

2023 INSTITUTE NEWS

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Benefiting the community by promoting and supporting interdisciplinary research at the interface of people, Earth, and the environment.

SMITHSONIAN TRAVELING EXHIBITIONS SERVICES (SITES) MEET TO DISCUSS TRAVELING EXHIBIT



ISEM welcomed the Director of Smithsonian Traveling Exhibitions Services (SITES) **Myriam Springuel** (second from left, standing) and Assistant Director **Bob Leipold** (far left, standing) to a dinner on August 30 sponsored by Bobby Lyle and Tom Meurer. Discussions touched on many topics of interest to this group of museum lovers, especially the next phase of the *Sea Monsters Unearthed* exhibit, which will begin traveling the US at the end of next year.

Seated L to R: Anthony Aramoonie, Thomas Di Piero, Gregory Warden, Bonnie Jacobs, Diana Vineyard, Amanda Dotseth, Janet Martin **Standing L to R:** Bob Leipold, Myriam Springuel, Scott Wendorf, Andrea Hamilton, Jaime Da Silva, Louis Jacobs, Russell Martin

Elizabeth Chindebvu named Malawi's Principal Secretary for National Unity

Elizabeth Gomani Chindebvu (MS 1998, PhD 2004) has risen in the ranks of Malawi's government to become Principal Secretary for National Unity. Her responsibilities include the oversight of Malawi's national cultural assets, both tangible and intangible, including museums, music, and indigenous cultures. Visitors to the Perot Museum will recognize her work because she studied *Malawisaurus*, the dinosaur on display in the foyer. Her picture as an SMU student doing fieldwork is on the explanatory panel. Elizabeth and former SMU undergraduate Myria Perez (BS 2018), plus other colleagues, have recently published

a paper on Malawi in the Geological Society of London Special Volume Geology's Significant Sites and their Contributions to Geoheritage.

Jurassic paleogeography of African Gondwana (Chindebvu et al., 2023, Geological Society of London)

ISEM ENERGY ROUNDTABLE 2023



ISEM continued its tradition of invitational Energy Roundtables dating back to the 1980's. The Roundtable was held at Moody Gardens Hotel in Galveston from April 17-19. The theme was "Business Strategies and Technology Applications in a Low-Carbon Energy World." Participants included executives, technical experts, consultants, and SMU graduate students **Nnamdi Okeifufe**, geothermal energy, **Jaime Silva**, mechanical engineering, and University of Houston graduate student **Juan Pablo Ramos Vargas**, geology.

SCOTT WENDORF: FLIGHT OF THE WARBLER

ISEM Board Chair **Scott Wendorf** with Smithsonian ornithologist **Christopher Milensky**, pointing to the first known specimen of Virginia's Warbler. This specimen was discovered at Fort Burgwin in northern New Mexico in 1858 and named by Smithsonian curator Spencer Fullerton Baird (1823-1887) in honor of the wife of the army surgeon stationed at the fort. The reconstructed fort has been the SMU-in-Taos campus since 1964 and has been the location of several ISEM Energy Roundtables.

Above: The first illustration of Virginia's Warbler from Baird (1860, Birds of North America). **Right:** Scott Wendorf pointing to the first specimen of Virginia's Warbler (enlarged).

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Thank you for your support and continued interest in ISEM!

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ISEM SUPPORTS STUDENT RESEARCH



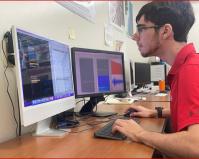
Graduate student **Jerod Aguilar** is researching physicochemical weathering of sediment and mineral surfaces to understand abiotic synthesis of organic compounds, or more broadly, the origins of life. The newly crafted Schlenk Line in Dr. Neil Tabor's lab is up and running, fashioned from borosilicate glass appropriate for Jerod's experiments.



Anthropology graduate **Ryan Breslawski** (PhD 2022) collected stable oxygen isotope data from bison teeth dating to 11,700–4200 years ago. Data revealed average temperature and seasonal temperature variability spanning most of the North American Great Plains, suggesting that climatic impacts had pronounced effects on the hydrological system of the central and southern but not the northern Great Plains.



Senior **Travis Nolan** attended the 2023 annual meeting of the Society of Vertebrate Paleontology in Cincinnati to present his research, "Comparative vertebral morphology and intervertebral mobility of *Seymouria*." Here he is standing next to a block of Austin Chalk containing an 88 million year old crocodile fossil, the subject of his senior thesis, going into a CT scanner at Animal Imaging in Irving.



Geophysics junior **David Berberian** is working with Dr. Beatrice Magnani to process and interpret seismic data acquired in the Jamaica Passage following the 2021 earthquake. This data is essential for interpreting gravity cores recovered from the region, which shows evidence of multiple earthquakes in pre-instrumental time.



Junior **Mahima Quazi** is collaborating with Dr. Xiao Yang and others to harmonize zooplankton time series data from lakes across the world, a project of the Global Lake Ecological Observatory Network. The ultimate goal is to explore zooplankton response to environmental change such that they can be used as indicators of environmental stress.



APPRECIATION OF PETER GAFFNEY

In its Fall meeting, the ISEM Board approved a Resolution of Appreciation for **Peter Gaffney**, an ISEM Trustee since 1997. Peter has long been a strong proponent of interdisciplinary thinking, one of the founding principles of ISEM. He was a creative mind on the organizing committee of ISEM's Energy roundtables for more than two decades. Peter, his wife Tessa, and their sons have all been engaged supporters of ISEM, one example being the Dallas Trinity Forest initiative, which supported students in the study of the flora and fauna of one of the largest urban forests in the US. From the beginning they have been enthusiastic about the placement of an exhibit, largely built by SMU undergraduates, in the Smithsonian Institution as Sea Monsters Unearthed: Life in Angola's Ancient Seas. Their support of the exhibit as it is readied to travel the United States is a tribute to the Gaffney family.

Left: Peter and Tessa Gaffney with Louis Jacobs in the Great Trinity Forest

48th Anniversary of Angola's Independence



On November 7th Louis Jacobs was the guest of the Consul General of Angola in Houston Ms. Ana Paula Do Nascimento at the celebratory dinner for Angola's 48th Independence Day Anniversary.

October in Luanda

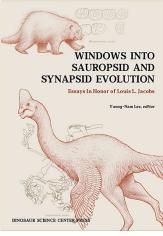


Louis Jacobs met with Angola Minister of State Ms. Dalva Ringote to discuss a commission formed to maximize the value of Projecto PaleoAngola. Louis also presented Projecto PaleoAngola to the Board of Sonangol, a major supporter of the project.

DR. LOUIS L. JACOBS HONORED WITH PUBLICATION



Louis Jacobs was presented with a Festschrift titled Windows into Sauropsid and Synapsid Evolution: Essays in Honor of Louis L. Jacobs at the International Symposium on Asian Dinosaurs held in Hwaseong City, South Korea. The volume was edited by Yuong-Nam Lee (PhD 1995) and comprises 365 pages included in 20



original papers by 68 authors from 16 countries. Eight of the authors were his former students.

Left: Bonnie and Louis Jacobs with editor, Yuong-Nam Lee PDF of the book: https://www.smu.edu/dedman/research/institutes-and-centers/ISEM/Research/Louis-Jacobs-Festschrift