



*For Immediate Release*

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**WORLD'S FIRST VOLUNTARY GORILLA BLOOD PRESSURE READING**

*Veterinary leap forward through collaboration with Zoo Atlanta, Georgia Tech, Emory and a 300-pound great ape*

**ATLANTA – November 10, 2009** – Zoo Atlanta recently became the first zoological institution in the world to obtain voluntary blood pressure readings from a gorilla. This groundbreaking stride was made possible by the Gorilla Tough Cuff, a blood pressure reading system devised through partnership with the Wallace H. Coulter Department of Biomedical Engineering at the Georgia Institute of Technology and Emory University. Created as a senior design project by Georgia Tech undergraduates David Sotto, Nisha Bhatia, Stephanie Drewicz and Scott Seaman, the prototype has now been successfully tested on one of Zoo Atlanta's 22 western lowland gorillas.

The students had guidance from Hanjoong Jo, the Ada Lee and Pete Correll Professor in Biomedical Engineering and the Division of Cardiology; and Professor Franklin Bost, the Coulter Department director of design instruction.

"Zoo Atlanta is home to the nation's largest collection of gorillas, so there is an ongoing responsibility to contribute to the zoological community's understanding of their care," said Dennis Kelly, President and CEO. "We are proud to have spearheaded an effort that will ultimately benefit gorillas living in captive settings around the world."

The Gorilla Tough Cuff operates in the same manner as the mechanism familiar to humans, with the patient slipping an arm into a cuff. As the cuff inflates, the blood pressure reading is measured and displayed on a monitor. The student design team's biggest set of challenges, however, was constructing a durable, comfortable cuff large enough to fit an adult male gorilla weighing upwards of 300 pounds.

Once the prototype was complete, the Tough Cuff had its first tester: Ozzie, a 48-year-old male western lowland gorilla. Gorillas aren't typically keen on the idea of inserting their arms into inflatable cuffs: Ozzie's accomplishment is the result of months of patience and diligent voluntary positive reinforcement training on the part of Zoo Atlanta's Primate Team.

One of four geriatric gorillas living at the Zoo (the others are Shamba, 50; Choomba, 48; and Ivan, 47), Ozzie is at an age where he may be subject to health concerns similar to those experienced by mature humans. Cardiac disease is the leading cause of mortality in adult male gorillas living in captive settings, and the new system will enable veterinarians to more effectively monitor precursory signs such as high blood pressure.

"This is a great step forward in the medical management and care of captive gorillas," said Dr. Sam Rivera, Associate Veterinarian at Zoo Atlanta. "Our Veterinary and Primate Teams are extremely fortunate to have the biomedical engineering department at Georgia Tech and Emory University as a resource."

The Gorilla Tough Cuff has already been demonstrated for veterinarians and animal care professionals from numerous other accredited zoos. The device could ultimately prove invaluable to the more than 100 institutions around the world currently housing the species.

#### **About Zoo Atlanta**

An accredited member of the Association of Zoos and Aquariums (AZA), Zoo Atlanta inspires value and preservation of wildlife through a unique mix of education and outdoor family fun. From well-known native wildlife to critically endangered species on the brink of extinction, the Zoo offers memorable close encounters with more than 1,000 animals from around the world. The Zoo's newest attraction, Boundless Budgies: A Parakeet Adventure, opened in April 2009. The interactive new experience is the largest of its kind in the Southeast. Zoo Atlanta is also the proud home of Xi Lan, the only giant panda cub born in the U.S. in 2008. Other highlights include the nation's largest collection of great apes and a global center of excellence for the care and reproduction of vanishing amphibians and reptiles. Zoo Atlanta is open daily with the exceptions of Thanksgiving and Christmas Day. Keeper talks, interactive wildlife shows, education programs and special events run year-round. For more information, call 404.624.WILD or go to [zooatlanta.org](http://zooatlanta.org).

#### **About Georgia Tech**

The Georgia Institute of Technology is one of the nation's premier research universities. Ranked seventh amongst U.S. News & World Report's top public universities, Georgia Tech's more than 19,000 students are enrolled in its Colleges of Architecture, Computing, Engineering, Liberal Arts, Management and Sciences. Georgia Tech is among the nation's top producers of women and African American engineers. The Institute offers research opportunities to both undergraduate and graduate students and is home to more than 100 interdisciplinary units.

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