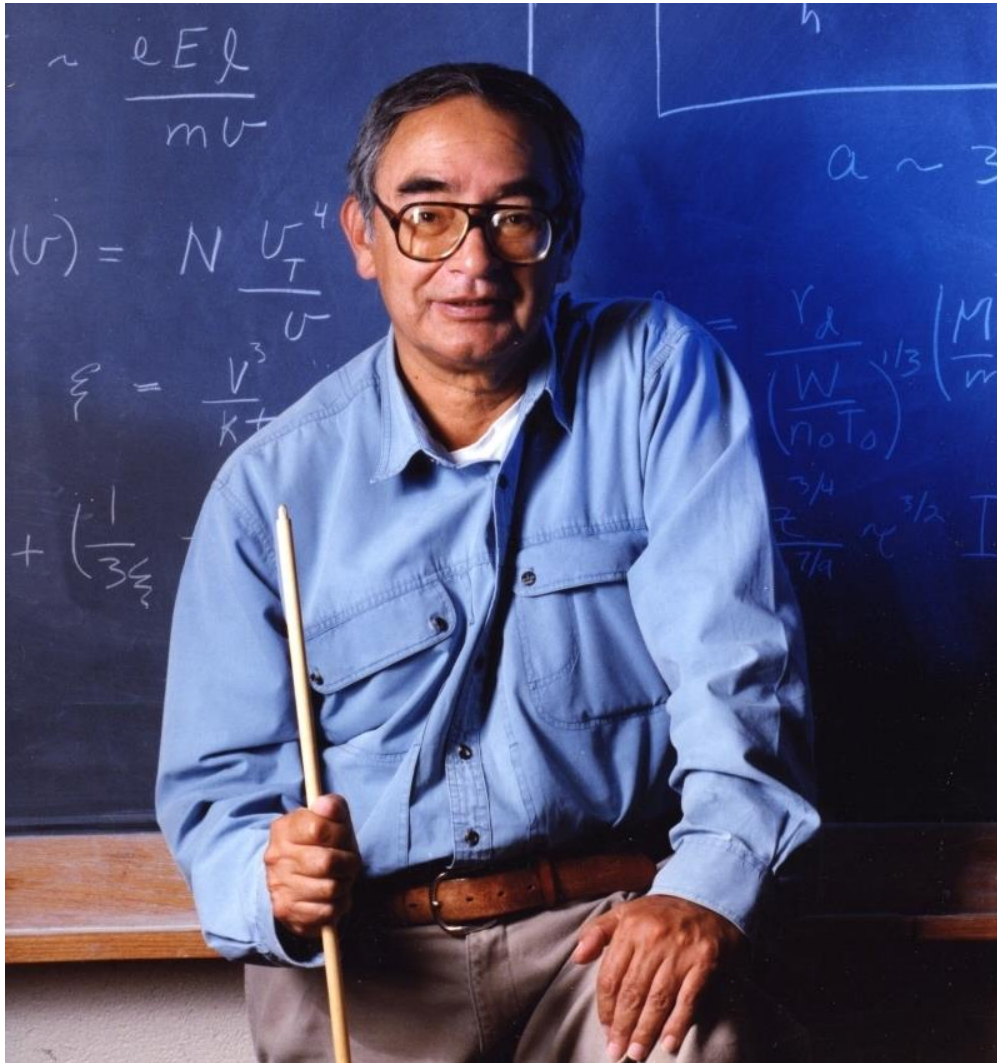


Native Americans in STEM



Fred Begay (Navajo and Ute)

- Born to a father who was Navajo and a mother who was Navajo and Ute, Begay spoke both Indian languages but did not learn English until the BIA (Bureau of Indian Affairs) school in Ignacio, Colo., when he was 10.
- He hitchhiked to Albuquerque and enrolled in the University of New Mexico on the strength of his BIA farming certificate and a promise that he would go to high-school classes at night. At the urging of professors, Begay changed his major to physics and graduated in 1961, still lacking a high-school diploma. Begay left UNM in 1971 with seven children, a pickup truck and a doctorate in nuclear physics. He headed for a job at Los Alamos.
- His research focused on **nuclear fusion as an alternative energy source** and the search for sources of high energy gamma rays and solar neutrinos.

