Partnership for Native American Cancer Prevention

Margaret Briehl, PhD (UACC)
Jani C. Ingram, PhD (NAU)
Partnership for Native American Cancer Prevention

• Funded by National Cancer Institute since 2002
• Partnership between NAU and the University of Arizona Cancer Center
• Goal of Partnership is to alleviate the unequal burden of cancer among Native Americans of the Southwest
• Research, student training and community outreach
Community
A child and adult

National Cancer Institute
Prayer Feathers, symbols of blessing and curing

Two sets of handprints, a symbol of the ancient handprints upon the earth and the continue legacy of people

The University of Arizona
The Saguaro, native to Tucson and Sonora Desert

Northern Arizona University symbols of mountains and clouds

Four spiral representing the journeys and pursuits of all people in the four directions. The spiral begins with the community

Mountains

Sky and Clouds

Pottery inspired symbols representing the elements of the earth and our connection to it

Canyons and Rivers

Water
Specific Aims

• **Aim 1.** Build on the NACP’s positive Native American-focused research trajectory to conduct research that addresses Native American community priorities and cancer disparities (Planning and Evaluation Core).

• **Aim 2.** Leverage this NCI U54 grant with institutional support to recruit and support additional early stage Native American investigators focused on cancer research (Administrative Core).

• **Aim 3.** Expand on NACP’s successes in workforce development by implementing a new shared resource, providing services and enhanced mentoring to facilitate the transition of early stage investigators to research independence (Guiding U54 Investigator Development to Sustainability Shared Resource).

• **Aim 4.** Broaden the exemplary cancer research education activities for Native American students by providing new undergraduate curriculum in cancer disparities, enhanced undergraduate to graduate transitional opportunities, and mentored graduate and post graduate level experiential research opportunities including guidance in developing and submitting NCI CURE applications (Research Education Core).

• **Aim 5.** Continue building on the trust NACP has established with the Native American community partners by integrating community engagement principles into all NACP activities, providing more in-depth cultural competency training pertinent to the design and conduct of research, and facilitating the dissemination of the Partnership’s research findings and the National Outreach Network’s screening and education initiatives to Native American communities (Outreach Core).
The Partnership for Native American Cancer Prevention

NACP Leadership

University of Arizona Cancer Center

Contact/Lead: Margaret Briehl, PhD
(in the wings – Francine Gachupin, PhD, MPH)

Planning & Evaluation Core: Jeff Burgess, MD, MS, MPH

Research Education: Margaret Briehl, Ph.D.

Outreach: Francine Gachupin, PhD, MPH

GUIDeS: Ron Heimark, PhD

The Partnership for Native American Cancer Prevention

The University of Arizona Cancer Center
The Partnership for Native American Cancer Prevention

NACP Leadership

Contact/Lead: Jani C. Ingram, PhD
Planning & Evaluation Core: Jason Wilder, PhD
Research Education Core: Hendrik de Heer, PhD
Outreach Core: Nicky Teufel-Shone, PhD
GUIDeS: Jani C. Ingram, PhD
Challenges

- Distance
- Identifying cancer health disparity issues in tribal communities along with assembling NAU and UACC research teams to address the issues
- Encouraging Native American students to continue their career development in cancer research past baccalaureate degrees
- Attainment of approvals for tribal-based research projects including tribal communities, Indian Health Service, Institutional Review Boards (tribal and NAU/UACC)
Tribal Consultation and Approval Flowchart - NAU

1. Contact VP for Native American Initiatives
2. Proposed Activities with Native Americans (individuals and/or communities)
3. Contact NAU IRB
4. Identify Tribal Process
5. Human Subjects Research
6. Education
7. Tribal Consultation
8. Determined Not Human Subjects Research
9. Initiate NAU IRB Process
10. Human Subjects Research
11. IRB Exemption or Approval (Documentation to IRB)
12. Tribal Approval (Documentation to ONAI)
Example: Ingram Environmental Health Research on Navajo

- Meet with Navajo community members about their concerns and develop project (may be multiple communities)
- Meet with Chad Hamill (NAU) for tribal consultation
- Attend chapter meeting(s) to request being on their monthly agenda
- Attend monthly chapter meeting(s) to request approval of project– meetings in Navajo language (need translator)
- Attend agency meeting(s) to request approval of the project
- Attend IHS regional health board meetings to request approval
- Submit NAU IRB application and gain approval (online)
- Submit Navajo Nation Human Research Review Board (NNHRRB) application including all resolutions of support and NAU IRB approval letter and gain approval (in person meeting in Window Rock)
- Submit quarterly reports to NNHRRB and attend meetings at least yearly
- Research Impact – developing policy on water, soil, livestock contamination
Current Research Projects

Full Projects
- Helicobacter pylori and Stomach Cancer Among Native Americans in Northern Arizona
- Nitric Oxide in the Tumor Microenvironment of Triple Negative Breast Cancer

Pilot Projects
- Improving Shared Decision-Making about Cancer Screening Among American Indian Women Experiencing Intellectual Disabilities
- Viewing Native American cervical Cancer Disparities through Lens of the Vaginal
Outreach Core

• Received tribal approvals for 13 research projects since 2002

• Community Readiness Assessments (CRA) provided supportive data for Hopi Breast & Cervical CA Early Detection program funding and NACA’s ACS grant

• Outreach community grants return on investment = $250,000 in competitive extramural funding

• Collaboration with Navajo Nation President to bring mobile health units to the reservation

• New Outreach Core leader recruited at UACC with expertise in cancer health disparity research in underrepresented populations
Research Education Core Additional Funding = Sustainability

Training grants focused on underserved population:
- Bridges to Baccalaureate (Ingram)
- Native Americans Exploring Global Health Disparities (Propper)
- NAU Center for American Indian Resilience (CAIR): (Sanderson)
- Southwest Health Equity Research Collaborative: (Sterns & Baldwin)
- T32 Cancer Prevention and Control (CPC) Health Disparities Training Program (Alberts & Harris)
- Post Baccalaureate Research Education Program/PREP R25 grant (Briehl)

Curriculum & Programs
- Graduate Programs Primer
- One credit Individual Development Plan course
Research Education Core

- Improved student tracking: NACP trainees attained over 120 graduate degrees & 44 doctoral degrees
- The proportion of Native American trainees has doubled over time
- New interdisciplinary advanced degree programs at NAU and UA
Challenges & Solutions

- **Distance**
  - ✓ Utilize all means of communication but not neglecting face-to-face meetings

- **Identifying cancer health disparity issues in tribal communities along with assembling NAU and UACC research teams to address the issues**
  - ✓ Proactive approach of Development & Outreach Cores to build research teams

- **Encouraging Native American students to continue their career development in cancer research past baccalaureate degrees**
  - ✓ NIGMS PREP (UA), NIGMS RISE (NAU), GMaP 3 region activities, multi-level mentoring

- **Attainment of approvals for tribal-based research projects including tribal communities, Indian Health Service, Institutional Review Boards (tribal and NAU/UACC)**
  - ✓ Provide planning funds to navigate/attain approvals in first year of project