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AMERICAN MUSEUM OF NATURAL HISTORY OPENS NEW PERMANENT EXHIBIT OF GIGANTIC DINOSAUR

122-FOOT-LONG TITANOSAUR CAST SQUEEZES INTO THE MUSEUM

Generations of visitors have flocked to see the renowned blue whale and iconic *Tyrannosaurus rex* at the American Museum of Natural History. On January 15, the Museum will add another must-see exhibit on its fourth floor: a cast of a 122-foot-long dinosaur so new that it has not even been formally named by the scientists who discovered it. Paleontologists infer that this dinosaur, a giant herbivore that belongs to a group known as titanosaurs, weighed in at around 70 tons – as much as 10 African elephants. Since this titanosaur is too large to fit into the gallery, part of its 39-foot-long neck will extend out towards the elevator banks, welcoming visitors to the fossil floors.

The massive cast, created over six months by Research Casting International in Ontario, Canada in association with the Argentina's Museo Paleontológico Egidio Feruglio, is based on 84 fossil bones that were excavated in Argentine Patagonia in 2014. In total, scientists have discovered 223 fossil bones from six individuals at the site. The finds included a colossal 8-foot femur, or thigh bone, whose unique shape and size indicated to scientists that they discovered a new species – and one of the biggest dinosaurs ever found. One femur found at the site will be among five original fossils on temporary view with the titanosaur.

"We are pleased to present this awe-inspiring exhibit as yet another icon in an inspiring journey of discovery that the Museum offers throughout its galleries," said Ellen V. Futter, President of the American Museum of Natural History. "While the titanosaur itself is ancient, it nevertheless embodies and reflects the very modern, dynamic, and thrilling state of paleontology today. The Museum continues to be at the forefront of both research about the history of life on Earth and the interpretation of the very latest discoveries for audiences of all kinds. And, of course, a deeper knowledge of the past enriches our understanding of the present and informs our hopes for the future." 2

"Titanosaur fossils have been unearthed on every continent, and an abundance of discoveries in recent years has helped us appreciate the deep diversity of this group," said Michael Novacek, the Museum's Senior Vice President and Provost for Science.

The Discovery

The dinosaur on which the Museum's new cast is based was excavated in the desert near La Flecha – 135 miles west of Trelew, Patagonia – by a team from Argentina's Museo Paleontológico Egidio Feruglio. The team was led by José Luis Carballido and Diego Pol, who received his Ph.D. in a joint program between Columbia University and the American Museum of Natural History, in the lab of noted Museum paleontologist Mark Norell. The team was tipped off to the site in 2012 by a rancher who stopped by Museo Paleontológico to tell the scientists there about fossils on his land. The excavation team made several trips to the site over 18 months, building roads and removing part of a hill with bulldozers and other heavy machinery. Both Dr. Pol and Rubén Cúneo, Director of the Museo Paleontológico Egidio Feruglio, were in New York for the unveiling.

The fossils from the original discovery that will be on temporary display with the titanosaur are the femur (thigh bone) and forelimb (front limb) — including the humerus, ulna, radius, and scapula. Researchers use mathematical approaches to translate the length and thickness of the animal's limb bones, particularly the femur (thigh) and humerus (upper arm), into an approximation of its weight.

"Paleontology has become less geological and more biological in the last 20 years or so," said Mark Norell, Macaulay Curator in the Division of Paleontology and the division's chair. "We are asking entirely new and different sets of questions now. All of us are simply biologists who work on fossils. But we have an entirely new tool kit, which is what makes it so exciting."

Excavations at La Flecha have uncovered remains of six of these giant animals, all young adults, whose deaths happened at three distinct moments in time, anywhere from a few years to centuries apart. Among many herding animals, young adults may be isolated from the group and sometimes die of stress and hunger often near water sources. Scientists working at the site think this is one possible reason for the death of these titanosaurs, who would have lived in the forests of today's Patagonia around 100 million years ago, during the Cretaceous period.

The story of this new animal and its dramatic discovery, which is a BBC Production with PBS and THIRTEEN Productions LLC, will be the focus of **Nature: Raising the Dinosaur Giant** airing Wednesday, February 17, 2016, at 8pm EST/7pm CST on PBS.

On Exhibit

In preparation for this colossal new exhibit, the Museum closed the Miriam and Ira D. Wallach Orientation Center in September to remove the gallery's previous occupant: a life-sized – but, by comparison, diminutive – fleshed-out model of a juvenile *Barosaurus* that had been on display since 1996.

