Mongolian Archaeology:
New Discoveries, New Concerns

Monday, April 3, 2017
9:30 a.m. – 6 p.m.

180 Doe Library
UC Berkeley

Organized By:
UC Berkeley Mongolia Initiative
Smithsonian Institution
The organizers of this conference gratefully acknowledge the support of the Government of Mongolia in making this conference possible.

Sponsored By:
UC Berkeley Mongolia Initiative
Smithsonian Institution
Institute of East Asian Studies
Archaeological Research Facility

Mongolian Archaeology:
New Discoveries, New Concerns

Conference Participants

Jeffrey ALTSCHUL, Statistical Research, Inc.
John Vincent BELLEZZA, University of Virginia
Pat BERGER, History of Art, UC Berkeley
Richard CIOLEK-TORELLO, Statistical Research, Inc.
Julia Kate CLARK, Northern Mongolia Archaeology Project
Diimaajav ERDENEBAATAR, Ulaanbaatar State University
William FITZHUGH, Smithsonian Institution
Nelson GRABURN, Anthropology, UC Berkeley
William HONEYCHURCH, Yale University
Esther JACOBSON-TEPFER, University of Oregon
Richard Dennis KORTUM, East Tennessee State University
Sanjyot MEHENDALE, Chair, Tang Center for Silk Road Studies, UC Berkeley
Daniel ROGERS, Smithsonian Institution
Joan SCHNEIDER, San Manuel Band of Mission Indians
William TAYLOR, Max Planck Institute
Uranchimeg TSULTEM, History of Art, UC Berkeley
Joshua WRIGHT, University of Aberdeen
Mongolian Archaeology: New Discoveries, New Concerns

**Agenda**

9:30 a.m.
Welcome Remarks
Pat Berger, History of Art and Co-chair, UC Berkeley
Mongolia Initiative Committee

William Fitzhugh, Smithsonian Institution

**MORNING SESSION**

9:45 a.m.
Panel 1: Origins and Expansion of Pastoral Nomadism
Chair: Nelson Graburn, Anthropology, UC Berkeley

William Honeychurch, Yale University
“Monuments of the East: Pastoralism, Exchange and Down-the-line Networks”

Daniel Rogers, Smithsonian Institution
“Architecture, Empires, and Archaeology: New Perspectives on Interpreting Mongolia’s Past”

Diimaajav Erdenebaatar, Ulaanbaatar State University
“Customs and Traditions of the Interment and Funeral Rites of Hun Elites”

11:00 a.m.
Break

11:15 a.m.
Panel 2: Rock Art Revisited
Chair: Sanjyot Mehendale, Program Director, Tang Center for Silk Road Studies and Lecturer, Near Eastern Studies

John Vincent Bellezza, University of Virginia
“Mongolia and the Western Tibetan Plateau in the Late Bronze Age and Iron Age: Considering an Expanded Sphere of Cultural Interconnectivity in Late Prehistoric Inner Asia”

Richard Dennis Kortum, East Tennessee State University
“The Biluut Petroglyph Complex: New Scientific Dating Experiments at a Prehistoric Sacred Center in the Mongolian Altai”

William Fitzhugh, Smithsonian Institution
“Culture, History, Tradition, and the Biluut Rock Art Complex at Khoton Noor, Mongolian Altai”

12:30 p.m.
Morning Session Discussants
Pat Berger, History of Art and Co-chair, UC Berkeley
Mongolia Initiative Committee

Sanjyot Mehendale, Program Director, Tang Center for Silk Road Studies and Lecturer, Near Eastern Studies

1:00 p.m.
Lunch
AFTERNOON SESSION

2:30 p.m.
Panel 3: The Why and How of Preservation
Chair: Orna Tsultem, History of Art and Co-chair, UC Berkeley Mongolia Initiative Committee

Joshua Wright, University of Aberdeen
“Integrated Narratives: Cultural Resources Preservation and Regional Archaeology in Mongolia”

Julia Kate Clark, Northern Mongolia Archaeology Project
“Efforts of the American Center for Mongolian Studies Cultural Heritage Program to Preserve the Real and Digital Cultural Resources of Mongolia”

William Taylor, Max Planck Institute
“3D Scanning for Research and Cultural Heritage Preservation in Mongolia”

3:45 p.m.
Break

4:00 p.m.
Panel 4: Planning for Preservation
Chair: William Fitzhugh, Smithsonian Institution

Joan Schneider, San Manuel Band of Mission Indians
“Building a Cultural Heritage Program in Mongolia: Experiences from Ikh Nart Nature Reserve, Dornogovi Aimag”

Jeffrey Altschul and Richard Ciolek-Torello, Statistical Research, Inc.
“Balancing Mongolia’s Past with Economic Development”

Esther Jacobson-Tepfer, University of Oregon
“The Preservation of Rock Art Complexes Through World Heritage Status”

5:15 p.m.
Afternoon Session Discussants
Orna Tsultem, History of Art and Co-chair, UC Berkeley Mongolia Initiative Committee

William Fitzhugh, Smithsonian Institution

5:45 p.m.
Final Discussion and Closing Remarks

William Fitzhugh, Smithsonian Institution

6:00 p.m.
Adjourn
Mongolian Archaeology: New Discoveries, New Concerns

Conference Abstracts

Jeffrey ALTSCHUL and Richard CIOLEK-TORELLO, Statistical Research, Inc.

