Why It's Cool to be "Green" & Native TEP Internship Program

Sandra Begay-Campbell
Principal Member of the Technical Staff



College Student Internship Program

DOE's Tribal Energy Program offers student internships at Sandia National Laboratories since 2003.

Eligibility: Current college upper-classmen and graduate students, who are familiar with Native American culture and tribal issues, support the Tribal Energy Program efforts with technical project tasks

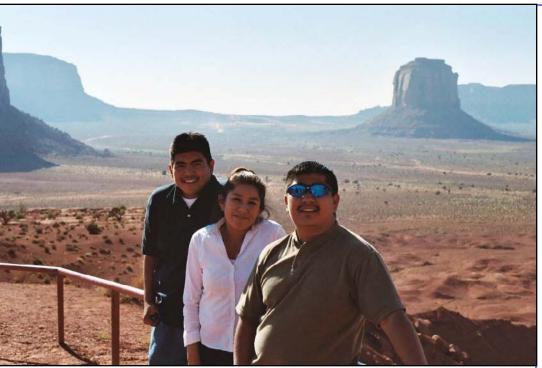
- Assist a cross-disciplinary team to perform specific tasks at Sandia National Laboratories.
- Interact with Sandia's renewable energy staff, Native American tribes interested in renewable systems and Sandia's American Indian Outreach Committee.
- Immerse in activities to work directly with experienced and internationally recognized peers
- Visit current renewable energy projects

Required: As authorized by the TEP, the student applicant must

- be a US Citizen
- be a Native American as defined as
 - a member of a recognized Federally-recognized Tribe, Alaska Village or Alaska Corporation
 - not state-recognized, not bands or groups, or first peoples of Guam or Hawaii
- Be specifically interested in renewable energy



2003 DOE Office of Science Interns



Pictured left to right at Navajo - Monument Valley: Keith Candelaria, Velissa Sandoval & Shawn Tsabetsave.

Keith Candelaria (San Felipe/Jemez),

BS - Environmental/Earth Science, Dartmouth College

His paper entitled, "Native American Renewable Energy Approaches: Navajo Tribal Utility Authority and NativeSun."

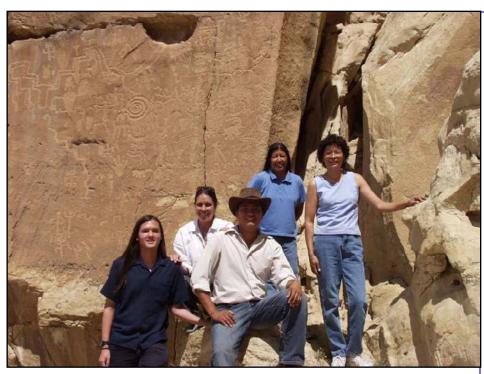
Velissa Sandoval (Navajo/Zuni), BS - Electrical Engineering Her paper entitled, "Women Champions in Solar Energy."

Shaun Tsabetsaye (Zuni) is a graduate student in electrical engineering, University of New Mexico, BS – Electrical Engineering.

His paper entitled, "Navajo Tribal Utility Authority: Electrification Demonstration Program - Developing a Sustainable Tribal and Rural Co-operative Solar Program".



2004 TEP/Sandia College Interns



Pictured left to right at Hopi Tribe Petroglyph: Benjamin Mar, Jennifer Coots, Colin Ben, Deborah Tewa, & Sandra Begay-Campbell.

Benjamin Mar (Cherokee), BS – Electrical Engineering, Worchester Polytechnic Institute His paper entitled "Navajo Tribal Utility Authority: Photovoltaic Hybrid Operation and Maintenance Process for a Sustainable Program"

Jennifer Coots (Navajo), MBA – Finance, University of New Mexico Her paper entitled "A Decade Of Changes To An Alternative Power Source For A Rural Utility."

Colin Ben (Navajo), MA – American Indian Studies, University of Arizona. His paper entitled

"Researching Renewable Energy Systems Available to Indian Country"

Deborah Tewa (Hopi), BS - Indigenous Studies, Northern Arizona University. Her research focused on DOE's Reliability Database for Off-grid PV systems.



2005 TEP/ Sandia College Interns



Pictured left to right at Hopi Old Oraibi Village: Tanya Martinez, Deborah Tewa, Sandra Begay-Campbell, and Jennifer Coots. **Tanya Martinez (Mi'KMaq)** Power Engineering graduate student, University of Massachusetts – Lowell, BS - Electrical Engineering.

Her paper "Remote Monitoring System Design - Sustainable Systems For The Navajo Tribal Utility Authority".

Deborah Tewa (Hopi) BS - Indigenous Studies, Northern Arizona University. Her paper "NativeSUN: A Model for Sustainable Solar Electric Systems on Indian Lands".

Jennifer Coots (Navajo) MBA - Finance, University of New Mexico.

Her research focused on the tribal housing mortgage finance for renewable energy systems.



2006 TEP/ Sandia College Interns



Terry Battiest (Choctaw)

MS – Telecommunications University of Colorado – Boulder

Jonathan Biron (Sault Ste. Marie Tribe of Chippewa)

BS – Biosystems Engineering Michigan State University

Lani Tsinnajinnie (Navajo/Filipino)

BS – Environmental Science University of New Mexico.

Pictured left to right at Navajo Nation - Monument Valley, UT:

Thom Sacco, Terry Battiest, Jonathan Biron, Sandra Begay-Campbell, Lani Tsinnajinnie & Debby Tewa



2007 TEP/ Sandia College Interns



Terry Battiest (Choctaw)

MS – Telecommunications University of Colorado – Boulder

Nick Johnson (Three Affiliated Tribes)

BS – Mechanical Engineering University of Colorado - Denver

Cherylin Wilson (Navajo)

BS – Biology Oklahoma Panhandle University AS - Environmental Science

Pictured left to right:
Debby Tewa, Thom Sacco
Cherylin Wilson, Nick Johnson & Terry Battiest



Immersion of future leaders into renewable energy



Sandia/TEP interns on Navajo Nation

Pictured left in the following order:

Gepetta Billie (Navajo)

MS – Regional & Community Planning, BA – Environmental Planning & Design University of New Mexico AS – Civil Engineering Technology, SIPI

Amanda Montoya (Taos, San Juan & Isleta)

MS – Regional & Community Planning, University of New Mexico

BA – Business Administration, NM State University

Carson Pete (Navajo)

MS – Mechanical Engineering, BS – Mechanical Engineering
Northern Arizona University

Suzanne Singer (Navajo)

PhD – Mechanical Engineering, MS – Mechanical Engineering
University of CA - Berkeley

BS - Mechanical Engineering, University of AZ

