

SAN DIEGO NATURAL HISTORY MUSEUM

Cerutti Mastodon Site Author Bios

Thomas A. Deméré, Ph.D.
Curator of Paleontology and Director of PaleoServices
San Diego Natural History Museum



Dr. Tom Deméré has worked as a professional paleontologist since 1974, first as a micropaleontologist in the petroleum industry and then as a paleontologist with the [San Diego Natural History Museum](#) (theNAT) involved with collecting, curating, and interpreting fossils.

Since 1994, Dr. Deméré has served as curator of paleontology and director of PaleoServices at theNAT. He is the author of numerous scientific and popular articles dealing with the paleontological history of southern California and the evolutionary history of marine mammals.

Since 1981, Dr. Deméré has also worked as an environmental consultant to various planning firms, municipalities, and land development companies. In this last capacity, Dr. Deméré's work has ranged from initial resource assessments, to impact evaluation, to actual impact mitigation. Although the majority of this work has been with residential and commercial developments within San Diego County, it has also involved a number of water, sewer, and natural gas pipeline and utility transmission line projects in southern California.

Dr. Deméré holds a Ph.D. in biology from the University of California, Los Angeles, a M.S. in geology from the University of Southern California, and a B.S. in geology from San Diego State University.

Steven R. Holen, Ph.D.

**Director of Research, Center for American Paleolithic Research
Research Associate, Department of Paleontology, San Diego Natural History Museum**



Dr. Steven Holen has worked as a professional archaeologist since 1972. He held positions at the Nebraska State Historical Society, University of Nebraska State Museum, Dawson County Museum (NE), University of Kansas Museum of Anthropology, and U. S. Natural Resources Conservation Service. His most recent position was curator of archaeology at the Denver Museum of Nature & Science from 2001-2013. He joined the Center for American Paleolithic Research in 2013 as director of research. Dr. Holen is the author of numerous scientific articles, popular articles and cultural resource management reports, dealing with a wide range of archaeological topics. He has extensive archaeological field experience and museum experience in the Great Plains.

For the past 28 years, Dr. Holen has focused his research on the question of how and when humans first arrived in North America. He has excavated numerous mammoth sites in the Great Plains that have evidence of humans modifying mammoth limb bone for marrow extraction and/or tool production. This evidence suggests that humans have been in the Great Plains for at least 30,000 to 40,000 years. Most recently, he and his wife, Kathleen Holen, have published two book chapters that provide evidence of some of the earliest humans in North America based on their mammoth bone research. They continue their research with an active field program and collections-based research in museums through the [Center for American Paleolithic Research](#).

Steven Holen holds a Ph.D. in anthropology from the University of Kansas. Additionally, he received his M.S. and B.S. in anthropology from the University of Nebraska.

Publications include series on *Great Plains Paleoindian Archaeology* and *Ice Age Humans in the Americas*, both of which he has edited with his wife, Kathleen Holen.

Daniel C. Fisher, Ph.D.
Director and Curator, Museum of Paleontology
Claude W. Hibbard Collegiate Professor of Paleontology
Professor, Department of Earth and Environmental Sciences
Professor, Department of Ecology and Evolutionary Biology
University of Michigan

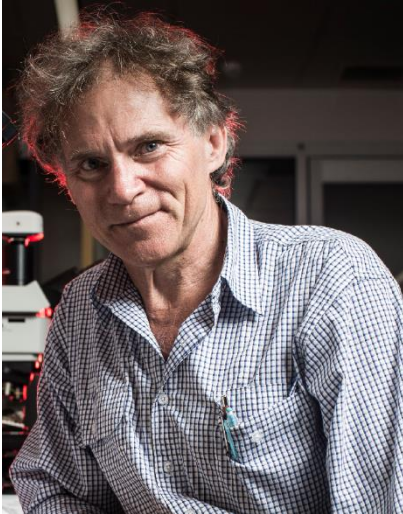


Dr. Daniel Fisher is a professor of paleontology at the University of Michigan, where he also serves as the director of the Museum of Paleontology. Since coming to Ann Arbor in 1979, a major focus of his research has been the paleobiology and extinction of mastodons and mammoths. To learn more about the lives of these animals, he developed procedures for analyzing their tusks, which contain detailed records of their growth, diets, reproductive histories, and environments. He has also conducted controlled excavations of sites where mastodon and mammoth remains have been found, evaluating the circumstances of their deaths and early postmortem histories and assessing the nature and extent of human interaction with these species.

One of the indicators of human activity that Dr. Fisher has encountered at mastodon and mammoth sites in North America, as well as at mammoth sites in the Siberian Arctic, is a distinctive pattern of broken bone reflecting activities such as marrow processing and acquisition of raw material for tool-making. He has made extensive use of 3D surface models to document specimens of broken bone.

Dr. Fisher earned his Ph.D. as well as his M.S. and B.A. in geological sciences at Harvard University.

