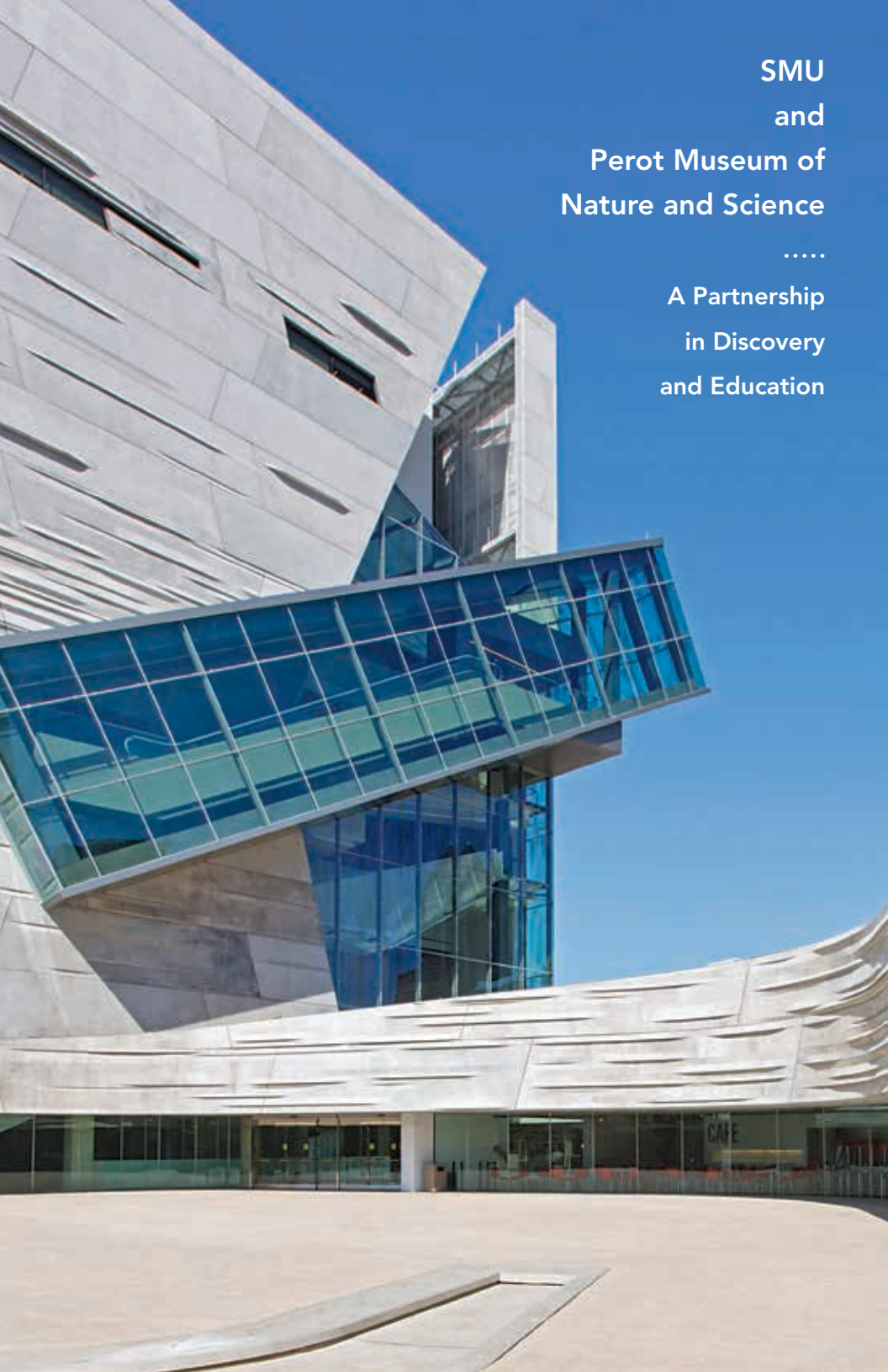

SMU and Perot Museum of Nature and Science

.....

