

Hilltopics

LA Cares Project



As our branch has done since 2014, we will prepare festive bags filled with fresh fruit to be placed in each box distributed by LA Cares during its monthly food distribution in December.

We will need volunteers to help decorate and pack the bags, and, as usual, we are asking for contributions to provide this holiday treat. We encourage members to make their donations early by **mailing a check to Denise George**, 411 Cheryl Ave, White Rock, NM, 87547. Make out the check to Denise. It is best to have the contributions in hand so that we will be able to place the order.

Denise will be asking for help in decorating and labeling the bags, and Karin Roberts will be asking for help to pack the gift bags. (Note: *LA Cares is a tax-exempt organization so you may make out your check to them if you prefer, but please mail it to Denise.*)

Science Fair

The Los Alamos School Science Fair will be held on Saturday Jan 24 at Barranca Mesa Elementary school. Karen Henderson has registered AAUW-LA with the science fair. She will lead our group of judges, but needs volunteers for the committee; a background in science is not required.

Contact Karen at (505-695-0247, KOH7X@yahoo.com) to volunteer.

We judge only elementary age entries, and we are lenient with the implementation of the scientific method:

Make an observation or ask a question.

Gather background information.

Create a hypothesis and perform a test

Analyze the results and draw a conclusion

Document the results and decide what question to answer next

Scholarship

After careful consideration of the applications received, the Branch scholarship committee chose Alegandra Pizano Mendez and Rheanna Esparza to each receive a \$1000 scholarship, \$500 for use during fall semester and \$500 for use during spring semester, provided they register for spring semester and each still meets the credit hour and GPA requirements.

Alegandra is one of the women who had a \$500 scholarship last spring semester and who came to our Spring Tea. She is working toward earning an associate degree in Early Childhood Education. She did not let recovery from some serious medical problems keep her from working hard at her studies. She has been inducted into Phi Theta Kappa honor society at UNM, and she continues to serve as a youth leader in her community and church.

Rheanna graduated from high school with an excellent GPA in 2016. However, financial hardship kept her from continuing her schooling. She wrote that, "Years later, I was fortunate to move to Los Alamos, where I found stability and opportunity to begin again." Her field of study at UNM-LA is Environmental Science. She Is working toward an Associate Degree. Many of you probably recently received in the mail a flyer from UNM-LA

that featured Rheanna on the cover and with a full page about her studies. In that article, she says her work at UNM-LA will provide her with a "smooth transition to a four-year university". Rheanna was raised in Las Vegas, Nevada, where she has worked with Get Outdoors Nevada running educational programs for lower-income students. She has also completed an intern program at the Valles Caldera National Preserve.

A note about Sara Lujan, the other woman who had a \$500 scholarship from the branch for Spring Semester 2025 and who also came to our Spring Tea (and also had a \$1000 scholarship a few years ago): She completed her associate degree at UNM-LA and has gone on to the main UNM campus in Albuquerque.

Book Group

The November book is <u>Trust</u> by Herman Diaz. Christine Cloyd will review at both meetings.

The November 3rd, 7pm meeting will be hosted by Els Hoffer at 505 Grand Canyon, WR. Please let Els know if you will attend (505 672 3245, jimnelshoffer@icloud.com).

The 2pm, November 4th meeting will be held at Sherril Hall of the Trinity on the Hill Episcopal Church. Let Rozelle Wright know if you are coming (bandrwright@yahoo.com, 505-662-5490).

Nonfiction Book Group

The November meeting is on the 10th at 7pm. The book is <u>Better Living through Birds</u> by Christian Cooper; the discussion leader is Joan Moore. Rozelle Wright will host the meeting at 213 Barranca Rd, LA. Please let Rozelle know if you will attend (505-662-5490, <u>bandrwright@yahoo.com</u>)

Great Decisions

Bi-weekly meetings will begin in February once the books have been procured. If you have not signed up for this year's program, and wish to participate contact Denise (505-690-3534, denisegeorge@icloud.com). She will order books for the group. These members have already signed up for a book: M Lindahl, K Roberts, R. Wright, J Lysne, M. Wecksung, D. Hyman, M. Doolen, C. Neal, B. Cooper, N. Markin, D. George, J. Prono.

