

# Introduction to Archaeology

Fall 2024  
Lecture 19 (11/14)



# Week 11

## Studying People

- **Foodways, Disease & Migration**
    - Anthropologist Debunks the Paleodiet
    - This Ancient DNA revolution
    - Jennifer Raff: DNA & migration (opt.)
  - **TrowelBlazer Final Project [ [link](#) ]**
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# Anthropologist Debunks the Paleodiet (C. Warinner, 2019)

- Prof. Warinner specialization?
- Primary research questions?
- What data sets does she study and/or what methods does she use?
- What sub-fields of bioanth/anthropology are covered here?!



<https://christinawarinner.com/about-us/christina-warinner/>  
<https://christinawarinner.com/outreach/for-the-general-public/>  
<https://anthropology.fas.harvard.edu/people/christina-warinner>  
<https://www.instagram.com/warinnergroup/>

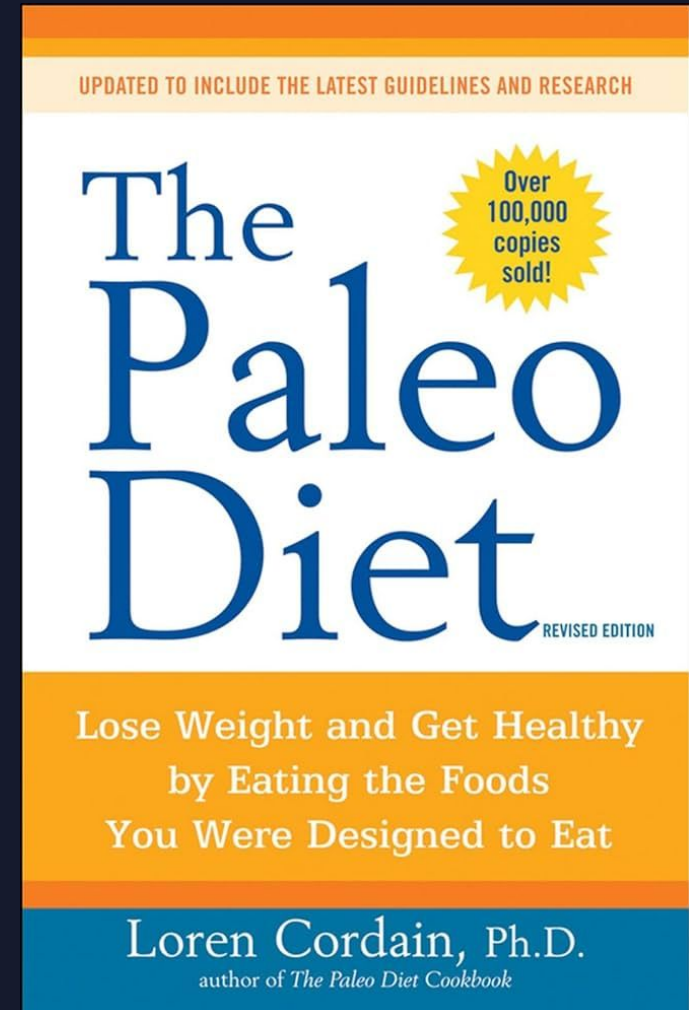
# What is the Paleodiet? How formulated?

## Loren Cordain, Paleodiet

- Dr. Loren Cordain received his Ph.D. in Health from the University of Utah, his master's in physical education from the University of Nevada-Reno, and his bachelor's in health sciences from Pacific University. He was a professor in the Department of Health and Exercise Science at Colorado State University from 1982 – 2013.

## Katherine Milton, Bioanthropologist (primates)

- Primate Biology Group: The PBG is an informal group of people from the departments of ESPM, Integrative Biology, Anthropology, Molecular and Cell Biology, as well as other scientists in the local community who meet every other week during the semester to discuss research ideas, results, and recent publications related to primate biology, ecology, behavior, conservation, taxonomy, evolution, and paleontology.



