



# The Partnership News

**“Partners in Building Cancer-Free Communities”**

NORTHERN ARIZONA UNIVERSITY – NATIONAL CANCER INSTITUTE – ARIZONA CANCER CENTER

Volume 3, Issue 1

Spring 2006

## NACRP in the News

By Angelo J. Joaquin, Jr.

Two newspapers, the *Arizona Daily Sun* and *Tucson Citizen* recently featured front page articles on Partnership faculty and students. On May 5, in the Flagstaff paper’s article “NAU Team Finds

New Danger of Uranium”, NACRP Co-Principal Investigator Dr. Diane Stearns and student Hertha Woody (Navajo) discussed their research findings. They have discovered that uranium can damage mammalian DNA as a heavy metal.

According to the article by Annie Braun, “Stearns and her team are the first to show that when cells are exposed to uranium, the uranium binds to DNA and the cells acquire mutations. When uranium attaches to DNA, the genetic code in the cells of living organisms, it can change that code. As a result, the DNA can make the wrong protein or wrong amounts of protein, which affects how the cells grow. Some of the cells can grow to become cancer.” Their results were published in



Diane Stearns

*Mutagenesis* and *Molecular Carcinogenesis* and presented at the Society of Toxicology Conference.

While it has long been known that the radioactivity of uranium could damage DNA, the new findings will affect the way people think with regard to depleted uranium from which most of the highly radioactive isotopes of uranium are absent. Thought to be safer in this state, depleted uranium is used by the military in munitions and tank armor. People living in close proximity to uranium mine tailings may now have another reason for concern.

Hertha grew up in Shiprock, New Mexico where her family still resides.

Nearby, a 72-acre pile of uranium tailings was only recently buried under a cover of concrete and gravel. She related to the reporter how, as a child, she knew to stay away from the pile. As a researcher and a soon-to-be graduate of NAU, she now knows that may not be



Hertha Woody

enough to avoid health problems.

In the May 12 edition of the *Tucson Citizen*, Carol Goldtooth-Begay (Navajo) was one of several University of Arizona graduating students highlighted.

Her photo graced the newspaper’s lead article.

Carol cites, in the article, recent research that shows cancer is the third leading cause of death among Navajos. She points out, however, that little research and information is available to tribal members.

She earned her Masters in Public Health using the required internship to develop and conduct a project surveying hundreds of Navajo Nation employees on their knowledge, attitudes and beliefs about cancer. Carol, also an NACRP graduate research assistant, would like to use her findings in working with leaders and communities to devise ways around cultural barriers to education about cancer risk factors.



Carol Goldtooth-Begay

## Breast and Cervical Cancer Screening among Women on Hopi and Navajo Nations

By Robin Harris



Sally Joe, Robin Harris and Sylvia Brown discuss project at Mabel Street House.

Community-based participatory research means conducting research so that community leaders and members

are active partners during the conceptualization, implementation, and interpretation of the work. The NACRP has facilitated such research partnerships between tribes in Arizona, the Arizona Cancer Center and Northern Arizona University (NAU). Through these partnerships, we are developing a framework for provision of technical assistance to increase capacity for program evaluation, as well as provision of research strategies about accessing the knowledge, attitudes, beliefs, and behaviors (KABB) associated with appropriate cancer screening.

While increased cancer screening is considered a cornerstone for decreasing cancer mortality, much is unknown about how to increase screening rates among rural Native American women. The Women’s Health Programs of the Hopi Tribe and the Navajo Nation have both been operating Breast and Cervical Cancer Prevention (BCCP) programs for some time. However, both programs see a need to improve program evaluation and surveillance of cancer screening. Furthermore, they are seeking to determine factors that

(Continued on page 4)

## NAU/UA Student Close-up



Yá'át'ééh. My name is Cheryl Arviso and I am of the Black Streak Wood people clan and born for Red Towering House

clan. I am currently pursuing a Master of Arts degree in American Indian Studies at the University of Arizona and will graduate in May 2006. I graduated from Northern Arizona University in May 2003 with a Bachelor of Science degree in Applied Indigenous Studies and a Minor in Navajo Language. I am a graduate research assistant for NACRP.

