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

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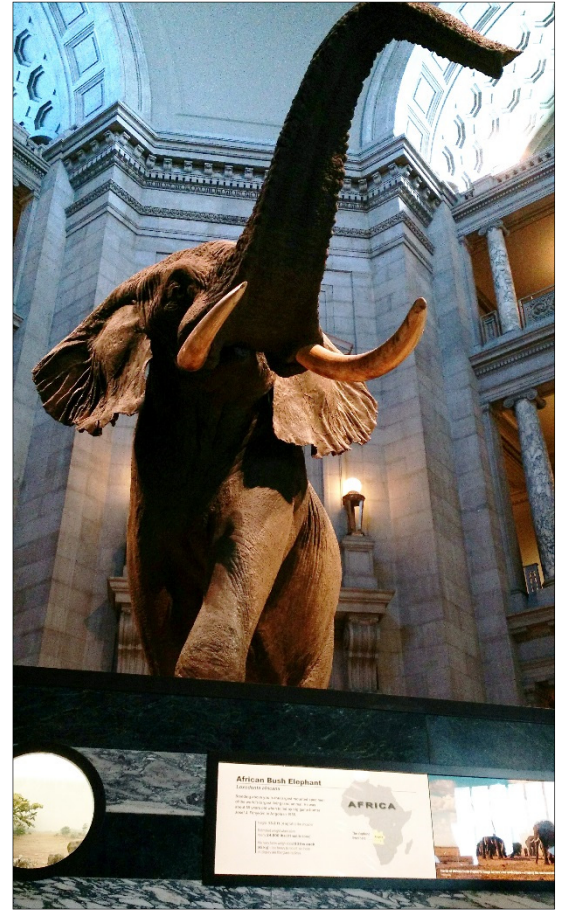
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## SEVEN UNDERGRADUATES WORK TOWARD SMITHSONIAN EXHIBIT

**Projecto PaleoAngola**, a paleontological study of the opening of the South Atlantic Ocean and its effect on marine reptiles, paleoenvironments, human evolution, and climate, is one step closer to having an exhibit in the **Smithsonian's US National Museum of Natural History** on the Mall in Washington, D.C. The fossils for the exhibit are currently in Shuler Museum laboratories in Heroy Hall where, thanks to ISEM Trustee **Peter Gaffney** and to the **Jack and Jane Hamilton Fund of the Communities Foundation of Texas**, SMU undergraduates are freeing fossils from stone and making them ready for exhibition. Expertise from a wide range of disciplines is necessary to bring a display such as this from the field to the lab to the showcase, to gather and process digital imaging data, to engineer the structures necessary, to understand the scientific story, and to reach out to K-12 experts to help develop educational material of use around the globe. ISEM is engaging SMU students all levels, and they are taking pride in working for an understandable and worthy goal. The Smithsonian team is being assembled by National Museum Chief of Exhibits **Junko Chinen** and includes **Siobhan Starrs** as Projecto PaleoAngola Exhibit Project Manager, and Dr. **Nick Pyenson**, National Museum Curator of Paleontology, along with **Louis Jacobs** and **Michael Polcyn** from ISEM and SMU's Huffington Department of Earth Sciences. The exhibit will be in the Sant Ocean Hall Focus Gallery, a space of 1026 square feet adjacent to the Sant Ocean Hall and the Hall of Human Origins. The exhibit is tentatively scheduled to open in November 2018. The Natural History Museum is the most visited educational space in the world, with 7 million visitors per year. After their showing at the Smithsonian, the fossils, ready for display, will be returned to the Republic of Angola, their home. To see Projecto PaleoAngola fieldwork in Angola, visit: <https://www.youtube.com/watch?v=7glJrDlpl4>