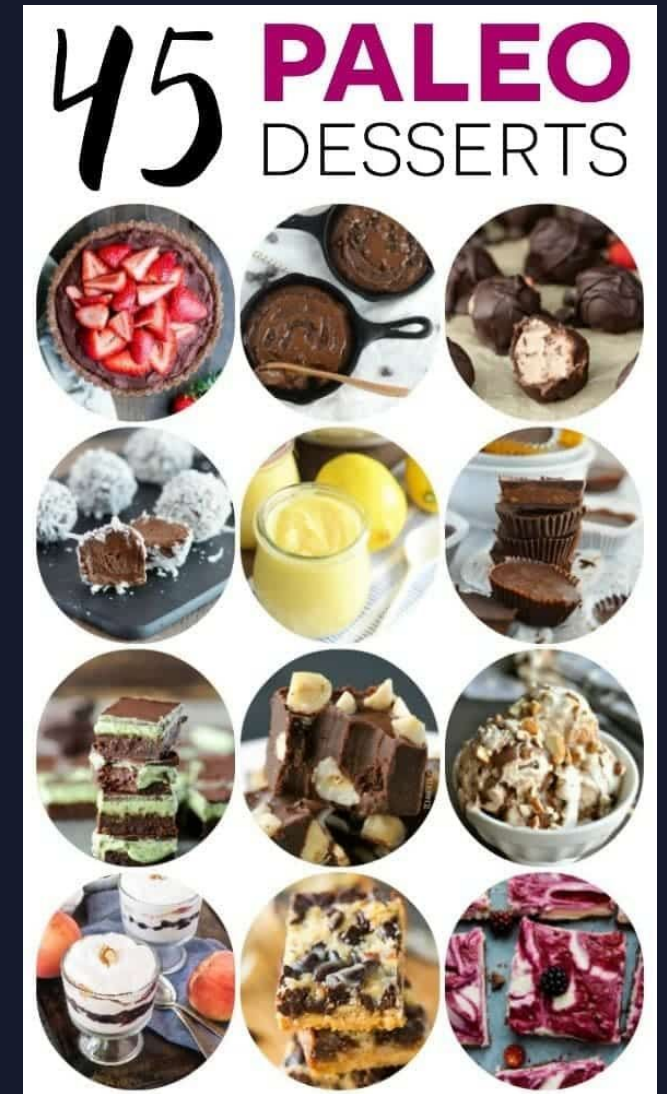
# Paleodiet 101

**Fiction or Myths?**

**Data and/or “Facts”?**

# Take-aways or food for thought???

- **When was the Paleodiet?** 2 mya, climate fluctuations; Late Pleistocene (900 kya) & Ice Ages
- **Where was the Paleodiet?** Different everywhere! (e.g. Guila Naquitz, Mexico= seasonal, wild plants, game)
- **Are health issues related to agriculture or to other factors?** Diversity & versatility is key, according to studying gut biomes (h/g's, rural ag, urban industrial)
  - Eat fresh foods & in season
  - Eat whole foods (wheat, corn & soy in everything...)



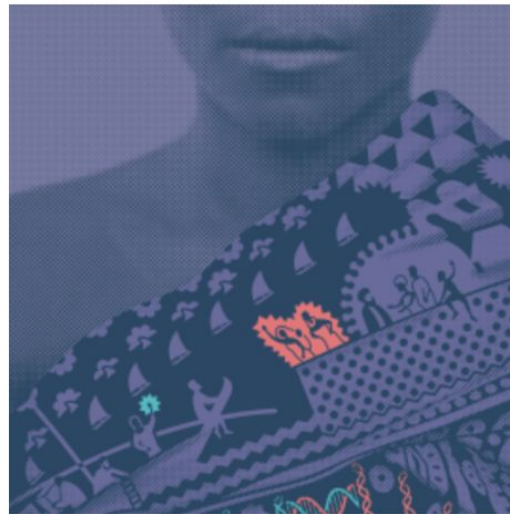
# Reich Lab @ Harvard: Ancient DNA

## RECENT PUBLICATIONS



August 2023 (Science)