Balancing Mongolia’s Past with Economic Development

Rapid growth in tourism, mining and other aspects of economic development have created a crisis in the protection and management of cultural heritage resources in Mongolia. To meet this challenge, the Mongolian International Heritage Team (MIHT), comprised of the Mongolian Academy of Sciences, Institute of History and Archaeology, Statistical Research, Inc., and the University of Arizona, School of Anthropology, developed a comprehensive cultural heritage management plan for Ömnögovi aimag in the Gobi Desert. This plan incorporates five components: Public Policy, Compliance, Public Programs, Capacity Building, and Empowering Local Communities. Public Policy focuses on the laws and regulations that govern how cultural heritage will be defined, identified, evaluated, and managed, while Compliance involves the identification and evaluation of archaeological, paleontological, and historical resources endangered by development. By contrast, Public Programs focus on intangible heritage, teaching children about their cultural heritage, and heritage tourism. Capacity Building involves training of professionals to manage their cultural heritage. The final component aims to empower local communities to manage and monitor actions that affect their heritage resources. In our presentation, we discuss the successes and problems experienced in the implementation of this plan.

John Vincent BELLEZZA, University of Virginia

Mongolia and the Western Tibetan Plateau in the Late Bronze Age and Iron Age: Considering an Expanded Sphere of Cultural Interconnectivity in Late Prehistoric Inner Asia

This paper compares pre-Buddhist monuments, rock art and artifacts in Upper Tibet (constitutes most of the western half of the Tibetan Plateau) with those from other areas of Inner Asia, particularly Mongolian cultural regions. It reviews archaeological discoveries made in the last 25 years, which show that northern regions had a formative impact on the cultural and technological development of Upper Tibet in the Late Bronze Age and Iron Age. While technological innovation (bronze metallurgy, equestrian arts, etc.), increased social complexity (aristocracies, proto-states, etc.) and the rise of new economic systems (nomadic pastoralism, etc.) in the Mongolian world reverberated most strongly in other Eurasian steppe and desert regions, manifold correspondences in the archaeological record indicate that they also penetrated the Kunlun divide to reach Upper Tibet. These influences are also seen in the rock art record of the western extremity of the Tibetan Plateau (Ladakh, Baltistan and Spiti).

Using cross-cultural methodological approaches based on morphological, functional, stylistic and chronological parallels, this work furnishes an analysis of material and abstract links between Upper Tibet and (greater) Mongolia. Affinities in conception, form and utility are used to develop an assessment
of the causes and conditions that may have facilitated cultural and technological interactions between these vast territories in antiquity. The effects of technological, political and economic transmissions from the north on the ideological and symbolic fabric of pre-Buddhist Upper Tibet are considered in this study as well.

The main bodies of Upper Tibetan archaeological evidence presented in this paper include mascoid, chariot, horse rider, and ‘animal style’ rock art; funerary sites with stelae and appended constructions; and portable copper alloy articles such as ‘animal style’ bronzes, mirrors, equestrian fittings, personal ornaments, knives, and bell-shaped objects.

Julia Kate CLARK, Northern Mongolia Archaeology Project

Efforts of the American Center for Mongolian Studies Cultural Heritage Program to Preserve the Real and Digital Cultural Resources of Mongolia

The American Center for Mongolian Studies, through their newly developed Cultural Heritage Program, has been working hard to creatively and effectively approach the problem of digital data management, and its role in cultural heritage preservation in Mongolia. This paper will discuss the efforts of the Center in approaching the digital data problem, as well as future plans. It is hoped that it will encourage discussion among archaeologists about the importance of a sustainable and accessible digital data management plan. The potential loss of a large amounts of digital data through technological change, shifting careers, and other means is one of the most pressing issues that cultural heritage preservation, including archaeology, faces today.

Diimaajav ERDENEBAATAR, Ulaanbaatar State University

Customs and Traditions of the Interment and Funeral Rites of Hun Elites

In ancient Chinese historical resources, the recordings on funeral rites of Xiongnu kings and elites and correlated information are found. For instance, in the Chapter 110 of the Records of the Grand Historian (史記 Shiji) by Sima Qian, Chinese historian, it's written that ‘...In funerals they use coffins and cases containing gold, silver and clothing; but they have no grave-mound, trees or mourning apparel. When a ruler dies, the ministers and concubines who were favoured by him and who are obliged to follow him in death often number in the hundreds or even thousands.