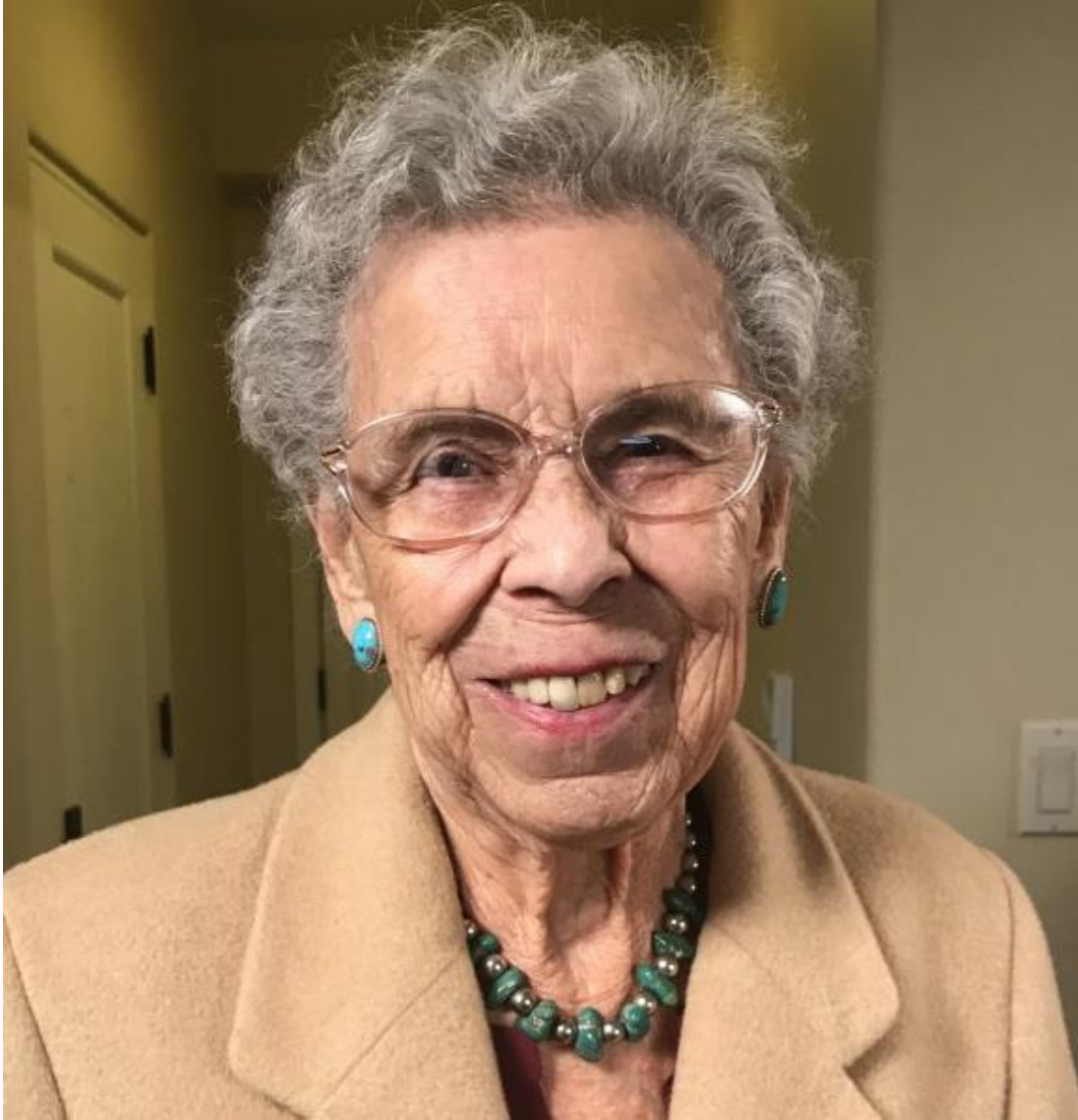
Native Americans in STEM



- Ross was born in 1908 in Park Hill, Oklahoma, a town near Tahlequah, the capital of the Cherokee Nation. After high school, Ross attended Northeastern State Teacher's College in Tahlequah where she graduated in 1928 with a degree in mathematics.
- Ross then became a teacher, instructing students in mathematics and science for nearly 10 years in public schools. In 1937, she accepted a position as an advisor to girl students at the Santa Fe Indian School in New Mexico.
- Between 1932 and 1938, she completed graduate coursework at Colorado State Teachers College, which culminated in a master's degree in mathematics.
- In 1942, she joined Lockheed Aircraft Corporation in Burbank, California, as a mathematical research assistant. Ross and her colleagues worked to improve the design of a fighter plane and other military aircraft. She specialized in the study of how aircraft respond to aerodynamic forces.
- Through her studies, Ross qualified as a registered professional engineer in 1949. **She was the first known Native American woman engineer.**

Mary Golda Ross (Cherokee)

Native Americans in STEM



Floy Agnes (Pueblo nation)

- Floy Agnes “Aggie” (Naranjo Stroud) Lee was a biologist who worked on the Manhattan Project at Los Alamos as a technician. Lee’s mother was German-American and her father was a member of the Santa Clara Pueblo. She grew up in Albuquerque and graduated from Albuquerque High School. In 1945, Lee graduated from the University of New Mexico with a degree in biology. During her college years, she also learned to fly planes, with the goal of joining the Women’s Air Force.
- Her research in the biology lab at UNM led her to be recruited to work in the hematology lab at Los Alamos. She collected and examined blood samples from Manhattan Project scientists, including Louis Slotin and Alvin Graves after the criticality accident that exposed Slotin to a fatal dose of radiation.
