

New American Institute of Rhinoceros Science Focused on Saving Rhinos

The Center for Conservation and Research of Endangered Wildlife (CREW) at the Cincinnati Zoo and Botanical Garden in Cincinnati, Ohio; The Wilds in Cumberland, Ohio; Disney's Animals, Science and Environment in Orlando, Fla.; George Mason University; the South-East Zoo Alliance for Reproduction and Conservation; and Stellenbosch University in South Africa formed the American Institute of Rhinoceros Science (AIRS)—a model for saving species with *ex situ* science. This new initiative was made possible by a National Leadership Grant from the Institute of Museum and Library Services (IMLS).

“By bringing together a diverse team of the brightest minds in rhino science, I am confident that we can overcome the challenges to sustaining thriving rhino populations within our nation's zoos,” said Dr. Terri Roth, vice president of conservation and science and director of CREW.

The team will focus on the high priority research needs of rhinos in accredited facilities that were identified by the Association of Zoos and Aquariums' Rhinoceros Research Council in 2019. These priorities are: 1) physical fitness and its relation to health, 2) iron storage in browsing rhinos, 3) reproductive success, and 4) behavioral and environmental factors that can maximize rhino well-being.

“The International Rhino Foundation



(IRF) applauds the commitment and efforts of these individuals and organizations working to save the five species of rhinos,” said Nina Fascione, IRF's executive director. “Furthering the understanding of these magnificent animals is essential to their survival, and we look forward to applying the knowledge gained to populations in the wild for the benefit of future generations.”

SEZARC is a group of conservation facilities focusing on solutions for reproductive challenges in order to support self-sustaining populations of endangered species in managed care and in the wild.

“AIRS' approach of drawing on collective expertise and addressing challenges in a comprehensive manner meshes perfectly with SEZARC's collaborative, holistic methods for tackling reproductive issues,” said Dr. Lara Metrione, SEZARC research associate.

AIRS recognizes that the four research priorities that it will address are inter-related and should not be studied in isolation. The scientists will, over three years, conduct research within each pillar on overlapping subjects and examine the effect across all pillars. SEZARC scientists have been working in the areas of rhino behavior and reproduction for nearly 20 years and have been increasingly engaged in developing methods for monitoring and evaluating animal wellbeing over the last decade.

Data collected from all AIRS studies will be compiled in a centralized database accessible to all AIRS members.

“This kind of close collaboration, transparency, and data-sharing is uncommon in the scientific arena, but cross-study analyses are essential for maximizing what can be learned from multidisciplinary, multi-institutional research in which unanticipated discoveries could provide the most valuable answers,” said Roth.

“SEZARC is excited for the opportunity to make truly significant advances in our understanding of rhinos and best practices for rhino management,” said Metrione. Ultimately, AIRS will provide affordable and feasible management recommendations to veterinarians and animal care staff at the 74 AZA-accredited facilities caring for rhinos. Managed rhino populations are becoming increasingly important in light of the tremendous illegal poaching pressures on wild rhinos. Rhinos are poached for their horns which are used in traditional Chinese medicine and also as a status symbol of wealth and success in some Asian cultures.

“Accredited zoos are committed to saving wildlife from extinction while providing the highest standard of animal care. AIRS will set a precedent for saving species in zoos with science, a model with value for all zoo species at risk in the wild,” said Roth.