I plan to continue working towards a Ph.D. degree for tribal environmental policy in Agriculture.

I have been with NACRP for two years. Prior to enrolling at UA, I worked with the Partnership at NAU. Dr. Nicolette Teufel-Shone is my supervisor and mentor. She has been an inspiration in my education and in my work with American Indian communities.

Currently, Dr. Teufel-Shone and I are working on an educational module for University investigators. NACRP and the University of Arizona American Indian Studies Program, with support from the University of Arizona Human Research Protection Program and the Office of the Vice President for Re-

search, have developed a module for investigators conducting research with Native Nations. The intent of this module is to provide some historical and social context to research in Indian Country. In addition, it will outline, for new and experienced researchers, the various steps necessary to gain approval and clearance to conduct research within sovereign Native Nations.

My long term goal is to work with American Indian communities. I think it is important for American Indians to preserve the integrity of culture, language and the land. Our Indian communities need to effectively manage their resources and build positive relationships with entities. Ahe'hee.

## Two Affiliated with NACRP Named to Komen's NANAC

The Susan G. Komen Breast Cancer Foundation announced on April 20 the creation of a fourth Minority Advisory Council. The Native American National Advisory Council (NANAC) joins the existing African American, Hispanic Latina and Asian American Pacific Islander advisory councils to address breast cancer disparities among their populations.

The eleven named to NANAC include Lydia Hubbard-Pourier (Navajo - Tohono O'odham) and Nellie Sandoval (Navajo). Both have been involved in NACRP



Lydia Hubbard-Pourier

activities and have contributed greatly to the success of the Partnership.

Lydia is a consultant working mainly with NACRP's project partners on the Navajo Nation. She has been invaluable in helping to build the organization's relationship with the Navajo Nation Human Research Review Board enabling research projects to take place on the reservation. Lydia has also assisted the Partnership in establishing and maintaining contact with health agencies on the Hopi and White Mountain Apache reservations.

Nellie teamed with Fran Robinson of the San Juan Medical Foundation to produce "Breast Cancer - The Healing Begins", a video in the Navajo language with English subtitles. This educational resource is designed to facili-

tate discussion between the Health Provider and the woman diagnosed with cancer. Nellie and Fran served as Project Consultant Co-Investigators for NACRP's evaluation of the video. A cancer survivor, Nellie works to convey the message of early detection and treatment options to her Navajo sisters.



Nellie Sandoval

NACRP heartily congratulates Lydia and Nellie on their appointments to the Komen Foundation's Native American National Advisory Council.

## NACRP Highlights

- DEC 2005—Priscilla Sanderson is the first Native American to receive a two-year R-25T Cancer Prevention and Control Training Program for Post-Doctoral Fellows at the Arizona Cancer Center where she is named a Research Associate.
- DEC 2005—Frances Robinson, Nellie Sandoval, Julie Baldwin and Priscilla Sanderson's article, *Breast Cancer Education for Native American Women: Creating Culturally Relevant Communications* is published in the *Clinical Journal of Oncology*. They receive the Gold Award in the Scholarly Journals Feature Article category for the Society of National Associations Publications Awards in competition with over 1,000 entries.
- JAN 2006—Nicky Teufel-Shone and Cheryl Arviso present an educational module for researchers working with Native Nations at the 4<sup>th</sup> Annual Hawaii International Conference on Arts and Humanities.
- MAY 2006—Priscilla Nez begins a Post-Bac summer internship with the Epidemiology and Genetics Research Program at the National Cancer Institute in Bethesda, MD.
- JUN 2006—Josh Lucio begins a summer internship at the USDA Human Nutrition Center of the Agricultural Research Service in Grand Forks, ND.
- JUN 2006—Carmella Kahn begins a summer internship at the National Institute of Environmental Health Sciences' Laboratory of Molecular Carcinogenesis in Research Triangle Park, NC.

