# **COMPARATIVE ANTHROPOGENY:**

# EXPLORING THE HUMAN-APE PARADOX

A VIRTUAL CARTA SYMPOSIUM

## **BIOSKETCHES**

## Alyssa Crittenden, Symposium Co-Chair, University of Nevada, Las Vegas



Alyssa Crittenden is Associate Professor, Department of Anthropology, and Adjunct Associate Professor, School of Medicine, University of Nevada, Las Vegas. She is a human behavioral ecologist and nutritional anthropologist who has worked with the Hadza hunter-gatherers of Tanzania since 2004. Her primary research interest is the study of the evolution of human behaviors as a function of socioecological context. Her other research foci include: evolution of the human diet; evolution of childhood; children's foraging and food sharing; nutritional and behavioral correlates of cooperative breeding; life history theory.

# Pascal Gagneux, Symposium Co-Chair, University of California, San Diego



Pascal Gagneux is Professor of Pathology and Anthropology, UC San Diego, and Associate Director, Center for Academic Research and Training in Anthropogeny (CARTA). He has a strong interest in the evolutionary mechanisms responsible for generating and maintaining primate molecular diversity. The Gagneux Lab studies how this diversity affects susceptibility to infection and reproductive compatibility by comparing cell surface molecules, glycans (sugar chains), in closely related primates species. Past pathogen regimes have shaped these molecules in different species and sexual selection (via cryptic female choice) might have contributed to reproductive incompatibility and speciation due to female immune rejection of sperm or fetal cells decorated with incompatible glycans.

# Ajit Varki, University of California, San Diego



Ajit Varki is Distinguished Professor of Medicine and Cellular & Molecular Medicine, UC San Diego, Adjunct Professor, Salk Institute, Co-Director, Center for Academic Research and Training in Anthropogeny (CARTA), Co-Director, Glycobiology Research and Training Center (GRTC), Executive Editor of *Essentials of Glycobiology* (Cold Spring Harbor, 2009), Co-author of *Denial* (Hachette, 2013), and Member of the National Academy of Medicine and the American Academy of Arts and Sciences. He served as President, Society for Glycobiology, Editor-in-Chief, *Journal of Clinical Investigation*, and President, American Society for Clinical Investigation. His research focuses on sialic acids in biology, evolution and disease - in relation to explaining human origins.

## **BIOSKETCHES**

#### Barry Bogin, Loughborough University, UK



Barry Bogin is Professor Emeritus, Biological Anthropology, School of Sport, Exercise and Health Sciences, Loughborough University, UK, and William E Stirton Professor Emeritus of Anthropology of the University of Michigan-Dearborn. He received his Ph.D. in anthropology from Temple University in 1977. Bogin has expertise in human physical development, nutritional ecology, evolutionary biology, Maya people, and human adaptation. His research focus is how Social-Economic-Political-Emotional (SEPE) forces influence human physical development. He has authored more than 230 books, articles, book chapters, and popular essays, including *Patterns of Human Growth*, 3rd edition (2021), and *Human Variability and Plasticity, Human Biology: An Evolutionary and Biocultural Approach*, and *The Growth of Humanity*.

## Margaret Schoeninger, University of California, San Diego



Margaret Schoeninger is Distinguished Professor Emerita of Anthropology, UC San Diego, a Research Archaeologist in the Glenn Black Laboratory of Archaeology at Indiana University, and Co-Director, Center for Academic Research and Training in Anthropogeny (CARTA). She has done fieldwork in North America, Mexico, Pakistan, India, Kenya, and Tanzania as well as laboratory research on carbon, nitrogen, and oxygen stable isotope ratio analysis in biological tissues and food component analysis of traditional foods. Her major interest is in the evolution of human diet particularly as it informs our understanding of the appearance and evolution of the human lineage.

## Linda Marchant, Miami University, Ohio



Linda Marchant is Professor Emerita and founding chair, Department of Anthropology at Miami University (Ohio). Her research interests include behavioral primatology, laterality of function (handedness), African apes, and visual anthropology. She is the author of more than 70 book chapters and journal articles, co-editor of *Annals of the New Academy of Sciences* (2013), and *Behavioural Diversity in Chimpanzees and Bonobos* (Cambridge University Press, 2002), and *Great Ape Societies* (Cambridge University Press, 1996). She has been a Visiting Research Fellow at the Centre for Social Learning and Cognitive Evolution (U. of St. Andrews), Visiting Fellow at Leverhulme Centre for Human Evolutionary Studies (U. of Cambridge), Research Associate (U. of Cambridge), Visiting Scholar (UC San Diego), and Visiting Professor (CARTA).

# Robert Kluender, University of California, San Diego



Robert Kluender is Professor of Linguistics, UC San Diego. The underlying question addressed in his research is the extent to which the natural limitations of human cognition shape and constrain the human language system: how much of linguistic competence can be reduced to facts of performance, and how language is represented and processed in the brain. Kluender addresses these questions in experimental studies of language processing focused on the interaction of working memory, semantics and pragmatics, and language structure, particularly as it unfolds in real time. He heads the Language and Brain Laboratory (UC San Diego), serves on the advisory board of the Center for Research in Language (UC San Diego), and periodically serves on the language review panel for the National Institutes of Health.