Similar to the *Barosaurus*, the new dinosaur is also a sauropod, a type of massive plant-eater with a whip-like tail and long neck — but a much, much bigger one. Based on the size of its front limb, scientists think this titanosaur would have stood 20 feet (about 6 meters) from the ground to its shoulder, or 46 feet (14 meters) tall with its neck held at a 45-degree angle. Even with its head and neck bowed, the Museum's titanosaur will almost touch the gallery's approximately 19-foothigh ceilings.

The life-sized skeleton on display doesn't include any real fossils, which are far too heavy to mount. Instead, its bones are lightweight 3D prints made of fiberglass. In addition to casts of the 84 bones discovered in Argentina, the skeleton includes "missing" bones modeled based on analysis of this titanosaur's close relatives.

The unveiling of the Museum's new dinosaur is part of a series of events, public programs, exhibitions, and digital offerings highlighting dramatic developments in paleontology. This spring, the Museum presents the new exhibition *Dinosaurs Among Us* (on view from March 21, 2016, through January 2, 2017), which will examine how one group of dinosaurs evolved into the fascinating creatures we call birds. Exploring topics ranging from flight to feathers, nests to wishbones, and brains to lungs, the exhibition will showcase remarkable new evidence for what scientists now call one of the best-documented evolutionary transitions in the history of life.

Paleontology at the Museum

The American Museum of Natural History's Division of Paleontology is home to one of the largest and most diverse collections of its kind in the world, with 6 million specimens including more than 5 million fossil invertebrates and nearly 1 million fossil vertebrates. Annual fieldwork in some of the richest fossil localities in the world continues today. Since 1990, Curators Michael Novacek and Mark Norell have led expeditions to the Gobi Desert with colleagues from the Mongolian Academy of Sciences, yielding discoveries of dinosaur, bird, and mammal fossils.

Generous support for The Titanosaur exhibit has been provided by the Susan S. and Kenneth L. Wallach Foundation.

3

The AMNH-Mongolian Academy of Sciences expeditions are generously supported by the Margaret and Will Hearst Paleontological Research Fund.

The Museum gratefully acknowledges the **Richard and Karen LeFrak Exhibition and Education Fund** for its support of *Dinosaurs Among Us*.

Dinosaurs Among Us is proudly supported by Chase Private Client.

AMERICAN MUSEUM OF NATURAL HISTORY (AMNH.ORG)

The American Museum of Natural History, founded in 1869, is one of the world's preeminent scientific, educational, and cultural institutions. The Museum encompasses 45 permanent exhibition halls, including the halls of the Rose Center for Earth and Space and the Hayden Planetarium, as well as galleries for temporary exhibitions. It is home to the Theodore Roosevelt Memorial, New York State's official memorial to its 33rd governor and the nation's 26th president, and a tribute to Roosevelt's enduring legacy of conservation. The Museum's five active research divisions and three cross-disciplinary research centers support approximately 200 scientists, whose work draws on a world-class permanent collection of more than 33 million specimens and artifacts, as well as specialized collections for frozen tissue and genomic and astrophysical data, and one of the largest natural history libraries in the world. Through its Richard Gilder Graduate School, it is the only American museum authorized to grant the Ph.D. degree and the Master of Arts in Teaching (MAT) degree. Both the Ph.D. and the MAT are the only such non-university, museum-based graduate programs in the United States. Annual attendance has grown to approximately 5 million, and the Museum's exhibitions and Space Shows can be seen in venues on five continents. The Museum's website and collection of apps for mobile devices extend its collections, exhibitions, and educational programs to millions more beyond its walls. Visit amnh.org for more information.

Hours

The Museum is open daily, 10 am-5:45 pm. The Museum is closed on Thanksgiving and Christmas.

Admission

Museum admission is free to all New York City school and camp groups.

Suggested general admission, which supports the Museum's scientific and educational endeavors and offers access to the Museum's 45 halls including the Rose Center for Earth and

4

Space, is \$22 (adults) suggested, \$17 (students/seniors) suggested, \$12.50 (children) suggested. All prices are subject to change.

The Museum offers discounted combination ticket prices that include suggested general admission plus special exhibitions, IMAX or 3D films, and Space Shows.

- Museum Plus One includes one special exhibition, IMAX or 3D film, or Space Show: \$27 (adults), \$22 (students/seniors), \$16 (children)
- Museum Supersaver includes all special exhibitions, IMAX or 3D film, and Space Show: \$35 (adults), \$28 (students/seniors), \$22 (children)

Visitors who wish to pay less than the suggested Museum admission and also purchase a ticket to attend a special exhibition, IMAX or 3D film, or Space Show may do so on-site at the Museum. To the amount they wish to pay for general admission, they add \$25 (adults), \$20.50 (students/seniors), or \$13.50 (children) for a Space Show, special exhibition, or IMAX or 3D film.

Public Information

For additional information, the public may call 212-769-5100 or visit the Museum's website at amnh.org.

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No. 5