*Elephant from Angola in the rotunda of the Smithsonian*

## ISEM Supports Students: Shuler Museum Laboratories!

Vivan Tsai, Roe Higgins, Evan Snyder, Ucha Abba, Alyssa Moino,





# DOWNEY FAMILY AWARD

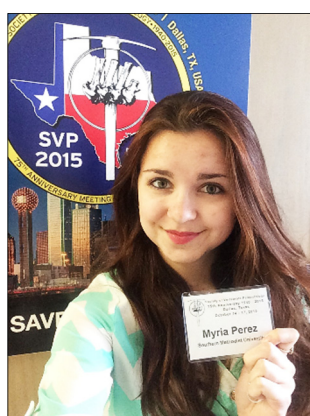
## for Faculty Excellence

The Downey Family Award for Faculty Excellence was established by Marea and former ISEM Trustee Marlan Downey to facilitate faculty advancement in Earth Sciences and Archaeology. This year's \$5000 award recipient is **Dr. Rita C. Economos**, Assistant Professor in SMU's Roy M. Huffington Department of Earth Sciences. Rita, shown at right with undergraduate student **Madeline Wewer**, studies igneous petrology and geochemistry. Her focus is on the plumbing that feeds magma to volcanoes, particularly in large igneous systems like the modern Andes. One of her strategies for studying active systems relies on ancient analogs – extinct volcanoes whose roots have been exposed by erosion. Rita has done extensive fieldwork in the Transverse Ranges and Joshua Tree National Park in eastern California where she found the closest analog of the modern Andean volcanic system. The beautiful and complex rocks in this region once resided as much as 15 miles below the surface but are now exposed to view. Studying these rocks leads to understanding the inner-workings of deep magmatic reservoirs and the volcanoes they produce.



## MAYOR PROCLAIMS VERTEBRATE PALEONTOLOGY WEEK

October 11-17 was proclaimed Vertebrate Paleontology Week in Dallas by Mayor Mike Rawlings on behalf of the Dallas City Council. The proclamation was in honor of the 75<sup>th</sup> Annual Meeting of the Society of Vertebrate Paleontology, hosted by **SMU** and the **Perot Museum of Science and Nature**, which attracted to Dallas some 1200 scientists from all over the world who study fossils of animals with backbones. To answer the question, "What is vertebrate Paleontology?" go to this KERA radio story <http://keranews.org/post/thousands-vertebrate-paleontologists-descend-dallas>. Dallas has played a role in vertebrate paleontology going back to the 1800s, as explained by the Mayor in his Proclamation: The logo of the Society of Vertebrate Paleontology has at its center the vertebrae of the Texas Permian vertebrate *Eryops*; *Eryops* was discovered by Jacob Boll, a 19<sup>th</sup> century resident of Dallas; Jacob Boll's family was part of the La Reunion Colony that a century later inspired the naming of the landmark Reunion Tower, which overlooked the SVP in its



75<sup>th</sup> anniversary. The full story of Jacob Boll, told from archival material in **SMU's DeGolyer Library** and family documents from SMU geophysicist **Matt Hornbach**, was presented at the meeting by SMU under-grad **Myria Perez**, who dug up *Eryops* for the Houston Museum when she was twelve, and **Diana Vineyard** of ISEM. Boll wrote a poem to the fossil he collected in his native German. If you would like to see an animation of *Eryops* while the poem is read in German and in English, point your QR scanner to the barcode, or watch SMU's video at: <https://www.youtube.com/watch?v=CzI5-krm-cc>.

To top off the meeting, not only did the Mayor issue the Proclamation, but the SVP was "in lights" on the Reunion Tower ball. Special thanks to ISEM Trustee **Ray Marr** and **Shade Tree Studios** for help in immortalizing Boll and this meeting and to Trustee **Tom Meurer** for his help.



Former and current SMU paleontology students and friends at SVP meeting



SVP Logo



Myria Perez at age 12 digging fossil of *Eryops*.



# ITALY'S SUPERVOLCANO

## ISEM Excursion

SMU's Associate Vice President for Research and Dean of Graduate Studies **James E. Quick**, shown at right, is well known in Italy. The Geological Society of Italy awarded him its prestigious Capellini Medal for his study of the ancient Sesia Supervolcano in the Italian Alps. Dr. Quick led the ISEM on a volcanic tour of Italy starting in Naples in the south, where the group explored the excavations at Herculaneum and Pompeii, hiked to the summit of Mount Vesuvius, learned about the geology of Campi Flegrei with expert Dr. Paola Petrosino of the University of Naples Federico II, and went behind the scenes of the Vesuvius Volcano Observatory, the oldest volcanology institution in the world, to understand the volcanic hazards of the area. Next stop, Florence, to visit the geothermal area and see the museum in nearby Lardarello. Then toward the Alps and the 280 million-year-old Sesia Supervolcano, which erupted long ago in Pangea but was carried north on a slice of African Gondwana, which collided with Europe to form Italy, raising the Alps, and thereby exposing the roots of the Sesia Supervolcano, which once lay 15 miles in the Earth. **Trustee Ray Marr** and **Shade Tree Studios** videographer, **Adam Dunsworth**, captured this exciting geological story, and SMU undergraduate, **Connor Johnson**, took advantage of this unique "learning moment" through an independent study guided by Dr. Quick. View videos of ISEM Excursions at [smu.edu/isem/excursions](http://smu.edu/isem/excursions)