## **BIOSKETCHES**

## Tetsuro Matsuzawa, Kyoto University Institute for Advanced Studies, Japan



Tetsuro Matsuzawa is Distinguished Professor, Kyoto University Institute for Advanced Study (KUIAS), Japan. He studies chimpanzee intelligence in the laboratory and the wild. His laboratory work, known as "Ai project," focuses on the language-like skills and the concept of numbers established in a two chimpanzees. He studies wild chimpanzees at Bossou, Guinea, West Africa, where his long-term research revealed interesting topics like handedness of use hammer stones, critical period of learning nut-cracking, and "education by master-apprenticeship." He has received prestigious awards including the Purple Ribbon Medal of Honor (Japan) and the Jane Goodall Award. He has published extensively, including *Cognitive Development in Chimpanzees* (Springer, 2006) and *Chimpanzees of Bossou and Nimba* (Springer, 2011).

#### Kristen Hawkes, University of Utah



Kristen Hawkes is Distinguished Professor of Anthropology, University of Utah. Her principle interests are the evolutionary ecology of hunter-gatherers and human evolution. She studies age and sex differences in behavior, using comparisons between people and other primates, paleoanthropology and evolutionary modeling to develop and test hypotheses about the evolution of human life histories and social behavior. Hawkes has pursued ethnographic fieldwork in highland New Guinea, Amazonia, and eastern and southern Africa. She is a member of the Scientific Executive Committee of the Leakey Foundation, the American Academy of Arts and Sciences, and the National Academy of Sciences.

# **Todd Pruess, Emory University, Ohio**



Todd Preuss is Associate Research Professor, Division of Neuropharmacology and Neurologic Diseases, Yerkes National Primate Research Center of Emory University, and Professor of Pathology, Emory University School of Medicine, as well as a Faculty Affiliate in the Department of Anthropology, Emory University. His research has focused on the organization and evolution of the primate cerebral cortex, particularly the visual and frontal cortex. Recently, his research has concentrated on identifying evolutionary specializations of the cerebral cortex using information derived from genomics studies to guide histological and anatomical investigations and comparative neuroimaging studies of humans, chimpanzees, and other nonhuman primates.

# Nina Jablonski, Pennsylvania State University



Nina G. Jablonski is the Evan Pugh Professor of Anthropology, Pennsylvania State University. She pursues basic research on the evolution of adaptations of primates, including humans, to their environment, such as the evolution of human skin and skin pigmentation. In addition to her scholarly articles on skin and skin color, Jablonski has written several popular books on the subject, *Skin: A Natural History* (2006) and *Living Color: The Biological and Social Meaning of Skin Color* (2012), both published by University of California Press, and the children's book, *Skin We Are In* (New Africa Books, 2018), co-authored with Sindiwe Magona. She is an elected Fellow of the American Academy of Arts and Sciences, the American Philosophical Society, and the American Association for the Advancement of Science, and a member of the Board on Behavioral, Cognitive, and Sensory Sciences of the U.S. National Research Council.

## **BIOSKETCHES**

#### Lyn Wadley, University of the Witwatersrand, South Africa



Lyn Wadley is Professor of Archaeology based in the Evolutionary Studies Institute (ESI) at the University of the Witwatersrand, South Africa, where she specializes in Middle Stone Age cognitive archaeology. She is an A1-rated National Research Foundation (South Africa) researcher and recipient of some of South Africa's top research awards. In 2014 and 2015, she was on the Thomson-Reuters High Citation list that records the top 1% of researchers globally. Her research into cognitive archaeology provides theory and methods for demonstrating that some Stone Age technologies can be proxies for complex brain power. She has excavated three important Middle Stone Age archaeological sites in South Africa: Rose Cottage Cave in the eastern Free State and Sibudu and Border Caves in KwaZulu-Natal.

#### Anidruddh Patel, Tufts University



Aniruddh (Ani) Patel is Professor of Psychology, Tufts University, where he researches the cognitive, neural, and evolutionary foundations of music cognition. Areas of special interest include the relationship between music and language, which is the topic of his book, *Music, Language, and the Brain* (Oxford Univ. Press, 2008), the processing of musical rhythm, and cross-species studies of music processing. Patel has served as President for the Society for Music Perception and Cognition (2009-2011). In 2015, he was appointed as Fellow of the Canadian Institute for Advanced Research (CIFAR) in the Program in Brain, Mind, and Consciousness. In 2018, Patel was awarded a Fellowship from the Radcliffe Institute for Advanced Study at Harvard University and a Guggenheim Fellowship to write a book on the evolution of music cognition.

### lain Davidson, University of New England, Australia



lain Davidson is Emeritus Professor of Archaeology and Paleoanthropology, the University of New England, Australia. His research has included work on the Spanish Upper Paleolithic, archaeology and ethnography of Northwest Queensland, Australian rock art, the colonization of the Sahul, language origins, cognitive evolution, and projects with multiple Aboriginal groups in Australia. Publications include numerous books, chapters, and journal articles. He is a Fellow of the Australian Academy of Humanities, Visiting Chair of Australian Studies at Harvard University (2008-9), and 2010 recipient of the Rhys Jones Medal of the Australian Archaeological Association.