

BACK(BONE) TO THE FUTURE

Bioarchaeological Perspectives on Climate Change and Climate Crisis

2nd December (14:00 CET - 19:00 CET) and 3rd December 2021 (14:00 CET - 19:00 CET) @ Zoom

Division of Natural Sciences, German Archaeological Institute

BioarchClimateConference@dainst.de

#BioarchClimateConference

Keynote Lectures:



Gwen Robbins Schug

Appalachian State University / University of North Carolina:

Bioarchaeology at the nexus of past and present climate change



Choongwon Jeong

Seoul National University

Understanding the origins of Tibetans and their altitude adaptations from a genetic perspective



Ryan Harrod

Garrett College / University of Alaska Anchorage

Bioarchaeology of Climate Change and Violence: Ethical Consideration in 2021

Thursday, 2nd December 2021 (14:00 CET – 19:00 CET)

14:00 CET Opening Session and Keynote Lecture by Gwen Robbins Schug

Break

15:00 CET Session 1 and roundtable

Break

17:00 CET Session 2 and roundtable

Friday, 3rd December 2021 (14:00 CET – 19:00 CET)

14:00 CET Keynote Lecture by Choongwon Jeong

14:30 CET Session 3 and roundtable

Break

16:30 CET Session 4 and roundtable

Break

18:30 CET Keynote Lecture by Ryan Harrod and Closing Session

**Sessions:****Session 1 – Threatened Bioarchives: Climate Change and (Bio)Cultural Heritage**

Melting glaciers, rising sea levels, coastal erosion, flooding, droughts and global warming all put under threat ancient bioarchives, including osteological remains, which have survived for hundreds or thousands of years. This session aims to open a discussion about the environmental and social dynamics that fuel the increasing loss of ancient bioarchives, as well as to envision rescuing strategies for the future of our (bio)cultural heritage.

Invited Speakers:

Albert Zink

Institute for Mummy Studies, Eurac Research

*Climate change and glacier mummies: the example of Ötzi, the Iceman***Adam Boethius**

Lund University

*The effects of climate change and human encroachment on our cultural heritage - organic degradation at the Swedish Mesolithic bog site Ageröd 1***Dione da Rocha Bandeira**

University of Joinville Region / Archaeological Museum Sambaqui

*The preservation of shell mounds of Babitonga Bay and environmental changes***Session 2 – From climate riders to climate refugees: Climate Change and Human Evolution**

Climatic changes have driven human dispersal of different species of Homo all over the globe. For those of our ancestors who could survive them and thrived, environmental challenges became adaptive opportunities. Today, increasingly fast changes in climatic conditions are responsible for the displacement of people and the uprooting of entire social and cultural systems. By bridging the remote origins of climate change and its dramatic reality, this session will focus on resilience as key to face climate change and climate crisis.

Invited Speakers:

Richard Potts

Smithsonian National Museum of Natural History

*Ecological disruption and the evolution of human adaptations***Michael Petraglia**

Max Planck Institute for the Science of Human History

*Habitats and Hominin Niches: New Insights from Africa to Asia***Louisa Loveluck**

The Washington Post

Title TBA



Session 3 – Under the Weather: Climate Change and Human Health

Our capacity to adapt is determined by the ability of our physiological system to face the changes triggered by fast dropping or rising temperatures, increased precipitation or aridization. The talks in this session will span from parasite infections, to the spread of diseases in over-crowded cities of the past and the increasingly high threat of modern climatic stressors. The discussion will build up a global perspective on the history of human health as tightly intertwined with that of climatic changes, and the coping strategies developed by different human groups through time.

Invited Speakers:

Aida R. Barbera / Karl J. Reinhard / Morgana Camacho

CELAT Research Center, Université Laval / Pathoecology Laboratory, University of Nebraska-Lincoln / Escola Nacional de Saúde Pública Sergio Arouca, Fundação Oswaldo Cruz

Parasites in archaeology as evidence for long-term infection and disease

Sharon DeWitte

University of South Carolina

Famine and plague: climate change, mortality crises, and health in medieval England

Hanns-Christian Gunga

Charité – University Medicine Berlin

Climate change and the impact of heat stress on human physiological function

Session 4 – Rising Temperatures and Rising Tensions? Climate Change and Violence

The history of droughts, famine and economic crisis caused by climatic changes is often read as a story of increased competition over the available resources, inter-group tensions and, ultimately, violence. Through the study of the bioarchaeological evidence, this session will open to new narratives, taking into account also mitigating strategies and inter-group cooperation as winning adaptive responses to climate change and climate crisis, in the past as well as today.

Invited Speakers:

Mark Allen

California State Polytechnic University

Drought, Rising Temperatures, and Increased Violence: The Medieval Climatic Anomaly in Western North America

Rebecca Redfern

Museum of London

An overview of violence and environmental change in Europe from the Bronze Age to the Post-Medieval period

Kira Vinke

Center for Climate and Foreign Policy, German Council on Foreign Relations

Title TBA