
Intern Gathering at Southwest RE Conference, Flagstaff, AZ
Pictured: Suzanne Singer, Gepetta Billie, Sandra Begay-Campbell, Carson Pete, Terry Battiest, Prestene Garnenez

2002 - 2012

• 27 undergraduate & graduate interns have participated.
  • 16 different tribal affiliations
  • 12 different majors
• 26% of the interns were converted to year-round status (7 of 27)
• 11% of the interns were hired as FTEs or Sandia contractor (3 of 27)

Type of Work for Former Interns

- Tribal related work
  - Tribal Energy Consultant
  - Navajo Tribal Utility Authority
  - AZ RE Community College
  - RE Technical Company
  - Inst. Of American Indian Art
  - Udall Foundation
  - NM Council of Governments
  - Tribal Planner

- Non-tribal Engr/Science work
  - Sandia Nat’l Laboratories
  - Lawrence Livermore Nat’l Labs
  - DOE Golden Field Office
  - Lockheed Martin
  - INTEL
  - Kellogg

- Seeking Employment

Graduation Rate of All Interns

- Enrolled Students (9)
- Graduated (18)
Deborah Tewa (Hopi)
BS - Indigenous Studies, Northern Arizona University
Her research focused on tribal off-grid PV systems and tribal RE systems.

Pictured at Sandia’s PV Laboratory, NM:
Deborah Tewa (certified electrician & solar installer)

“While I had worked with photovoltaic systems for several years including my experience at NativeSUN, the internship complemented my prior work ‘in the trenches’ and has been a gratifying experience. “
“Native Americans believe that the sun, wind, and geothermal waters are all gifts from the Creator. As people use these resources today, they should always remember to give thanks for all that is provided.”
Benjamin Mar (Cherokee), BS – Electrical Engineering, Worcester 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, BA Finance
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 Solar Reliability Database for Off-grid PV systems.

“With our diverse backgrounds, we shared our perspectives as well as analyzed situations through different points of view whether cultural, technical or financial.”
Tanya Martinez (Mi’KMaq)  Power Engineering graduate student, University of Massachusetts – Lowell, BS - Electrical Engineering.
Her paper entitled “Remote Monitoring System Design - Sustainable Systems For The Navajo Tribal Utility Authority”.

Deborah Tewa (Hopi)  BS - Indigenous Studies, Northern Arizona University.
Her paper entitled “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.

“Tribal Nations do have unique cultures that must be considered for any government project and it increases the success of the project when that awareness is there.”
Terry Battiest (Choctaw)
MS – Telecommunications, University of Colorado – Boulder, BS - Industrial Engineering
His research focused on the Navajo Nation’s Internet-to-the-Hogan Project.

Jonathan Biron (Sault Ste. Marie Tribe of Chippewa)
BS – Biosystems Engineering, Michigan State University
His paper entitled, “Tribal Renewable Energy Integration: An Analysis of Current Tribal Infrastructure”

Lani Tsinnajinnie (Navajo/Filipino)
BS – Environmental Science & Native American Studies, University of New Mexico
Her paper entitled “Benefits of Renewable Energy for Native Nations from the Environmental and Native Perspectives”

“…it has given me insight to what I want to do professionally…”
“Since day one, I have felt like a valuable member of the team, which is important because not only am I learning a great deal, I also feel like I am contributing to the group.”
Pictured at Navajo Nation, AZ: Gepetta Billie, Amanda Benavidez, Carson Pete & Suzanne Singer

**Gepetta Billie (Navajo)**
MS – Regional & Community Planning; BA – Envr. Planning & Design, UNM, AS – Civil Engr Tech, SIPI

**Amanda Benavidez (Taos/San Juan/Isleta)**
MS – Regional & Community Planning, University of New Mexico; BA – Business Administration
Her paper entitled, "Renewable Energy and Energy Efficiency Initiatives on the Laguna Pueblo Reservation"

**Carson Pete (Navajo)**
MS – Mechanical Engineering; BS – Mechanical Engineering, Northern Arizona University
His paper entitled, "North Leupp Family Farms Project – Sustainable Agriculture Systems Using Photovoltaic Cells and Small Wind"

**Suzanne Singer (Navajo)**
PhD – Mechanical Engineering; MS – Mechanical Engineering, University of CA, Berkeley; BS – Mech. Engr

“This internship has allowed me to learn and see first hand what it means to plan and build sustainably on Native lands.”
Gepetta Billie (Navajo)
MS – Regional & Community Planning; BA – Environmental Planning & Design, University of New Mexico, AS – Civil Engineering Technology, SIPI
Her paper entitled, “Renewable Energy: Planning for Sustainability & Self-Determination for the Navajo Nation”

Prestene Garnenez (Navajo)
MA – Urban Planning, University of California – Los Angeles; BS – Biology, New Mexico State University

Suzanne Singer (Navajo)
PhD – Mechanical Engineering; MS – Mechanical Engineering, UC-Berkeley; BS – Mechanical Engineering, University of Arizona

“I think what I learned that is important in all the tribes we visited, is the importance of ‘ownership’ of the project. If you’re investing part of what you have - your time, money, energy, pride - into these projects, [then] the projects can be successful, long-lived and sustainable.”
Joni Fuenmayor (Navajo)
AAS – Energy Systems, Navajo Technical College, Crownpoint, NM
BA – Studio Art, Dartmouth College, Hanover, NH
Her paper entitled: “What’s in 880 Watts? An Exploration of the Basic Electrical Power Connections between a Residential PV System and an Appliance”

Gepetta Billie (Navajo)
MS – Community & Regional Planning, UNM; BA – Environmental Planning & Design, UNM; AAS – Civil Engineering Technology, SIPI

Prestene S. Garnenez (Navajo)
MA-Urban Planning, University of California, Los Angeles; BS-Biology and minor in Mathematics, New Mexico State University

Logan Slock (Hopi/Choctaw)
BA – Environmental Studies, Johnson State College, Johnson Vermont

“It was really nice when an elderly community member...told me he was ‘happy to see young Indians involved in these issues and getting their education.’
His comment gave me a sense of pride in what we are doing and it made me realize that we are making a difference.”
2011 TEP/Sandia Student Interns

Tammie Allen (Jicarilla Apache)
MS – Community & Regional Planning, UNM;
BA – Art, College of Santa Fe
Her paper entitled: "Using Renewable Energy For Economic
Development: Off-Grid Ecotourism on the Ramona Band of Cahuilla
Mission Indian Reservation"

Gepetta Billie (Navajo)
MS – Community & Regional Planning, UNM; BA – Environmental
Planning & Design, UNM; AAS – Civil Engineering Technology, SIPI
Her thesis entitled “Addressing Renewable Energy Development at
the Local Level by Learning How to Plan through Green Building: An
Example of Community-based Planning on the Navajo Reservation”

Chelsea Chee (Navajo)
MS – Community & Regional Planning and Public Administration,
UNM; BS – Environmental Planning & Design, U of AZ
Her paper entitled: “Energy Efficiency and Renewable Energy
Benefits Agua Caliente Band of Cahuilla Indians
via Implementation at Their Indian Canyons Trading Post”

Devin Dick (Navajo)
AAS – Energy Systems, Navajo Technical College,
His paper entitled: “Suggested Alternatives’ For Navajo Tribal Utility
Authority: Utilizing Excess Power Generated By Stored Hybrid
Units”

“One of the most useful and biggest learning aspects of our field visits are the people we
are introduced to and visit with outside of the meetings and conferences.”
I came to realize that renewable energy adoption is a learning process for everyone involved….Each tribe had its own motivations and perspectives with implementation as unique as the individual cultures themselves.