Mount Vesuvius, Gulf of Naples



Connor Johnson (above) and Ray Marr (right), at the summit of Mount Vesuvius



## DR. JAMES E. BROOKS HONORED

American Association of Petroleum Geologists President Randi Martinsen bestowed the **2015 AAPG Presidential Award for Exemplary Service** to **Dr. James E. Brooks**, Vice-Chairman and President Emeritus of ISEM, "for a lifetime of inspired and dedicated service to his profession and community, and for the education of hundreds of students for whom he has served as an outstanding teacher, wise mentor and genuine friend."

Dr. Brooks has also been a genuine friend to the Fondren Library throughout his time at SMU. Now, as part of the Second Century Celebrations, the **Fondren Library Centennial Reading Room** is being re-established as one of the signature spaces on the SMU campus. It is therefore fitting that ISEM and its Trustees honor Jim by participating in the furnishing of the Centennial Reading Room and providing an elegant piece of Thos. Moser furniture affixed with a plaque bearing the name of Dr. James E. Brooks.



## ANGOLA CELEBRATES 40 YEARS

On November 4, 2015, the Consul-General of the Republic of Angola in Houston hosted a celebration of national independence, "*Angola 40 Years: Independence, Peace, National Unity and Development*." Louis Jacobs, President of ISEM, was invited to speak to this gathering of Houston's diplomatic and business leaders about Projecto PaleoAngola and its value to Angola.



Dr. Louis L. Jacobs, Speaker



POINT YOUR QR  
SCANNER TO TUNE IN  
AND WATCH EYROPS  
COME ALIVE TO BOLL'S  
POEM! (Artwork and  
animation by  
Karen Carr Studio)





## GRADUATE STUDENT HIGHLIGHTS



**Casey Brokaw** (left) was the student representative at the **Game Creek Ranch Energy Roundtable** where he discussed research on induced seismicity on which he was a co-author. Casey was also designated the inaugural **Stephen N. Inbusch Scholar**, named for former ISEM Trustee Steve Inbusch and supported through the generosity of attendees to the Roundtable. ISEM is grateful to hosts, **Herbert and Nancy Hunt**, and to organizers, **ISEM Trustees Herbert Hunt, Peter Gaffney, and Mike Forrest**, and former Trustee **Marlan Downey** for their continued support of ISEM and SMU students through the Game Creek Energy Roundtables.



*"In my opinion, the most creative research at a university is done by the most energetic investigators, by which I mean students. Those are who we can support best."* Louis L. Jacobs, President

**Jenna Battillo** (right) is a Ph.D. student in archaeology. She is analyzing dietary pollen, macrobotanical, and DNA data from human paleofeces – yes, that's right - from Turkey Pen Ruin, Utah, to understand evolving patterns of subsistence and nutrition in the northern Southwest's earliest agricultural populations.



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## In Memoriam: Fred Wendorf

Dr. Fred Wendorf, Professor of Anthropology *Emeritus* and member of the National Academy of Sciences, passed away on July 15. In the early 1960's, then Dean of Graduate Studies Claude Albritton wisely recruited Wendorf and four of his associates, bringing them to SMU to establish what became SMU's first program in anthropology. Early in his career Dr. Wendorf developed the field of salvage archaeology focused on the collection and study of artifacts from sites exposed in association with pipelines, highways, dams and other public works, thus preserving and expanding the archaeological record across the United States. Equally important, he helped shape the legislation to protect these sites and the specimens derived from them. Without doubt, of his numerous contributions Wendorf is best known for his almost fifty years of research in Egypt and adjacent areas of Africa and the Middle East. This work has resulted in vast numbers of artifacts that now repose in the British Museum where they are available to scholars and to the public. Dr. Wendorf was an original member of the ISEM Board of Trustees. After his retirement from the Department of Anthropology, he continued his work from his office in ISEM, with which he was associated for his entire SMU career.