Observing the results of the excavations of Hun elites, the tombs of Hun kings and elites are discovered at sites of Noyon Uul, Takhiltyn khotgor, Gol Mod, Duurlig Nars, Gol Mod II on the territory of Mongolia and at Ilim and Tsaram in Buryatia, Russia. Among those archeological sites, large tombs accompanied by attendants numbering more than ten as recorded in the Records of the Grand Historian (Shiji) by Sima Qian, main ancient Chinese historical resource. This paper is a close examination of archaeological discoveries made at many of these excavation sites.

William FITZHUGH, Smithsonian Institution

Culture, History, Tradition, and the Biluut Rock Art Complex at Khoton Noor, Mongolian Altai

Connections between rock art and archaeology was the central theme of a three-year investigation of the Khoton Noor region of western Mongolia organized by East Tennessee State
University with the Smithsonian and National Museum of Mongolia. The Biluut rock art complex documenting nearly 10,000 years of elaborating petroglyphic history provided a rare opportunity to investigate rock art and archaeology as a single integrated enterprise. This presentation describes a 7000-year culture history demonstrated by dwellings, ritual sites, and burial practices, and identified points of intersection with the Biluut petroglyphic record. Links between archaeology and rock are difficult to perceive until the Bronze Age, and thereafter became increasingly important for understanding Iron Age and Turkic cultures and their monument traditions, including burials, standing stones and ovoos. A notable feature of Khoton history is the long–term continuity seen in local ritual traditions that persisted in an Altai mountain enclave beyond the centralized power of entities like the Xiongnu and Mongol states. In order to conduct future research that has local benefits, partnerships are needed at all levels to preserve and protect endangered archaeological sites, monuments, and rock art crucial for maintaining cultural traditions, identity, and economic development.

William HONEYCHURCH, Yale University

Monuments of the East: Pastoralism, Exchange and Down-the-line Networks

Recently the monumental landscapes of Mongolia’s Bronze Age have become better understood in terms of dating, distributions, mortuary function, and symbolism. The dominant focus has been central, northern and western Mongolia where charismatic sites like the famous "deer stones" have monopolized attention. Recent surveys in eastern Mongolia have now revealed a different approach to monumental practices and offer an opportunity to compare practices, landscape organization, and chronology. This approach sheds new light on the problem of why early pastoral nomads began building stone monument across multiple parts of the Mongolian Plateau by the mid second millennium BC.

Esther JACOBSON-TEPFER, University of Oregon

The Preservation of Rock Art Complexes Through World Heritage Status

I would like to discuss the preservation of rock art sites from the perspective of one who has worked in the Altai Mountains of Russia and Mongolia. My approach is shaped most particularly by my participation in the successful UNESCO World Heritage nomination, Petroglyphic Complexes of the Mongolian Altai (2011).

Preservation of rock art involves four stages coinciding with four significant points of development. These include:

- The site or complex [identification, documentation, analysis of physical setting, and preliminary analysis of visual materials];
- The laboratory [transcription of documentary materials, development of appropriate data bases, development of mapping, secondary analyses of visual materials; and dissemination];
- Governmental or public agencies [archiving of all relevant materials, the decision to preserve, the development of preservation strategies, and the development of management plans]; and
- Agencies charged with dissemination and education.

Each stage presents significant challenges: how do we record rock art and its environs in a manner appropriate to the concept of preservation? How do our databases shape (or distort) the
ability of future scholars to use this material? How can the actions of public or governmental agencies further regional understanding of cultural heritage? And how do we protect a site/complex from the natural deterioration of time and the elements and from more pernicious anthropogenic damage? Success in the search for preservation of cultural heritage requires a willingness to negotiate, to collaborate, and to work across a variety of special interests and perspectives.

Richard Dennis KORTUM, East Tennessee State University
The Biluut Petroglyph Complex: New Scientific Dating Experiments at a Prehistoric Sacred Center in the Mongolian Altai

Altai rock art is increasingly seen as essential to our grasp of the character and movements of prehistoric cultures throughout Inner Asia. In the past 25 years dozens of rock art sites have been found within Mongolia’s far-western Bayan Ulgii province alone. The Biluut Petroglyph Complex, an enduring ceremonial center at Khoton Lake near the convergence of Russia, China, and Kazakhstan, contains an array of several hundred archaeological sites associated with an unusually dense concentration of more than ten thousand petroglyphs. Imagery is attributed to the Stone Age through the Bronze and Iron Ages, and from the Turkic period to recent ethnographic times. With vandalism on the rise, protection and preservation of these fragile cultural expressions has become an urgent matter, and careful documentation and data retrieval become even more imperative. Highlighting significant figures while summarizing ongoing investigations from 2004 through 2016, this paper focuses on the dating of these images.