A Partnership in Discovery and Education

SMU & Perot Museum of Nature and Science

The new Perot Museum of Nature and Science is a world-changing institution that will inspire generations of visionaries and innovators. SMU faculty and students have played an important role in shaping this learning laboratory, from providing fossils of dinosaurs and sea turtles to technical assistance and service on advisory boards. This partnership actually dates back more than 80 years and will continue far into the future. In 1936 Ellis W. Shuler, one of SMU's original faculty members, helped spearhead the founding of the Dallas Museum of Natural History in Fair Park as part of the Texas Centennial. Shuler founded what is known today as the Roy M. Huffington Department of Earth Sciences in SMU's Dedman College. And the University's Ellis W. Shuler Museum of Paleontology is named in his honor.

Faculty and staff members associated with SMU and the Perot Museum gather in the lobby in front of the dinosaur *Malawisaurus*.

Visitors to the Perot Museum examine dinosaur fossils in the *T. Boone Pickens Life Then and Now Hall.*

Dinosaurs Among Us in Dallas

Fossils from SMU's collections greet visitors to the Perot Museum and its 11 permanent exhibit halls. Items from SMU's scientists include a 35-foot skeletal cast of the African dinosaur *Malawisaurus,* which welcomes guests in the spacious glass lobby of the Perot.

"The new museum building itself is an icon, but it's also a statement by the city about taking the advances of science to the public," says vertebrate paleontologist Louis L. Jacobs, an SMU earth sciences professor who serves on the Perot Museum's Advisory Board and Collections Committee.

Jacobs, a former *ad interim* director of the Dallas Museum of Natural History, led the team that discovered *Malawisaurus* in Africa. Other Shuler Museum fossils can be viewed in the Perot's *T. Boone Pickens Life Then and Now Hall*. They include an unnamed 113-million-year-old herbivorous dinosaur discovered in 1985 at Proctor Lake, southwest of Stephenville, Texas. The exhibit provides perspective on the climate in Texas when dinosaurs roamed, thanks to SMU paleobotanist and earth sciences professor Bonnie F. Jacobs, who provided fossil wood, fossil leaves and images of microscopic pollen grains from the Shuler Museum.

SMU professors Louis and Bonnie Jacobs with the dinosaur *Alamosaurus* and a replica of the extinct 112-million-year-old tree *Frenelopsis* that Bonnie described.

"Understanding past climate and climate change will help us understand what may happen in the future," she said.

Bonnie Jacobs is featured in a Perot Museum Career Inspiration Stories video that is part of the permanent exhibit and also advised on the text of some exhibits. She worked closely with Anthony R. Fiorillo, Perot Museum

Fossils on display include dinosaurs and the Perot Museum's Ocean Dallas marine reptile exhibit.

Curator of Earth Sciences and an SMU adjunct research professor of paleoecology. SMU earth sciences professor Neil J. Tabor also is featured on video discussing ancient soils and Earth's climate.

"We have a nexus between the mission, training and knowledge we have at SMU, infused into and enhanced by what the museum does. That's why the museum is important to SMU, and that's why SMU is important to the museum," Louis Jacobs says.

SMU researcher Diana Vineyard contributed to the exhibit of sea turtle fossils.

There are numerous other examples of SMU contributions in this area. Visitors to the Perot also can see stunning 80-million-year-old sea turtle fossils, discovered in 2006 in northeast Texas. These were identified by Diana Vineyard, director of administration and research associate at SMU's Institute for the Study of Earth and Man (ISEM), when she was a graduate student at the University.

Michael J. Polcyn, director of SMU's Earth Sciences Digital Laboratory, provided technical assistance for the museum's Ocean Dallas marine reptile exhibit. An expert in mosasaurs, Polcyn created digital reconstructions of *Dallasaurus*, named by him for the city of Dallas, and physically reconstructed the skeletons of *Dallasaurus* and another mosasaur, *Tethysaurus,* for the Perot Museum exhibit.

In 2006, two SMU doctoral students assisted Fiorillo, the Perot Museum curator, with excavation of a new species of dinosaur – *Pachyrhinosaurus perotorum* – named in honor of the Perot family.

The Plastiki temporary exhibit was made possible in part by the Hunter and Stephanie Hunt Institute for Engineering and Humanity in SMU's Lyle School of Engineering.

From Fossils to the Future

While SMU has helped shape many of the prehistoric displays, students and faculty also play a role in showcasing the future. Central to the *Texas Instruments Engineering and Innovation Hall* at the Perot Museum is a model prototype of an unmanned, dronelike helicopter that can help fight fires. This was built by SMU students in the Lyle School of Engineering's remarkable Innovation Gymnasium.