The 2026 topics are:

- America and the World: Trump 2.0 Foreign Policy
- 2. Trump Tariffs: Future of the World Economy
- 3. U.S.-China Relations
- **4.** Ruptured Alliances and the Risk of Nuclear Proliferation
- **5.** Ukraine and the Future of European Security
- **6.** Multilateral Institutions in a Changing World Order
- 7. U.S. Engagement of Africa
- 8. Human Rights and International law

Out'n About: None Left for Me, Maxwell Museum of Anthropology, Oct. 8, 2025



Our docent and co-curator, Dr. Jennifer Denetdale, introduced us to the exhibit by explaining the history of "The Navajo Livestock Reduction Program". In the 1930s US Indian Commissioner, John Collier, intended to conserve the grasslands of the dryland sheep ranchers on the Navajo reservation by reducing herds by half. The federal enforcement tactics that included slaughter of horses and sheep by federal agents, resulted in violent protests by the Navajos, who saw this policy as destroying

their culture and livelihoods.

Non-native photographer, Milton Snow, was hired in 1937 by the US government to document the Dine way of life and photograph the improvements the Livestock Reduction Program brought to the native people. The exhibit includes about a hundred of Snow's photographs from the Maxwell Museum's collection. The black and white photographs show rural life in a desolate dry landscape with primitive housing, schools and many domestic scenes of cooking, weaving and ranching activities. In stark contrast the annotation tells the story from the Dine perspective. Dr. Denetdale, herself Navajo, emphasizes the loss of livelihood and the forced imposition of a patriarchal, capitalist society onto the matriarchal Dine way of life.

Set within the backdrop of the 1930's Dust Bowl and the decade long drought, the badly fumbled attempt to protect the Navajo grassland from overgrazing can be seen as an early attempt at land conservation or as high-handed colonialism. It was both!

Five of our Branch members toured the exhibit, followed by a wonderful native New Mexican lunch at the Indian Pueblo Kitchen.

Honoring (JEDI) Woman: Inge Lehmann (13 May 1888 – 21 February 1993) was a



Danish seismologist and geophysicist known for her discovery in 1936 of the solid inner core that exists within the molten outer core of the Earth. The seismic discontinuity in the speed of seismic waves at depths between 190 and 250 km is her second major contribution to geophysics and is named the Lehmann discontinuity.

Inge Lehmann was born on 13 May 1888 and grew up in Østerbro, a part of Copenhagen, Denmark. Her mother, Ida Sophie Tørsleff, was a housewife; her father was experimental psychologist Alfred Georg Ludvik Lehmann.

Lehmann's parents enrolled both her and her sister at Fællesskolen in 1904, a progressive school that offered the same curriculum to both boys and girls, a practice uncommon at the time. This school was led by Hanna Adler, Niels Bohr's aunt, a scholar and firm believer in gender equality. A year after earning her degree, Adler launched her school, inspired by innovative teaching practices in the US. Women were prohibited from working in universities at the time, and the vast majority of female college graduates searched for employment as elementary schoolteachers despite obtaining degrees that allowed them to teach at the upper-secondary (high school) level. Lehmann credited her father and Hanna Adler as the most significant influences on her intellectual development.

At age 18, Lehmann achieved a first rank mark in the entrance exam for Copenhagen University. In 1907, she started her studies in mathematics, chemistry and physics at the University of Copenhagen. She continued her studies of mathematics in Cambridge from 1910 to 1911. There, Lehmann faced gender-based adversities. As a result, Lehmann had a mental breakdown, and in 1912 returned to Denmark. Lehmann served as an actuarial assistant from 1912 to 1918. She resumed her studies at Copenhagen University in 1918, and completed the candidata magisterii degree in physical science and mathematics in two years, graduating in 1920. This was significant, since this degree was mostly given to male students. After a short time studying mathematics at the University of Hamburg, in 1923 she accepted a position at Copenhagen University as an assistant to J.F. Steffensen, professor of actuarial science.