Direct scientific dating of non-organic rock peckings and engravings is notoriously difficult. Despite more than two decades of intensive effort, results are not widely accepted. At present, Altai rock art researchers rely on a set of contextual and stylistic criteria, many of which are qualitative and, hence, subjective or intersubjective in application. These yield chronological designations by broad cultural periods, e.g., “Archaic” (pre-Bronze Age), “Bronze Age”, “late Bronze Age”, “Iron Age”, and “Turkic Period”, etc., which, in each case, span several hundred to several thousand years. In an attempt to obtain greater precision, in 2015 we experimented with a new correlative dating technique of varnish microlamination (VML) analysis, based on millennial-scale climate variations recorded in varnish microstratigraphy (we will repeat our tests this coming July). Both types of methodology are discussed and preliminary results of our recent experiments are presented.

Daniel ROGERS, Smithsonian Institution
Architecture, Empires, and Archaeology: New Perspectives on Interpreting Mongolia’s Past

More than 2,000 years ago the first empire on the eastern steppe came into existence, followed over time by at least 13 others. Each of these empires innovated new political approaches, technologies, and perspectives, many of which originated outside the steppe region. Even so, all maintained a core reliance on herd animals and traditions shared by the steppe cultures. Archaeological research in Mongolia and surrounding areas is currently in the process of reinterpreting the significance of these early polities. As the research goes forward two of the most important challenges involve how to assemble and then use large data sets, and the preservation of
the sites themselves. Once thought to be just the reflection of political and economic changes to the south, emerging evidence points to a far more complicated political landscape linked to issues of mobility, dispersed control hierarchies, and the economics of multi-resource pastoralism. Together, these patterns offer an alternative vision of the origin and operation of early complex polities—not just on the steppe. Archaeologically, the pastoralist way of using the built environment provides a window into the dynamics of political processes. Evidence from a large sample of sites suggests that these polities operated as networks that relied more on mobility than the direct interactions seen in urban centers in sedentary societies. The urban centers of the steppe were the byproduct of polity formation, rather than the source.

Joan SCHNEIDER, San Manuel Band of Mission Indians

Building a Cultural Heritage Program in Mongolia: Experiences from Ikh Nart Nature Reserve, Dornogovi Aimag

Ikh Nart Nature Reserve, a Mongolian Protected Area, was created in 1996 with the intent of protecting increasingly threatened species, especially the argali and ibex. Active mentoring of Mongolian wildlife conservation biologists by the Denver Zoological Foundation started in 2000 and expanded over the years to the mentoring of Mongolian professionals and students in the conservation of raptors, small mammals, reptiles, and finally insects and flora. In 2010 while an archaeologist at Anza-Borrego Desert State Park in southern California, I was approached by Denver Zoo staff to come to Mongolia to check out "strange piles of rocks" and other constructions within Ikh Nart. Since that time, the Ikh Nart Archaeological Team, composed of both American and Mongolian archaeologists, supplemented by Earthwatch volunteers, and bolstered by an official "Sister Park" relationship between Anza-Borrego and Ikh Nart, has made substantial progress toward sustainability for the rich cultural landscape of Ikh Nart.

Some of the elements of the Ikh Nart project include data-gathering using a random-sample pedestrian survey of this 666 km² landscape of rocky outcrops and rolling grasslands, developing a record-keeping system and a collection strategy, creating a GIS mapping method, training Ikh Nart staff and students, working with local schools and the soum museum, building capacity in cultural heritage conservation for Mongolian archaeologists and rangers, creating interpretive and conservation messages in both Mongolian and English for tourists and other visitors, and partnering with local entities to develop a program in cultural tourism. Research agendas have not been ignored; investigation of the period of transition to early pastoralism is underway in cooperation with the University of Texas, Austin and the University of Pittsburgh.

The conservation programs at Ikh Nart (both cultural heritage and wildlife) have led to the designation of the Reserve as a model for other Protected Areas in Mongolia.

William TAYLOR, Max Planck Institute

3D Scanning for Research and Cultural Heritage Preservation in Mongolia

3D technology presents new solutions to the issues of artifact and archaeological site conservation in contemporary Mongolia. A large portion of Mongolia’s tangible heritage consists of fragile faunal remains, which often receive low
priority in cases of limited resources for archaeological conservation and storage efforts. 3D scanning offers a powerful tool for preserving morphological data from skeletal material, with the added advantage of easy sharing, long-term storage, and incorporation into digital repositories. While scanning can be unwieldy or impractical for in-field documentation, particularly in the case of larger archaeological features such as stone monuments or rock art, 3D photogrammetry is fast, and can produce results comparable to more expensive or time-intensive approaches, while using a minimum of equipment. Photogrammetry has the added advantage of avoiding subjectivity and preventing unnecessary damage from commonly practiced field techniques (like chalking). This paper highlights recent efforts at 3D documentation of stone monuments, rock art, and horse burials in northern Bayankhongor province, central Mongolia. Results indicate that 3D technology is not only an effective tool for cultural heritage preservation, but also that this approach often yields new research insights into the archaeological record. As Mongolia copes with issues of protecting and sharing archaeological data for future generations, 3D scanning and photogrammetry must play an expanded role in effective cultural heritage management.