The Genetic Legacy of African Americans from Catoctin Furnace



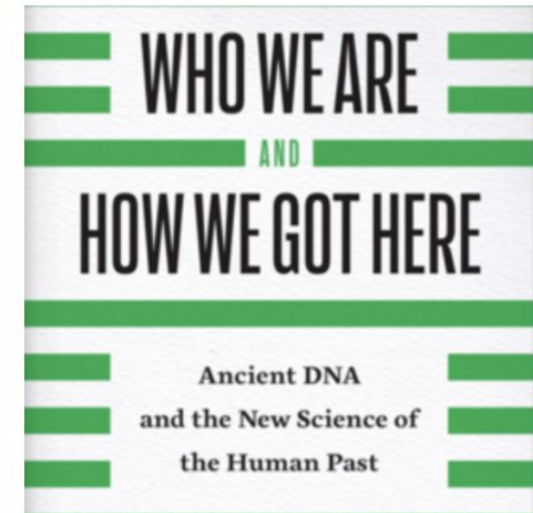
March 2023 (Nature)

Entwined African and Asian genetic roots of medieval peoples of the Swahili coast



August 2022 (Science)

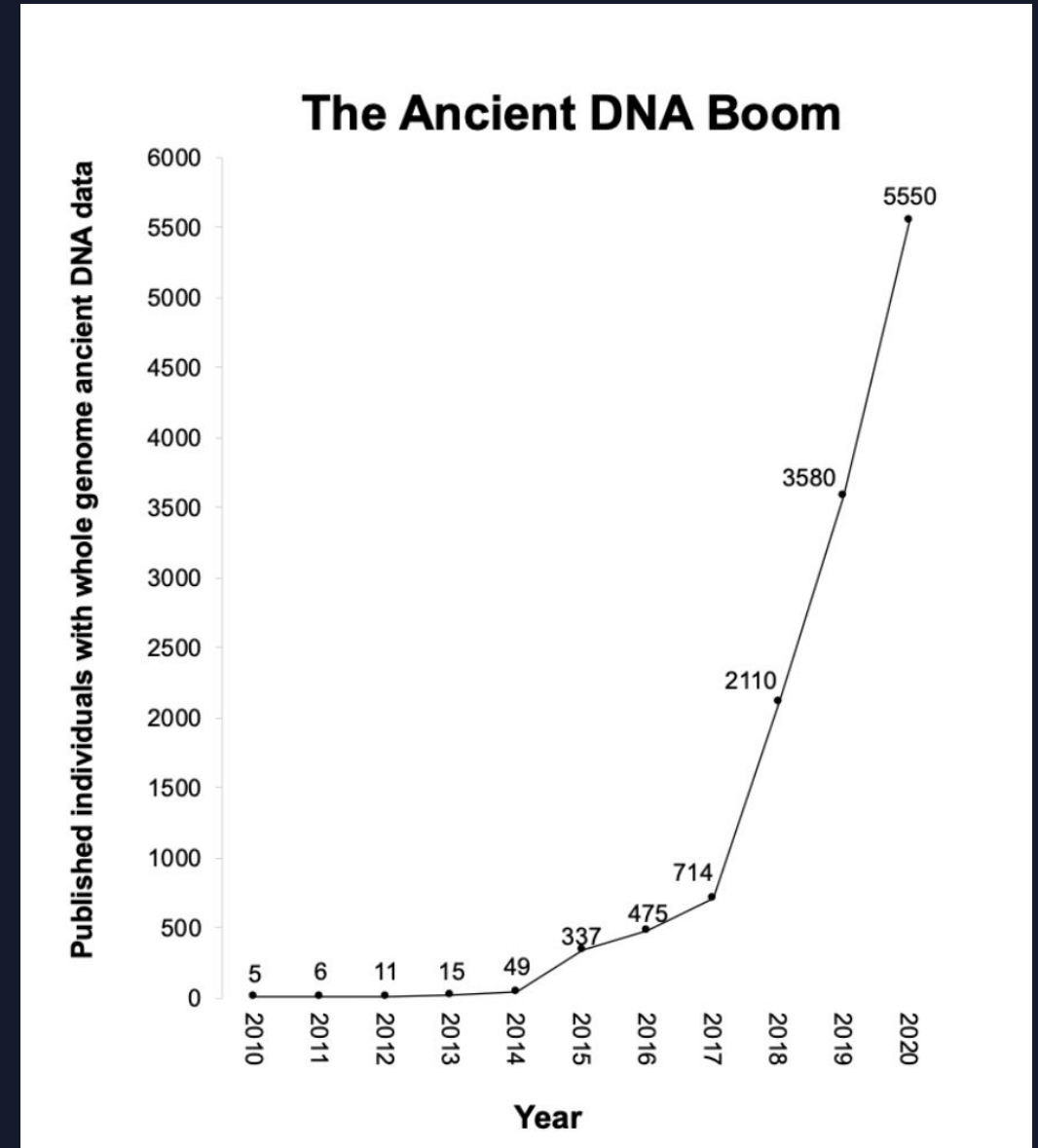
A genetic history of the Southern Arc  
1. Neolithic / 2. Copper-Bronze / 3. Historical



