Erik Sorensen



Erik Sorensen was born in New York in 1967 and is a member of the Onondaga tribe. He spent his childhood living on a reservation near Syracuse, NY. While originally focused on becoming a professional cross country athlete, he fell in love with organic chemistry at Syracuse University. He pursued his PhD in chemistry at UC San Diego, was an NSF post-doc fellow at the Sloan-Kettering Cancer Center, and is now a professor at Princeton. In college, he faced resistance from his family upon deciding to study chemistry rather than medicine. His mothercried when told his decision—worried about how Erik his degree would help his native nation. Sorensen now researches organic synthesis pathways and focuses on being a role model for Native American students pursuing science. Sorensen has been awarded awarded a scholar award by the American Chemical Society and the AstraZenica award of excellence in chemistry.

"if you're Native American and you grow up worshipping nature, you don't naturally gravitate to a field like chemistry. But I did. I became inspired by [chemical] transformations as a young student." – Erik Sorenson

Susan Picotte



Susan Picotte was a Native American medical doctor and reformer. As a child, she unfortunately watched a sick Native American woman pass away because a local white doctor refused to give her care. Picotte has stated that this event was the inspiration for her becoming a physician to gain the ability to treat people on the Omaha reservation. She was the first person to receive federal aid for professional education and the first Native American in the U.S. to receive a medical degree (WMCP in 1889). Picotte returned to the reservation soon after to work as a physician at the government boarding school, caring for over 1200 patients. In addition to providing medical treatment, Picotte also actively participated in public reform supporting temperance and public health issues. Serving as the chair of the state health committee of the Nebraska Federation of Women's Clubs, she strived to improve education about issues such as hygiene. Due to the widespread nature of tuberculosis during this time, she advocated further for cleanliness and the eradication of houseflies. For her service, the reservation hospital was named after her and declared a National Historic Landmark in 1993. In 2021, a bronze sculpture of Picotte was unveiled on Lincoln's Centennial Mall on Nebraska's first Indigenous Peoples' Day.

"I am a dreamer who dreams, sees visions, and listens always to the still, small voice. I am a trail-blazer.