Joshua WRIGHT, University of Aberdeen

*Integrated Narratives: Cultural Resources Preservation and Regional Archaeology in Mongolia*

Over the last two decades the amount of intensive regional archaeology in Mongolia has grown to be analytically powerful in several regions and continues to increase. This has supported a network of additional specialist research, excavation and many developments in Mongolian archaeology. This paper will make a case for this intensive investment in local archaeology as the key element for long term success of archaeology in Mongolia. This will be contrasted with the growing trend for well funded major research projects that consume existing collections and do not invest in capacity building or contextual understanding of the archaeological record in Eurasia.
Mongolian Archaeology: New Discoveries, New Concerns

Participant Biographies

Jeffrey ALTSCHUL, Statistical Research, Inc.

Jeffrey H. Altschul holds B.A. and Ph.D. degrees in Anthropology and has worked in cultural heritage management (CHM) since 1975. In 1983 he and his wife founded Statistical Research, Inc. (SRI) in the USA and in 2008, he co-founded Nexus Heritage in the United Kingdom. Together, the two consultancies provide CHM services around the world. In 2001, he founded the SRI Foundation which is a not-for-profit USA-based organization that advances historic preservation through education, research and training. Altschul has served as principal investigator on hundreds of CHM projects in North America, Latin America, Europe, Africa, and Asia. In 2010, he formed the Mongolian International Heritage Team (MIHT) which in 2010, designed the Oyu Tolgoi Cultural Heritage Program (CHP). In 2012, the MIHT performed a sample survey and predictive model for the Northern Railways project between Murun and Erdenet.

Altschul has served as president of the Register of Professional Archaeologists and the Society for American Archaeology (SAA) and served on scores of boards of directors of professional societies. Altschul has written hundreds of technical reports, published papers, books, and monographs in cultural heritage. Of particular note are the Oyu Tolgoi Cultural Heritage Program: Protecting the Past, Preserving the Present: Report on Phase 1 Activities of the Oyu Tolgoi Cultural Heritage Program Design for Ömnögovi Aimag. (edited with B. Gunchinsuren and John W. Olsen) and The Oyu Tolgoi Cultural Heritage Program (edited with B. Gunchinsuren and John W. Olsen).

John Vincent BELLEZZA, University of Virginia

John Vincent Bellezza specializes in the archaeology and cultural history of pre-Buddhist Upper Tibet. He is a Senior Research Fellow with the Tibet Center, University of Virginia. Over the last 25 years, Bellezza has comprehensively charted the visible monuments and rock art of Upper Tibet and has published widely on archaic ritual traditions in Bon and Old Tibetan literature. Bellezza is the first non-Tibetan to have explored both the geographic and ritual sources of each of the four major rivers that emerge from the Mount Tise region. He has also visited nearly every main island and major headland in the great lakes region of Tibet. In addition to numerous scholarly and popular articles, Bellezza has written nine books: Divine Dyads: Ancient Civilization in Tibet (1997: Library of Tibetan Works and Archives), Antiquities of Northern Tibet (2001: Adroit Publishers), Antiquities of Upper Tibet (2002: Adroit Publishers), Calling Down the Gods (2005: Brill), Zhang Zhung: Foundations of Civilization in Tibet (2008: Austrian Academy of Sciences), Death and Beyond in Ancient Tibet (2013: Austrian Academy of Sciences), Antiquities of Zhang Zhung, vols. 1, 2 (2014: Central University of Tibetan Studies), and Dawn of Tibet (2014: Rowman and Littlefield). For more information about his work, see www.tibetarchaeology.com.
Pat BERGER, History of Art, UC Berkeley

Patricia Berger, Professor of Chinese Art, received her Ph.D. in the History of Art in 1980 from the University of California, Berkeley. Before joining the Berkeley faculty in 1997, she served as Curator of Chinese Art at the Asian Art Museum of San Francisco and taught at Oberlin College and the University of Southern California. Continuing her interest in hands-on art history and museum practice, Berger has participated in the development and staging of a number of international exhibitions over the past couple of years, including the London Royal Academy of Art’s Three Emperors (2006) and the Zurich Rietberg Museum’s Luo Ping: Visions of an Eccentric (2009-10). Her book, Empire of Emptiness: Buddhist Art and Political Authority in Qing China (Honolulu: University of Hawai‘i Press, 2003), a study of the heteroglossic eighteenth-century Qing court and its ties to Tibet and Mongolia, was awarded the Shimada Prize for Best Book in Asian Art in 2008.

Richard CIOLEK-TORELLO, Statistical Research, Inc.

