Dr. Burney's research has focused on endangered species, paleoenvironmental studies, and causes of extinction. He has over 40 years of practical experience in conservation, including serving as a technical consultant for many conservation organizations and government agencies.

Prior to moving to Kaua'i in 2004 to become Director of Conservation at the National Tropical Botanical Garden, he was a Professor at Fordham University in New York for 15 years. In 2006 he was awarded a Guggenheim Fellowship to write a book on his work at Makauwahi Cave on Kaua'i (*Back to the Future in the Caves of Kaua'i: A Scientist's Adventures in the Dark.* Yale University Press). His research has been featured on National Geographic Television, Discovery Channel, Hawaii Public Television, NOVA, and NPR.