## NACRP Faculty & Staff



**Suzie Martinez of NAU office.**

I have been with NACRP since summer 2002; first, as an Administrative Associate and, then, as the Business Manager. I have seen the Partnership grow and change over the past four years and, with great sadness, I am leaving to accept another administrative job on campus. Over the years, I have grown close to the NACRP students, faculty and staff, as well as our consultants and committee members. I want to thank all of you for your hard work on such a wonderful project. I will greatly miss all of you and hope to stay in contact with some of the friends I've made over the past few years. I especially want to thank Drs. Stearns and Canfield, who truly work tons of overtime for us and I look up to them so much. Of course, I also want to thank the wonderful administrative staff: Maria, Marilyn and Beth. I could not have asked for a better support group than these ladies and I will miss them greatly.

I started with Dr. Roger Van Andel when the project first came to NAU and I really didn't know what I was getting myself into. We were all trying to figure out how a "U54" worked. There had been nothing like this at NAU before and still nothing else like it to this day. Not that we have everything figured out, we now have a better understand-

ing of the relationships we've created, the cancer research we have brought to NAU, and how important the collaborations are with U of A and the various tribes. We've learned that working together is how we accomplish lofty goals and that, in a way, we are one big family. Thank you again for being such a huge part of my life and for working so hard for something we all believe in!



**Beth Cloud of UA office.**

Hello! My name is Beth Cloud. I received my Bachelor of Science degree in Molecular Cellular Biology from the University of Arizona in 2003. I joined NACRP two years ago as an Administrative Assistant for Louise Canfield, although most of you know me as the front office person in Tucson.

I have had a wonderful time getting to know all of the people associated with NACRP. During my time here, I have assisted with designing the website, arranging for some of you to visit Tucson, and setting up multiple Partnership meetings including the Education Conference in 2004, two Retreats and two Program Steering Committee (PSC) meetings. I have also had the pleasure of getting to know the students in Tucson, discussing course loads, current classes and plans for the future.

I feel NACRP is doing very valuable work and have been honored to be a part of it. I am saddened to say that I will be leaving NACRP at the end of May but also excited as I have been accepted into the Accelerated Nursing Program at the University of Arizona. I have truly enjoyed working with the diverse, knowledgeable, dedicated family that is NACRP and will take the lessons I have learned with me into my new career. I look forward to hearing many great things about this program in the future and will miss all of you.



**Dr. Canfield, Maria, Marilyn, Suzie, Beth and Angelo at UA employee awards ceremony.**

The NACRP Administrative Team—Maria Mitchell, Marilyn Guengerich, Suzie Martinez, Beth Cloud and Angelo Joaquin, Jr.—was nominated for the Team Award for Excellence. The Employee Recognition Reception took place at the University of Arizona's Student Memorial Center on April 13. While not capturing the award, the team walked away with key chains, certificates and the satisfaction for a job well done over the two years of the team's existence. Thank you, Dr. Canfield and NACRP, for the honor.

*Ed.—We'll greatly miss Suzie and Beth's expertise, smiles and laughter. We wish them Good Fortune in their future endeavors!*

## Congratulations, Graduates!



**Racheal, Miranda, Carol and Cheryl at Mabel Street House graduation celebration.**

On May 12, NACRP staff, faculty and students gathered to honor four graduates of the University of Arizona: Racheal James, BS in Microbiology; Miranda Joe, BA in Sociology; Carol Goldtooth-Begay, MS in Public Health; and, Cheryl Arivso, MA in American Indian Studies. All are members of the Navajo Nation.

Graduating NAU students working in labs run by NACRP's Drs. Diane

Sterns, Jani Ingram, Allison Adams and Matthew Gage are Hertha Woody (Navajo), BS in Biological Sciences; Alex Lencinas, BS in Chemistry; Sam Salinas, MS in Chemistry; Jason Tidwell, BS in Biological Sciences; Ellie Heintze, BS in Chemistry; and, Sarsati Gurung, BS in Chemistry.