Dr. Richard Ciolek-Torello is a Registered Professional Archaeologist and Vice President at Statistical Research, Inc. He is also an expert member of the International Committee on Archaeological Heritage Management (ICAHM). Since 1969, Dr. Ciolek-Torello has directed many large, complex, and, often, controversial archaeological and historical projects in the American West, has conducted ethnoarchaeological research in India, and is currently involved in SRI's international Cultural Heritage Management program. In the latter capacity, he has been involved in the Oyu Tolgoi Cultural Heritage Program and the Northern Railways Project conducted by the Mongolian International Heritage Team (MIHT). For the past two seasons, has also participated in the Ihk Nart Archaeological Project and is currently developing a research project with members of the MIHT to study Bai Balik and other Mongolian Iron Age cities. The results of Dr. Ciolek-Torello’s extensive research are published in over 130 technical reports and articles in peer-reviewed journals, such as the Journal of Field Archaeology, Journal of Wetland Archaeology, and Kiva; and books published by the American Association for the Advancement of Science, BAR International, Cambridge University Press, Prehistory Press, the University of Colorado Press, and the University of New Mexico Press. Dr. Ciolek-Torello also has made over 80 presentations about his research at state, national, and international archaeological and anthropological conferences.

Julia Kate CLARK, Northern Mongolia Archaeology Project

Dr. Julia Clark is the Cultural Heritage Coordinator of the American Center for Mongolian Studies in Ulaanbaatar, Mongolia and the Director of the Northern Mongolia Archaeology Project in the Darkhad Depression of Huvsugul Aimag. She has been conducting archaeological fieldwork in Mongolia since 2007 in central, western and northern Mongolia. Dr. Clark’s research focuses on multi-resource economies, pastoral adaptation, and human-ecology in late prehistoric and early historic northeast Asia.
Diimaajav ERDENEBAATAR, Ulaanbaatar State University

Archaeologist Diimaajav Erdenebaatar is a Professor and Head of the Department of Archaeology of the Ulaanbaatar State University, Mongolia.

William FITZHUGH, Smithsonian Institution

William W. Fitzhugh is an anthropologist who has researched northern cultures and environments throughout the circumpolar region for more than forty years. His archaeological research has investigated the history of Arctic and Subarctic cultures and the effects of climate change and European contacts on the native cultures of Labrador, Quebec, and Baffin Island. His recent research explores 16/17th century Basque contacts with Inuit in the Gulf of St. Lawrence. Tracing circumpolar cultural connections led Fitzhugh to the Russian Arctic and to Mongolia, where he studies Bronze Age and other cultures. He founded and directs the Arctic Studies Center in the Smithsonian’s National Museum of Natural History. In addition to books, exhibition catalogs, monographs, and journal papers he has produced international exhibitions, and popular films.

Nelson GRABURN, Anthropology, UC Berkeley

Professor Graburn was educated in Classics at King's, Canterbury and Natural Sciences and Anthropology at Cambridge, McGill and University of Chicago. He has carried out ethnographic research with the Inuit (and Naskapi) of Canada (and Alaska and Greenland) since 1959, and in Japan (and East and Southeast Asia) since 1974, and China since 1991.

He has taught at Berkeley since 1964, with visiting appointments at the National Museum of Civilization, Ottawa, Le Centre des Hautes Etudes Touristiques, Aix-en-Provence, the National Museum of Ethnology (Minpaku) in Osaka, the Research Center for Korean Studies, Kyushu National University, Fukuoka, the International Institute for Culture, Tourism and Development, London Metropolitan University, the UF Rio Grande del Sol, Porto Alegre, Brazil and has lectured at twenty-four Chinese universities. At Berkeley, he teaches a seminar on Tourism, Art and Modernity (since 1977) and is co-chair of the Tourism Studies Working Group (www.tourismstudies.org). His recent research has focused on the study of art, tourism, museums, and the expression and representation of identity. He is now working on Contemporary Tourism in Asia (Japan and China). Professor Graburn is continuing his research on contemporary Inuit arts including "urban Inuit arts" and also works with the Canadian Inuit cultural organization, Avataq, in Nouveau Quebec, and with Inuit institutions in Iqaluit, Nunavut, on aspects of cultural preservation and autonomy.

William HONEYCHURCH, Yale University

William Honeychurch is Associate Professor of Anthropology and Director of Undergraduate Studies in Archaeology at Yale University. His research is on the archeology of ancient nomadic political organization in eastern Eurasia. Nomadic groups of the Eurasian steppe organized large-scale states and empires from the first millennium BC and are best known for the world empire constructed by the medieval Mongols under Genghis Khan. How and why relatively small groups of pastoral nomads assembled such monumental and complex polities is a topic that informs us about different approaches to
political relationships, state organization, and inter-cultural contact. Study of Eurasian steppe political systems gives valuable insight to how other large-scale empires were created and maintained over time, especially those in the Andes, the Mediterranean, and Southwest Asia where significant pastoral populations have resided.