Richard Fullagar, Ph.D.
Professorial Research Fellow
Centre for Archaeological Science
University of Wollongong, Australia



Dr. Richard Fullagar is an Australian archaeologist with a special interest in the function of stone tools. After completing his Ph.D. in 1986, he held Australian Research Council (ARC) postdoctoral and senior fellowships at the Australian Museum, and later research positions at the University of Sydney. He has led field trips and excavated sites in Australia, Papua New Guinea, and the Philippines. He has also studied archaeological tools from Eurasia, Africa, and Pacific countries. Richard has worked closely with Aboriginal communities, and was awarded the inaugural Bruce Veitch Award for Excellence in Indigenous Engagement (2007). He was a founding director of an archaeological consulting company from 2007-2013, working mostly in the Pilbara, northwestern Australia. Recent major ARC projects include his role as a chief investigator to analyse the function of flaked and ground tools from Madjedbebe, the earliest archaeological site in Australia.

In 2014, Dr. Fullagar was appointed Professorial Research Fellow in the [Centre for Archaeological Science](#), at University of Wollongong to study tool function at early human sites in eastern Asia, including the Denisova Cave in Siberia and Liang Bua in Indonesia. He has published more than 200 papers (including many popular archaeology articles) and has written numerous consulting reports. Dr. Fullagar is the elected President of the [Association of Wear and Residue Analysts](#), founded in Portugal in 2012, to bring together specialists who deal with wear and residue traces on archaeological artefacts.

Dr. Fullagar holds a Ph.D. in archaeology from La Trobe University and a B.A. in ancient Greek and economics from the University of Melbourne.

**James B. Paces, Ph.D.
Research Geologist
Geosciences and Environmental Change Science Center
U.S. Geological Survey**

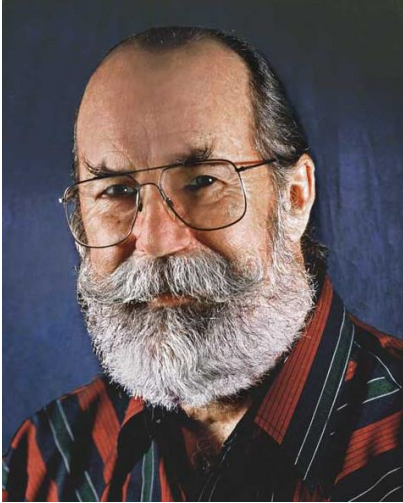


Dr. James Paces is a research geologist at the U.S. Geological Survey (USGS) in Denver, Colorado. He received a Ph.D. in geology in 1988 from Michigan Technological University by investigating the petrology of 1.1 billion-year-old Midcontinent Rift flood basalts. After post-doctoral appointments at the University of Tennessee (Sr- and Nd-isotopes in Apollo-17 lunar basalts) and USGS (U-Pb isotopes in Superior Province granulite nodules and U-Pb dating of Duluth Complex zircons), he was hired as a research hydrologist by the USGS Yucca Mountain Project Branch in 1992. Here Dr. Paces was responsible for U-series dating of Quaternary soils, spring deposits, and vadose minerals, as well as use of U- and Sr-isotopes as natural hydrologic tracers and indicators of water/rock reaction.

Since the proposed high-level radioactive waste repository was abandoned in 2009, Dr. Paces continued to date Quaternary materials (soils, tufas, corals, speleothems, and bone) and investigate radiogenic isotopes in water and hydrogenic deposits in a variety of settings.

Dr. Paces has authored or co-authored more than 45 publications in international scientific journals as well as a number of USGS reports. He was asked to date the Cerutti Mastodon after working on the Snowmastodon Project near Snowmass Village, Colorado, in collaboration with scientists at the Denver Museum of Nature and Science.

**George T. Jefferson
Paleontologist Emeritus
Colorado Desert District
California Department of Parks and Recreation**



George Jefferson currently serves as Paleontologist Emeritus for the Colorado Desert District of the California Department of Parks and Recreation. The district encompasses parks within southeastern California, including Anza-Borrego Desert State Park with its rich late Tertiary through Quaternary, marine and terrestrial vertebrate paleontologic record.

For the first half of his professional career George was curator of the Rancho La Brea paleontology collections at the George C. Page Museum in Los Angeles, California. From 1993 to 2011, he directed the paleontology branch of the Colorado Desert District Stout Research Center, and designed and implemented the first paleontologic resources management program for California State Parks.

George earned his undergraduate and master degrees in geology and paleontology at the University of California, Riverside, finishing in 1968. His research interests have centered on Pliocene and Pleistocene fossil vertebrates. He has written numerous scientific papers on the paleontology of the southwestern U.S., and is senior editor of the popular text *Fossil Treasures of the Anza-Borrego Desert*.