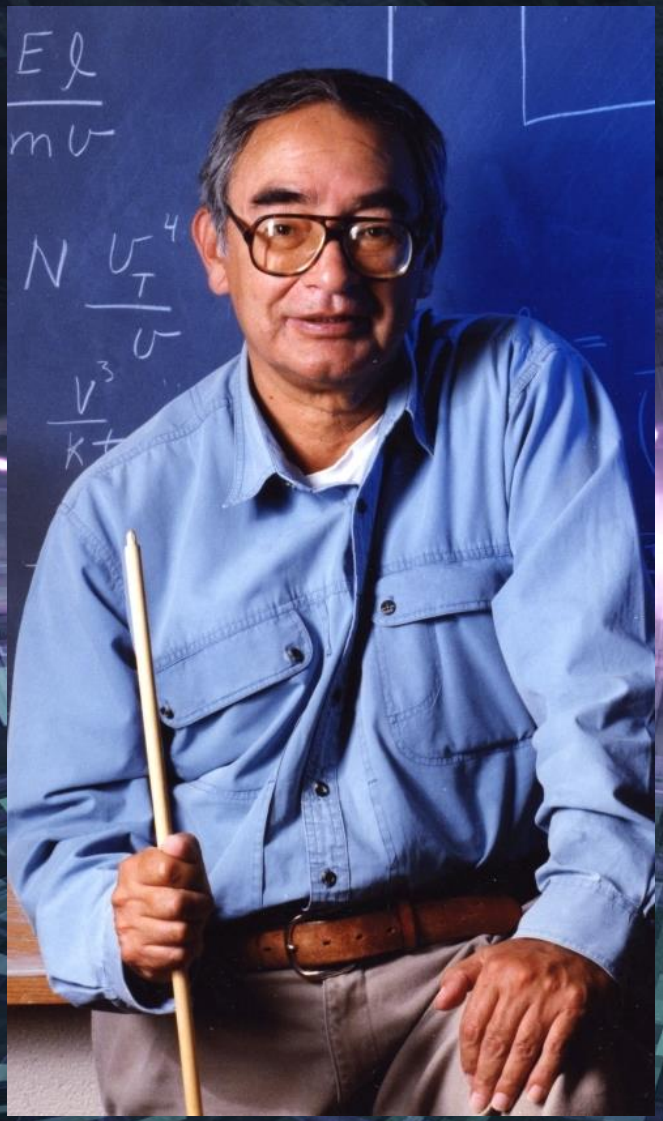
Lori Alvord



Lori Alvord is a Native American surgeon and author. Alvord earned a double major in psychology and sociology from Dartmouth in 1979. Attaining her M.D. from Stanford University Medical School in 1985, she became the first Diné (Navajo) woman to become board certified in surgery. Dedicated to giving back to her community, she returned to the Navajo reservation in NM to treat patients at the Indian Health Service. Here, while being technically proficient in surgery, her goal was treating patients psychologically and spiritually in addition to physical treatment. She accounted for patient surroundings when treating people and this approach culminated in her book, *The Scalpel and the Silver Bear*. Dedicated to making a broader impact, she served as student affairs faculty at Dartmouth, Johns Hopkins, Central Michigan University, and the University of Arizona and on various advisory councils. For her contributions to public health, she has received three honorary medical degrees and the American Medical Writers Association Award of Excellence. In 2013, she was also endorsed as Surgeon General of the US by the National Indian Health Board and the National Congress of American Indians.

The first Diné (Navajo) to become board certified in surgery.

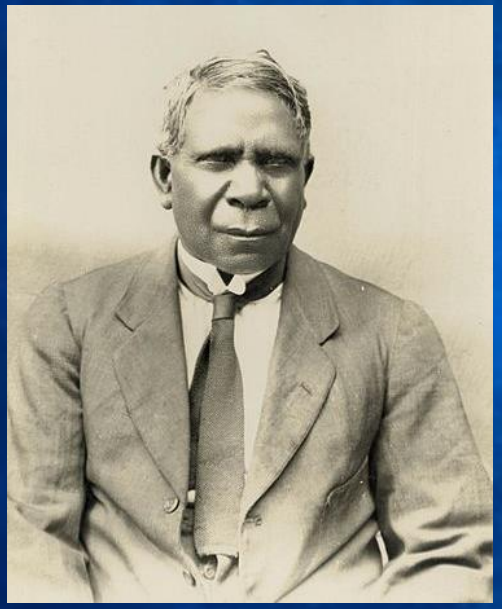
Fred Begay



Fred Begay was born on the Ute Mountain Indian reservation in Towaoc, CO on July 2, 1932. Begay was taught traditional songs and ceremonies as a child and cites his spirituality as a source of abstract thinking throughout his education. At the age of 10, Begay was required to attend an Indian Affairs boarding school and taught to farm, regardless of his interests. At 18, Begay enlisted in the US Army to fight in the Korean War, and did not finish his high school education. Upon returning to his reservation in 1955, the Navajo tribe had received federal education funds for veterans, and Begay enrolled at the University of New Mexico along with GED evening courses. Begay would earn his BS, MS, and PhD from UNM in nucelar physics. After graduating he would become a staff scientist at Los Alamos Labroratory where he studied the origin of gamma rays and solar neutrons. He also studied lasers for thermonuclear plasma energy sources. He also held teaching fellowships at Stanford and the University of Maryland and received the NSF Lifetime Acheivment award in 1994.

The first Native American to receive a Ph.D. in Physics.

David Ngunaitponi (Unaipon)