He studies these questions through the archeological material remains left by horse nomads over the past 3000 years on the steppes of Mongolia. His field projects emphasize regional pedestrian survey to discover and map cemeteries, habitation sites, walled complexes, rock art, and ceremonial areas. His research teams follow up field survey with GIS spatial analysis, materials analysis, paleo-environmental reconstruction and excavations at cemeteries and living sites to test ideas developed from regional analyses. Such intensive research programs allow us to understand how a particular area changed organizationally during the rise and fall of steppe states and empires. To date, he and his colleagues have completed survey and excavation projects at Egiin Gol in north central Mongolia and at Baga Gazaryn Chuluu in the Middle Gobi of Mongolia. They will carry out a new field project from 2012 to 2017 in the Mongolian eastern provinces in order to examine political interactions and contacts with Early Iron Age groups to the south in the Inner Mongolian region. His books include Genghis Khan and the Mongol Empire (Smithsonian Institution, 2009. co-edited with Fitzhugh, W. and Rossabi M.) and Inner Asia and the Spatial Politics of Empire: Archaeology, Mobility, and Culture Contact (New York: Springer Publications. 2015).

Esther JACOBSON-TEPFER, University of Oregon

Esther Jacobson-Tepfer is the Maude I. Kerns Professor Emeritus in the Department of the History of Art and Architecture, University of Oregon, where she taught the history of Asian art for 47 years.

Jacobson-Tepfer’s published work, including seven books and many articles, reflects her years of fieldwork on rock art, archaeology and landscape in the Altai Mountains of Mongolia. Her most recent publications include a prize-winning volume, Archaeology and Landscape in the Mongolian Altai: an Atlas (ESRI Press 2010, with James Meacham and Gary Tepfer); and The Hunter, the Stag, and the Mother of Animals (Oxford University Press 2015). She is currently working on another book project, Life in the Bronze Age in the Mongolian Altai (tentative title).

Jacobson-Tepfer has an Honorary Doctorate from the Mongolian Institute of Archaeology (2003). She has worked closely with Mongolian authorities on two successful World Heritage Nominations, Petroglyphic Complexes of the Mongolian Altai (2011) and The Sacred Landscape of Burkhan Khaldun (2015). For her contributions to the preservation of Mongolia’s cultural heritage, the Mongolian Academy of Sciences honored her with their highest recognition, the Kublai Khan Gold Medal (June, 2016).

Richard Dennis KORTUM, East Tennessee State University

Dr. Richard Kortum is Professor Emeritus in the Department of Philosophy and Humanities at East Tennessee State University in Johnson City, Tennessee, where he taught for the past 16
years. He holds a Bachelor of Arts degree from Duke University, a double-major in philosophy and fine art, Phi Beta Kappa. After completing the Tripos 1B in philosophy at Queens’ College, Cambridge University in England, he spent a year as William M. Keck Fellow at the University of Southern California in Los Angeles. Richard earned his doctorate in philosophy of language at Lincoln College, Oxford, under the supervision of Wykeham Chair of Logic, Sir Michael Dummett.

In 2004-2005 Richard was a 12-month Fulbright Scholar to the former Soviet Republic of Azerbaijan. Two years ago he received the ETSU Distinguished Faculty Award for Outstanding Research. He is the author of *Varieties of Tone: Frege, Dummett, and the Shades of Meaning* (Palgrave Macmillan, 2013). Since the summer of 2004 he has been engaged in cross-disciplinary rock art research. He has been awarded numerous grants to explore prehistoric petroglyphs in the Altai Mountains of far-western Mongolia, including a Three-Year Collaborative Research Grant from the National Endowment for the Humanities, and has published and delivered numerous conference papers on his discoveries. Richard is currently under contract for two books on the rock art of Bayan Ulgii aimag: with Mongolia’s Nepko Publishers for *The Petroglyphs of Biliut Tolgoi: A Prehistoric Sacred Center in the Mongolian Altai* (expected in 2017); and with Cambridge University Press for *Rock Art and Archaeology of Inner Asia: The Biliut Petroglyph Complex* with William Fitzhugh (expected 2018).

**Sanjyot MEHENDALE**, Program Director, Tang Center for Silk Road Studies and Lecturer, Near Eastern Studies

Dr. Sanjyot Mehendale is an archaeologist specializing in trade and cultural exchange of the early Common Era. She completed a dissertation on the Begram (Afghanistan) objects, which included a reexamination of, and ultimately new interpretations about, the nature of the finds, as well as a complete catalogue of the extensive ivory and bone objects discovered at the site. After completion of her dissertation, she began teaching on the Silk Roads as a Lecturer in UCB’s Department of Near Eastern Studies. In 1999, she developed and became the co-director of a joint project with the Uzbek Institute of Archaeology in Samarkand to excavate sites in southern Sogdiana. In 2007, she was hired as a consultant by National Geographic Society to help structure the *Afghanistan: Hidden Treasures from the National Museum, Kabul* exhibition as well as to contribute to the accompanying catalogue. She has conducted archaeological research in Sri Lanka, off and on since 1996 and is currently working on the excavation of a shipwreck off the southern coast of the island carrying merchandise from the ancient Near East.