SMU engineering students built this concept helicopter for fighting fires, displayed in the Perot Museum.

The Innovation Gym enables SMU students to hone their engineering and creative skills by working on real-world design challenges. Companies, researchers and nonprofits provide actual challenges for the students to develop innovative solutions, often under intense time and financial pressure.

For summer 2013 a temporary exhibit was added to showcase a message vital to the care of Earth's oceans. The entry plaza featured The Plastiki, a 60-foot seaworthy catamaran made from 12,500 recycled plastic bottles. The vessel, which made history with a 2010 voyage from San Francisco to Sydney, is not only made up of recycled materials but also uses organic adhesives that are much safer than traditional marine glues.

The Plastiki was unveiled in Dallas in conjunction with the Hunter and Stephanie Hunt Institute for Engineering and Humanity, an academic center at SMU's Lyle School. The Hunts honored The Plastiki creator David de Rothschild with the Institute's Visionary Award during the April 2013 Engineering and Humanity Week.

The 180,000-square-foot Perot Museum of Nature and Science has had more than 1 million visitors since opening in December 2012.

The Plastiki demonstrated that the remarkable partnership between SMU and the Perot Museum will continue with the mutual dedication to shaping new generations who want to change the world through science, math and technology.

"The relationship between the Perot Museum and SMU has a long and productive history," says Anthony Fiorillo, paleontologist at the Perot Museum and an adjunct research professor at SMU. "The combination of energy and resources has enhanced the training of SMU students and fueled the success of the research and exhibits at the museum."

One of the longtime visionaries in this relationship, SMU Professor *Emeritus* James E. Brooks, says the museum and university together play a civic role in enhancing one of the nation's leading cities. Brooks served on the board of the Dallas Museum of Natural History, one of the Perot's predecessor institutions.

Brooks says, "Museums, in addition to educating children and the general public, also have the responsibility to generate new knowledge, because that makes the city a more intellectually vibrant place."

Historical Highlights

Two SMU students produced this 3D digitized image of a footprint from the dinosaur *Eubrontes glenrosensis,* named by Ellis W. Shuler, one of SMU's founding faculty members. The 3D image is on display at the Perot Museum.

1936

The Dallas Museum of Natural History is established in the historic Fair Park district as part of the Texas Centennial and is one of the first natural history museums in the region. A driving force behind this effort is Ellis W. Shuler, founder of SMU's geology department and namesake of the Shuler Museum of Paleontology.

1946

The Dallas Health Museum is founded in Dallas by a group chartered as the Dallas Academy of Medicine "to provide a common channel of enthusiastic effort for all the forces of health in Dallas and the Southwest."

1958

The Dallas Health Museum is renamed the Dallas Health and Science Museum.

1981

The Dallas Health and Science Museum is renamed The Science Place.

1995

The Dallas Children's Museum is founded and serves as a hands-on early childhood learning destination.

2006

A unique merger of the three museums, the Dallas Museum of Natural History, The Science Place and the Dallas Children's Museum, results in a new institution: Museum of Nature and Science at Fair Park.

2008

The five children of Ross and Margot Perot – Katherine Perot Reeves, Carolyn Perot Rathjen, Suzanne Perot McGee, Nancy Perot Mulford and Ross Perot, Jr. – announce a $50 million gift made in honor of their parents. It will fund a museum to be named the Perot Museum of Nature and Science.

2012

The Perot Museum opens December 1. Thousands of visitors, the Perot family, the mayor of Dallas and museum leadership celebrate this significant day in Dallas history.

Dinosaur discovered in 2006 – by Anthony Fiorillo, a paleontologist with the Perot Museum and an adjunct research professor at SMU – is designated a new species and named *Pachyrhinosaurus perotorum* in honor of the Perot family.

2013

The Perot Museum records more than 1 million visitors in July, just eight months after opening.

Alamosaurus and *Tyrannosaurus rex* fossils tower over visitors at the Perot Museum.

Created for the SMU Board of Trustees on the occasion of its evening at the Perot Museum of Nature and Science and in honor of its mutual commitment to shape new generations that will change the world.

September 12, 2013

World Changers Shaped Here

SMU

140403613