- After the war ended, she moved to Chicago, began her doctorate in biology, and worked at Argonne National Laboratory. After her husband died from cancer, Lee balanced her studies, working at the lab, and raising her young daughter. After 14 years, she received her PhD. She later worked at the Jet Propulsion Lab in California and returned to work at Los Alamos National Laboratory before she retired. Over the course of her long career, she conducted research on the impact of radiation on chromosomes.

Native Americans in STEM



Jerry C. Elliott (Osage-Cherokee)

- physicist and one of the first Native Americans who worked in NASA
- His work as Mission Control Center lead retrofire officer for Apollo 13 helped return the crew home safely after an oxygen tank explosion aborted the mission. Jerry was awarded the Presidential Medal of Freedom.
- A prolific writer, Elliott has penned award-winning poetry and written numerous books, articles and papers on a variety of topics, ranging from space technology and computer theory to Native American tales for children.
- In addition to writing, Elliott is an accomplished musician renowned for playing the American Indian flute and drums from Native American events to concerts with the Milwaukee Symphony, the Oklahoma City Symphony and the National Symphony Orchestra in Washington, D.C.

Native Americans in STEM



Bertha Parker Cody (Abenaki-Seneca)

- Bertha “Bertie” Parker Cody is widely considered to be the first female Native American archaeologist. She contributed decades of dedicated work to both the field of archaeology and Hollywood, all the while advancing representation of Native Americans in the United States.
- Cody, who also went by her Seneca name Yewas, was born in Chautauqua County, New York in 1907. Her mother, Beulah Tahamont, was an actor of Abenaki descent. Her father, Arthur C. Parker, was an archaeologist of mixed Seneca descent, and the first president of the Society for American Archaeology.
- In 1930 Cody found what would prove to be one of the most important finds of Gypsum cave— the skull of a rare species of giant sloth, *Nothrotherium shastense* (Sinclair 1905). The ancient sloth remains were found close to ancient human tools, a discovery with possibly far reaching implications in the timing of human migration to North America. The discovery made headlines, bringing renewed support and funding for the expedition from CalTech.

Gifts for the Trivia