**Daniel ROGERS**, Smithsonian Institution

Dr. J. Daniel Rogers is Curator of Archaeology and former chair of the Department of Anthropology at the Smithsonian’s National Museum of Natural History. He received B.A. and M.A. degrees from the University of Oklahoma and a Ph.D. in Anthropology from the University of Chicago. Over his career he has conducted archaeological field research in the Southeast, Southwest, the Great Plains, the Caribbean, Mexico, Peru, and eastern Asia. Since 2002 he has studied the early
empires of Inner Asia and developed computational models to analyze the social and demographic implications of climate change. His research topics also include colonialism, culture contact, and the origins of complex societies.

Joan SCHNEIDER, San Manuel Band of Mission Indians

Schneider received her MS and PhD degrees in Anthropology from the University of California, Riverside, after a career change from the health sciences (she has Bachelor of Science and Master of Public Health degrees from Columbia University in New York City). She was Assistant Research Anthropologist at UC Riverside; she served as Interim Executive Director during the development of the Western Center for Archaeology and Paleontology (now Western Science Center). From 2001 until 2011, she was Associate State Archaeologist for the Colorado Desert District, California State Parks, of which Anza-Borrego Desert State Park is a major component. In retirement, Schneider continues to volunteer at Anza-Borrego as a volunteer trainer and member of the Colorado Desert Archaeology Society; she has recently become a Trustee of the Anza Borrego Foundation. Schneider is currently Consulting Archaeologist for the San Manuel Band of Mission Indians and works closely with Native American governments and individuals, government agencies, and private corporations on many projects.

Schneider has worked for over 30 years in desert regions of the world, including the Colorado, Mojave, Sonoran, Negev, and more recently, the Gobi. As a Principal Investigator, she has conducted projects in Joshua Tree and Death Valley National Parks, as well being an Archaeological Field School Director at Joshua Tree National Park. A Fulbright Specialist award, a United States Ambassador’s Cultural Heritage grant, and grants from the Trust for Mutual Understanding and the Earthwatch Institute support her research and cultural heritage conservation efforts in Mongolia—ongoing since 2010.

Schneider’s archaeological research focuses on the reasons why prehistoric peoples (particularly women) chose certain stones for tools and vessels, how the materials chosen related to the tasks performed with those tools, and how economic and political patterns are expressed through quarry studies using geochemistry and petrography. She has contributed articles to regional, national, and international professional publications. She is a proponent of citizen science and public education.

William TAYLOR, Max Planck Institute

William Taylor is a postdoctoral research fellow at the Max Planck Institute for the Science of Human History in Jena, Germany. He has been conducting archaeological research in Mongolia since 2011, and received his Ph.D. in archaeology from the University of New Mexico in 2016. His dissertation used archaeozoological techniques to investigate the origins of horseback riding and nomadic life in Mongolia.

Uranchimeg TSULTEM, History of Art, UC Berkeley

Uranchimeg (Orna) Tsultem served as an Assistant Professor at the Mongolian University of Arts and Culture in 1995-2002 and as Associate Professor at the National University of Mongolia in 2012-2014. She has curated Mongolian art exhibitions internationally: Tsukuba, Japan (1997), New York, NY (2000), Bonn, Germany (2001), Hong Kong (2011), 9th Shanghai Biennale (2012), 56th Venice Biennale (2015). As a
graduate student at UC Berkeley, she worked on Mongolian prehistoric art and Buddhist art. She received her Ph.D. in History of Art from UC Berkeley with a dissertation entitled "Ikh Khüree: a Nomadic Monastery and the Later Buddhist Art of Mongolia." She currently also co-chairs the Mongolia Initiative Program at the Institute of East Asian Studies at UC Berkeley, and is working on her two manuscripts on Mongolian Buddhist art. Orna was appointed as "Cultural Envoy of Mongolia," an honorary position from the Ministry of Foreign Affairs of Mongolia in September 2016.

**Joshua WRIGHT, University of Aberdeen**

Wright is a landscape archaeologist with a research focus on East Asia. He is a lecturer in the Department of Archaeology and the University of Aberdeen. His research addresses monumentality and movement, settlement patterns, mobile pastoralist economies, political landscapes, and the spatial structure of communities. Currently he carries out research in Mongolia and China using primarily archaeological survey. Previously, Wright was one of the directors of the first intensive archaeological surveys in Eastern Eurasia, the Egiin Gol Survey (1997-2002) and the Baga Gazaryn Chuluu Project (2004-2008) in Mongolia and key member of the Chengdu Plain Archaeological Survey (2007-2010). He received his Ph.D. in Anthropology from Harvard University (2006, Anthropology) where he studied the adoption of nomadic pastoralism and the dynamics of subsistence and landscape in Northern Mongolia. In addition to China and Mongolia, he has carried out fieldwork in Greece, Turkey, China, Egypt, Turkmenistan, Kazakhstan, Greece, Mexico, India, Pakistan, Jordan and Belize.