Professional Networks
Awesome Mentors

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Conferences



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Annual College Guide

Contact AISES:

<https://www.aises.org/membership>

Omaha Student Advisor: Scot Ouellette
scot.ouellette@unmc.edu



Nebraska AISES Program Partners



Are you or someone you know interested in participating in a cancer research internship at the University of Nebraska Medical Center, University of Nebraska at Omaha, or University of Arizona?

Please see the below flyer with more information about this program and how to get involved.



Part-Time Online and In-person Internships for College and Advanced High School Students

Program Description

The Youth Enjoy Science (YES!) Research Internship allows students with Native American heritage to learn about cancer research. Participants' time will be dedicated to building knowledge and experience critical to all researchers working in community-based public health or lab-based research projects at the University of Nebraska Medical Center, University of Nebraska-Omaha or University of Arizona in relation to cancer prevention, treatment, and research. Participants can learn about ongoing research and opportunities in health careers, engage with community through health interventions, virtual meetings with scientists and public health practitioners and support existing studies through data collection, analysis and/or presentation.

Program Requirements

- Native American heritage
- Undergraduate or advanced high school student (≥16 years old)
- Interest in a health profession and/or research career

More information about the YES! Program can be found at <https://www.unmc.edu/eppley/education-outreach>



Commonly Asked Questions

What research experiences are available for students?

Students can participate in an online program in which they will learn the fundamental science behind several laboratory techniques or public health research methods through participation in various research projects. Students can meet virtually to talk with graduate students and/or faculty members to learn about current cancer lab or community-based research projects and career options. Research projects and experiences will be matched to each student individually and can be somewhat flexible to accommodate students' schedules and interests.

Is this a paid internship?

Yes, students will be compensated \$12/hour

Can this internship be used to satisfy college program requirements?

We will do our best to create experiences that fulfill college program requirements for internships, capstone projects, or service-learning.

For specific questions about this program, please e-mail us at yesgrant@unmc.edu.



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Upcoming Events

Global Health Conference Midwest

The Harper Center @ Creighton University, Omaha, NE
January 31st - February 1st, 2025

YES! Research Forum (Virtual)

University of Nebraska at Omaha, Omaha, NE
February 4th, 2025

Register here to attend via Zoom:

https://unmc.zoom.us/meeting/register/iyWqFJtsSi-0EQfJ_ze5NA

Nebraska Native Youth Gathering

East Campus Union, Lincoln, Nebraska
April 15th - 16th, 2025

NIH SciED 2025 Conference

Grand Hyatt Washington Hotel, Washington, DC
April 16th - 18th, 2025

SEPAYES! Advisory Board Meeting (Virtual)

Marriott Riverfront, South Sioux City, NE
April 25th, 2025

Announcements

YES! has started a new way to promote local events from our organizations and partners. Please scan QR to sign up for promotional opportunities and updates on community events.



Please reach out to gsaul@unmc.edu for any questions or concerns.