Inge Lehmann lived by herself all her adult life. Lehmann once complained to her nephew Niels Groes about the incompetence of her male colleagues, and wrote him: "You should know how many incompetent men I had to compete with—in vain."

In 1925, Lehmann was assigned to be the assistant of seismologist Niels Erik Nørlund. She took an interest in his field, and she began studying it on her own. She was chosen as a delegate for Denmark to attend the International Union of Geodesy and Geophysics in 1927—a role she filled another eight times over the next forty years. By 1928, Lehmann obtained a *magister scientiarum* in seismology, and she was appointed head of the Geodætisk Institut's seismological department the same year. In this position, she was responsible for overseeing the operation of three seismographic observatories, two of which were in Greenland. She personally operated the one in Copenhagen, producing reports based on its readings. Though it was not part of her job, Lehmann also engaged in research at the facility.

In 1929, Lehmann studied the Murchison earthquake which struck on the South Island of New Zealand. She analyzed the seismic data from the earthquake and noticed waves of significant amplitude recorded in the Russian cities of Sverdlovsk and Irkutsk. Lehmann was the first to interpret P-wave arrivals as reflections from an inner core, leading her to hypothesize that the Earth's core consisted of two parts: "a solid metal core surrounded by an outer liquid core, overturning the accepted theory of an entirely liquid core". She published these findings in a paper titled P' in 1936. Prior to 1936, scientists believed that the Earth's core was a single, massive molten sphere. However, many observations did not agree with this hypothesis. The theory she developed was that the Earth consisted of 3 shells: the mantle, outer core and inner core. Lehmann inferred that the core wasn't homogeneous; rather, there is a smaller core that exists that is surrounded by the outer core. She deduced that waves travel faster in the smaller core, but the waves can be reflected off if arrived tangentially. Her theory allows for another wave deflection at the inner core boundary and this accounts for the direction and location in which the waves emerge. Other leading seismologists of the time adopted this interpretation within two or three years, but it took until 1971 for the interpretation to be shown correct by computer calculations. She continued her work during World War II, though international collaboration was limited.

She retired from her position as head of the Geodætisk Institut's seismological department in 1953, giving her more time to conduct research over the following decades. Throughout the 1950s and 1960s, Lehmann traveled to North America several times and visited different seismological observatories throughout the United States and Canada. She became a prominent member of the community at the University of California, Berkeley, one of her most frequent stops. During the 1960s, Lehmann was able to explore more of the Earth using new technologies made specifically for detecting nuclear bombs during the Cold War.

While in the United States, Lehmann collaborated on investigations of the Earth's Crust and Upper Mantle. During this work, she discovered another seismic discontinuity, which is a step-change increase in the speed of seismic waves at depths between 190 and 250 km. This discontinuity was named the Lehmann discontinuity after her. Francis Birch noted that the "Lehmann discontinuity was discovered through exacting scrutiny of seismic records by a master of a black art for which no amount of computerization is likely to be a complete substitute."

Lehmann died in 1993. She will appear on a 2028 Danish Krone banknote.

Calendar

November 3,4	Book Group
November 10	Nonfiction book group

Coordinating Council 2025-2026

Council Voting Members	
Judy Prono	Facilitator
Linda McLellan	Secretary
Mary Ann Lindahl	Membership/Treasurer
Judy Prono	JEDI justice, equity, diversity, inclusion
Denise George	Newsletter/WEB
Nina Thayer	Public Policy
Marilyn Doolen	Historian
Bev Cooper	Publicity
Appointed positions	
Carol Neal	UNM-LA Scholarship
Helena Whyte	STEM
Karin Roberts	Hospitality
Open positions	
	University Relations
	Nominating
contact: AAUWLA@icloud.com	