Kathleen Maule Holen M.S., M.A.
Administrative Director, Center for American Paleolithic Research
Research Associate, Department of Paleontology, San Diego Natural History Museum

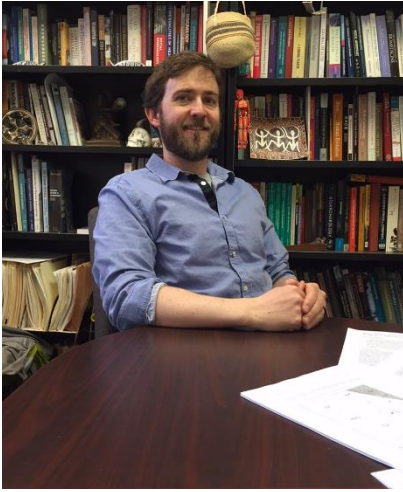


Kathleen Maule Holen received an M.A. in archaeology with distinction in 2009 from the University of Exeter, UK. She previously received an M.S. from the University of Michigan in 1985 and retired as a Nurse Practitioner in 2010 to begin a career in archaeology. Kathleen founded the Center for American Paleolithic Research in 2012 and continues as the institution's administrative director.

Kathleen is a research associate with the San Diego Natural History Museum and has participated in the research of Steven Holen since their marriage in 2001. Together, Kathleen and Steven continue to investigate early human dispersals into the Americas. In addition, Kathleen studies prey animal bone modification and its implications for human behavior, expedient bone tool manufacture and use, cognitive archaeology, and the archaeological importance of dog domestication.

Kathleen has regularly presented papers and posters at annual archaeological conferences and is co-author on two book chapters that document evidence of the early peopling of the Americas. She has presented and published on archaeological topics for children. Along with Steven, she has lectured to numerous avocational archaeological societies as a participant in the lecture series sponsored by the Archaeological Institute of America.

Jared M. Beeton, Ph.D.
Professor of Physical Geography
Adams State University



Dr. Jared Beeton is a professor of physical geography at Adams State University in the San Luis Valley of Colorado. Dr. Beeton's research focuses on soils and geomorphology in mountain and plains environments.

Dr. Beeton spends much of his time in the mountains of Colorado studying glacial and fluvial landforms, skiing or fly-fishing depending on the season, and playing with his three-year-old son Oliver.

Dr. Beeton holds a M.S. in earth sciences from the University of Northern Colorado and a Ph.D. in geography from The University of Kansas.

Richard A. Cerutti
PaleoServices Field Paleontologist
San Diego Natural History Museum



Richard Cerutti has worked as a professional paleontological monitor and fossil preparator since 1981. He has more than 28 years of experience in recovering fossils from mass-excavation projects in San Diego County and has developed special procedures to effectively communicate with heavy equipment operators concerning fossil salvage activities.

Richard has attended several technical courses on preparing fossil vertebrates and has 10 years of experience in supervising fossil preparators. Additionally, Richard teaches courses on local paleontology at the San Diego Natural History Museum and leads geologic and paleontologic field trips for the general public.

Adam N. Rountrey, Ph.D.
Research Museum Collection Manager, Museum of Paleontology
University of Michigan



Dr. Adam Rountrey is a professional paleontologist at the University of Michigan Museum of Paleontology. Since 2003, his research has largely focused on the use of incremental growth lines in animal hard tissues to understand ecology, biology, and climate. Dr. Rountrey has authored numerous scientific articles on the biology of Pleistocene mammoths and mastodons and the influence of environmental factors on the growth of modern fishes.

Working as a collection manager at the University of Michigan Museum of Paleontology since 2013, Dr. Rountrey is responsible for the fossil vertebrate and plant collections. He has focused on developing effective methods for acquisition and dissemination of detailed 3D surface models to make the museum collections more accessible to researchers and the public. This work has included designing an automated photogrammetry system, developing a web-based 3D model viewer, and managing development of the museum's online fossil repository website.

Dr. Rountrey holds a Ph.D. and M.S. in geology from the University of Michigan and a B.S. in environmental studies from Randolph-Macon College.

**Lawrence Vescera, Ph.D.
Volunteer Paleontologist
California State Parks Colorado Desert District Stout Research Center**



Dr. Vescera has been involved with archaeology and paleontology since 1968, but has spent most of his professional career in other areas including research, administration, and teaching. After beginning graduate school in archaeology, he changed fields and became a research psychologist, working as a project director for federally-funded research programs. His teaching career included assignments in political economy, economics, and mathematics. Dr. Vescera has served as a committee consultant to the California State Assembly and on the operational planning staff of the U.S. Commissioner of Education, in addition to serving as a policy analyst for the Education Commission of the State.

Later in his career, Dr. Vescera served as research director for the Foster Research Corporation. He has authored several books and articles dealing mostly with economics and behavioral studies. After retiring in 2010, Dr. Vescera worked as a volunteer paleontologist at the California State Parks Colorado Desert District Stout Research Center in Borrego Springs.

Dr. Vescera earned his Bachelor's degree in anthropology from California State University Fullerton, did graduate work in archaeology at Arizona State University, earned a Masters and Doctorate in policy analysis from Stanford University, and a second Doctorate in political economy from the Claremont Graduate University.