- Exhibit galleries at museums in the Midwest & South
- Outreach to youth organizations throughout the Midwest and South
- Research on how kids and adults learn about evolution
Exhibit Museum of Natural History, University of Michigan

University of Kansas Natural History Museum & Biodiversity Center

Sam Noble Oklahoma Museum of Natural History, University of Oklahoma

Science Museum of Minnesota

Texas Memorial Museum, University of Texas at Austin

University of Nebraska State Museum
Statewide 4-H youth organizations

- Iowa
- Minnesota
- Nebraska
- Texas
- Wyoming
Variation
“No one supposes that all individuals of the same species are cast in the very same mould.”
Darwin, On the Origin of Species

Inheritance
“. . . the inheritance of Every character whatever as the rule, and non-inheritance as the anomaly.”
Darwin, On the Origin of Species

Selection
“This principle of preservation, I have called for the sake of brevity, Natural Selection.”
Darwin, On the Origin of Species

Time
“It might require a long succession of ages to adapt an organism to some new and peculiar line of life . . .”
Darwin, On the Origin of Species

HIV

Charles Wood
Director, Nebraska Center for Virology
& Lehr/3M Professor of Biological Sciences
University of Nebraska
The Evolution of Friends and Enemies

Biologist Cameron Currie has discovered how certain species of ants evolve in partnership with the fungi they farm, with pests that attack their crops, and with bacteria that defend against the pests.

This picture lets you explore the amazing world of fungus crops that some species of ants raise. Notice the ants with fungal tufts. You are looking at the base of the fungus crop. The ants produce evocative mushrooms on this base that are eaten by the ants. Now look at the bottom of the picture. You can see a pest that attaches to the crop. For the pests, it is a meal. Bacteria that grow on the surface of the ants’ bodies. They produce an antibiotic that stops the crop pest.

These partners have all evolved together. Each partner of the farming ant depends on a single fungus crop species for food. The fungus crop species can survive only with the help of the ants. Cameron Currie studies the relationships among these three species to get a better understanding of how each combines to create a place.

Ant & Partners
Cameron Currie
Associate Professor of Bacteriology
University of Wisconsin, Madison
Fly
Kenneth Kaneshiro
Director, Center for Conservation Research & Training
University of Hawai`i at Manoa
Human & Chimp

Svante Pääbo, Director,
Max-Planck-Institute for Evolutionary Anthropology

Henrik Kaessmann, Professor,
University of Lausanne, Switzerland
Whale
Philip Gingerich
Professor of Geological Sciences
University of Michigan
Challenged by Creationists, Museums Answer Back

By CORNELIA DEAN

ITHACA, N.Y. — LouisDeLucas, a retired biology professor, was volunteering as a docent at the Museum of the Earth here when she was confronted by a group of seven or eight people, creationists eager to challenge the museum exhibitions on evolution.

They probed Dr. DeLucas with questions about everything from techniques for dating fossils to the second law of thermodynamics. Their questions seemed so thick and fast that she found it hard to reply. After about 45 minutes, "I told them I needed to take a break," she recalled. "My voice was dry." That encounter and others like it provided the impetus for a training session here in August. Dr. DeLucas and scores of other volunteers and staff members from the museum and elsewhere crowded into a meeting room to hear advice from the museum director, Warren D. Allman, on ways to deal with visitors who reject settled precepts of science on religious grounds.

Similar efforts are under way or gaining momentum around the country as science museums and other institutions struggle to confront challenges to the theory of evolution. They say they are growing common and often aggressive.

One, called the Creation Education Council, has even organized visits to the Denver Museum of Nature and Science. Participants hear lectures and get a chance to meet creationists. Another group, called the Creation Museum, in Kentucky, has organized an educational program under the same umbrella.

Dr. DeLucas is working on evolving ways to answer creationists, just as the Teaching Tolerance Project has worked to answer those who might challenge the museum's exhibitions on topics such as AIDS or the Holocaust. The project's guide, "The Bias Project," provides educators with a list of possible questions and answers they might use when confronted by creationists.

"The goal is to understand the context of the questions and to respond in a way that is both respectful and accurate," the guide says. "The goal is to help people understand the scientific evidence for evolution and to challenge their misconceptions in a way that is non-confrontational and non-argumentative."

Dr. DeLucas says she is not always successful in her efforts. "I've had people say, 'You can't teach evolution unless you believe in it,'" she said. "And I say, 'I don't believe in it, but I can teach it.'"
- Innovation
- Collaboration
- Strategic Impacts
Explore Evolution

Judy Diamond, P.I.

This material is based upon work supported by the National Science Foundation under Grant No. 0229294. Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation (NSF).