Congratulations to all our graduates. We're proud of you. Good Luck and, please, stay in touch!

## Breast and Cervical Cancer Screening (cont'd.)

will help them enhance cancer screening within their rural communities.

Both of these BCCP programs approached the NACRP for assistance and together we have developed a series of projects to determine the effectiveness of existing breast and cervical cancer screening programs to reach eligible Native American women, to determine barriers and incentives to receive timely cancer screening, and to provide a more complete picture of the occurrence of breast and cervical cancer among Hopi and Navajo women.

Multiple projects are being conducted under this umbrella of research and program evaluation. One project focuses on using archival data (or, data already being maintained and collected by the BCCP Programs but not readily used) to address specific questions such as: Who are being screened by the Hopi and Navajo Breast and Cervical Cancer Programs? Are they being reached in a timely manner? Data analysis reports will be available for review by the tribes in summer of 2006.

The other set of projects focuses on collecting new information about the current knowledge, attitudes, beliefs

and behaviors among Navajo and Hopi women about cancer, cancer screening, and cancer treatment, with specific emphasis on breast and cervical cancer. Each tribal program has identified a distinct but complementary strategy to determine the needed information and each is working with NACRP faculty and students. The Hopi BCCP program is conducting a survey among 250 randomly selected Hopi women living in various Hopi communities and villages. A pilot study among 25 women is underway, with the formal study to begin July 1.

The Navajo BCCP program is using an alternate approach and one that builds upon recent work conducted by the BCCP staff and a graduate student from the University of Arizona. The Navajo study will focus specifically on women who have never been screened for breast cancer or women who have been screened once, but then never returned within the next five years. The goal of this study is to better understand the barriers facing women so as to develop more appropriate strategies for increasing their attendance. This study will begin also on July 1.

This multifaceted research complex is directed toward understanding the facilitating factors and barriers to cancer screening among historically underserved populations. Given that the tribes initiated the original request to the Native American Cancer Research Partnership for assistance, this project represents an exceptional opportunity to incorporate the philosophy and methods of community-based participatory cancer research into an understanding of the personal, social, cultural and environmental factors associated with the use or non-use of cancer screening by American Indian women.

Project partners include Lorencita Martin, Director, Hopi Women's Health Program at Kykotsmovi, AZ; and, Sally Joe, Program Director, Navajo Nation Breast and Cervical Cancer Prevention Program at Window Rock, AZ.

Joining them are Lydia Hubbard-Pourier, M.P.H. (NACRP Consultant); Charlotte Goodluck, Ph.D. (NAU); Robin B. Harris, Ph.D., M.P.H., Kathryn Coe, Ph.D., Sylvia Brown, M.S., Ph.D., Louise Canfield, Ph.D., and Tomas Nuno, Epidemiology Ph.D. student (all from the Arizona Cancer Center).

### MISSION STATEMENT

*The Native American Cancer Research Partnership (NACRP) is a multicomponent, multidisciplinary project dedicated to alleviating the unequal burden of cancer among Native Americans through the development of Native American cancer researchers and clinical oncology health care professionals. NACRP is sponsored by a grant from the Comprehensive Minority Biomedical Branch of the National Cancer Institute.*

### Contact Information

We invite you to contact us for more information about the Native American Cancer Research Partnership. Our offices are located on the campuses of Northern Arizona University and the University of Arizona. Our website will provide you with additional information regarding the Partnership.

[www.nativecancer.org](http://www.nativecancer.org)



**Louise Canfield**  
**Co-Principal Investigator**  
1527 East Mabel Street  
PO Box 210457  
Tucson, AZ 85721-0457  
Phone: 520-626-0260  
Fax: 520-626-0265



**Diane Stearns**  
**Co-Principal Investigator**  
PO Box 5659  
Flagstaff, AZ 86011  
Phone: 928-523-8383  
Fax: 928-523-7317