David Ngunaitponi (Unaipon) was an indigenous Australian preacher, author, and inventor born under the rule of the British Empire (1872). At age 13, he left school to work as a servant for C. B. Young, where Young encouraged Unaipon's passion for philosophy, music, and science. In the late 1890s, he traveled to Adelaide in search of opportunities, but struggled to find work due to his race. He began a job as a storeman for an Adelaide bootmaker. Regardless, he still spent years trying to create a perpetual motion machine in his spare time. While he was not able to complete this device before his passing, he engineered 19 inventions along the way. One of the most prominent of these inventions was the modified sheep shears, which are still used as the basis for modern shears. Tragically, due to his background, he received no financial return or credit for this innovation, besides a short newspaper report in 1910. Unaipon also invented a centrifugal motor and a mechanical propulsion device. Further, he was known as the Australian Leonardo da Vinci for his mechanical ideas for pre-WWI drawings for a helicopter based on the principle of a boomerang. Unaipon has also made strides as a writer, obsessed with the use of proper English. He became the first indigenous Australian author to be published after being commissioned in the early 1920s to assemble a book about Aboriginal legends. Unaipon was also an activist involved in political issues surrounding Aboriginal affairs supporting Aboriginal self-determination. For his work, he received a Coronation medal in 1953 and received the FAW Patricia Weickhardt Award for Aboriginal writers in 1985 posthumously.

"As a full-blooded member of my race I think I may claim to be the first – but I hope, not the last – to produce an enduring record of our customs, beliefs and imaginings."

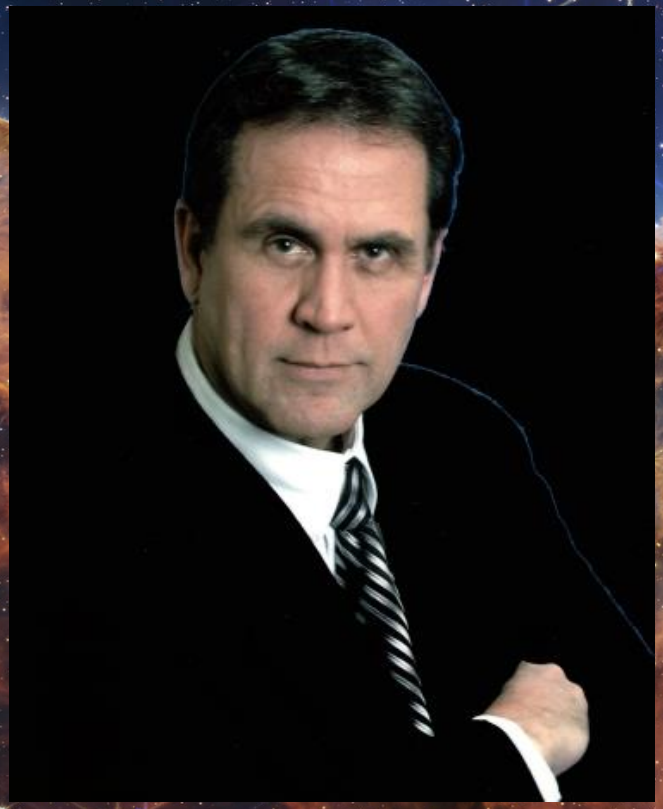
Mary G. Ross



Mary Ross was a Cherokee engineer from Park Hill, Oklahoma. She earned her bachelor's in mathematics (Northeastern State Teachers' College) and took every astronomy class offered at the Colorado State Teachers College while studying to earn her master's degree. She went on to become the first female engineer hired by Lockheed and the first known Native American engineer in history. While at Lockheed, Ross worked in aerospace design, as she developed numerous design concepts for interplanetary space travel consisting of both crewed and uncrewed Earth-orbiting flights. In 1992, the Santa Clara Valley Section established a scholarship in her name and in 2018, she was chosen to be depicted on the Native American $1 Coin by the U.S. Mint.

The first known Native American engineer and notable engineer in the field of aerospace design.

Jerry C. Elliott



Jerry C Elliott-High Eagle is an Osage-Cherokee physicist from Oklahoma. Despite facing discrimination during this undergraduate career, he became the first indigenous native to earn a physics degree from the University of Oklahoma. Soon after earning his bachelor's degree, he became one of the first Native Americans to work at NASA. While at NASA, he worked to further telecommunications infrastructure between Native American reservations. Elliott served on the mission control team during Apollo 11's moon landing. He played a key role in calculating the trajectory during the events of Apollo 13 to ensure successful recovery. For his efforts, he was awarded the Presidential Medal of Freedom.

"I made airplanes and flew them to see if they could touch the clouds . . . There were no astronauts then. But I knew someday, people would fly in rockets and go to the stars."