

Pioneer Hall of Fame: Brian Fisher, class of 1983



For many years scientists believed that ants evolved from wasps at about the time dinosaurs roamed the earth 100 million years ago. In 2000 Brian Fisher may have found the “missing link” between ants and their evolutionary wasp ancestors. While on a research expedition on the island of Madagascar (off the east African coast), Brian examined a rotting log. As Brian told the New York Times, “I pushed through an area that

was soft and all these ants came storming out and biting my hand. I yelled a scream of joy.”

What Brian found was a new species of *Adetomyrma* ants. These ants lacked the usual waist-like constrictions between the back part of the ant's body, called the gaster, and the thorax. This suggested the link between modern ants and wasps. Brian also made the rather grisly discovery that the adult ants from this colony apparently suck the blood of their own young for food, causing him to dub them “Dracula” ants.

Brian's discovery has led to much additional research in his role as Assistant Curator of Entomology at the California Academy of Sciences in San Francisco. This research includes DNA studies to determine the ants' genetic relationship to other ants. He is also coordinating studies with other scientists.

Brian's research is extremely important as development continues to eliminate wilderness areas. Species inventories, such as those Brian conducts, help determine what areas are most critical to preserve. On Madagascar, for example, the varied ant populations might necessitate four or five different preserves in order to preserve ants' biodiversity. Brian told *California Wild* magazine, “It's kind of like a rescue mission for biological information. We want to figure out what the amazing pieces of the diversity puzzle are before we lose them.”

Brian's work has taken him to many parts of the world, including Panama in Central America and Gabon in Africa, in addition to Madagascar. He is also the inventor of a collection device used to hold specimens known as a “mini-Winkler” that is now used by many entomologists in the field.

Brian holds a B.A. in Biology from the University of Iowa, an M.S. in Biology from the University of Utah, and a Ph.D. in Entomology from the University of California at Davis. He lives in San Francisco.