Book

## Research at the Lab...

- Building an Ancient DNA Atlas of Humanity
- Making DNA accessible to archaeologists
- Leveraging ancient DNA to understand human adaptation
- Leveraging an understanding of population history to reduce suffering and disease



Ethics of DNA research on human remains: five globally applicable guidelines (Nature 2021). Harvard Medical School, The New York Times, The Conversation, University of Alberta, Rice University, Stony Brook University, Universidade de São Paulo, Duke Kushan University, University of Sri Jayewardenepura, Mirage, Pioneer, The Hindu, The Hindu Business Line, Telangana Today, Le Monde, The Bolivar Commercial, Canadian Broadcasting Company, Washington University in St. Louis, The Jerusalem Post, The Scientist



# Migration & Ancient DNA @ KU (Raff lab)



## KU Anthropological Genetics Research Facilities

Our research at the University of Kansas is focused on the use of molecular genetic methods to:

Evaluate human and non-human population histories and migration patterns,

Investigate the diversity of fauna recovered from archaeological sites, and

Analyze environmental DNA (eDNA) for paleoecological reconstruction from soil samples.



# TrowelBlazer: Group Brainstorming

- Topic?
  - Region?
  - Method?
  - Format?
  - Engagement?
  - Something else???
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# Trowelblazer Project (braindump!)

- Check out the syllabus materials & *Sapiens* [archaeology publications!](#)
- Digital archaeology & heritage, gaming, AI: Colleen Morgan
- Indigenous Archaeology: Sonya Atalay, Dorothy Lippert, Sara Gonzalez ([book](#))
- Community engagement: Whitney Battle-Baptiste, Cheryl White, Alexandra Jones
- Bioarchaeology: Tina Warinner, Tiffany Tung, Michele Buzon
- Zooarch & Paleobotany: Amber VanDerwarker; BrieAnna Langlie, Katherine Chiou
- Technology studies: Catherine Frieman, Heather Miller
- Mesoamerica, farming & ethnoarchaeology: Verónica Pérez Rodríguez
- Egyptology & public outreach: Kara Cooney
- West Africa, paleobotany & modern food security: Amanda Logan
- Feminist archaeology & disability: Laura Heath Stout
- Historical archaeology & African diaspora: Daniela Balanzátegui
- Professional organizations! e.g. Society of Black Archaeologists ([SBA](#)), Black Trowel Collective ([Anarchist archaeology](#)),

# Week 12

## Transforming Archaeology

- **Changing the World?**
    - *Archaeology as History*, Ch 5 & Conclusion
    - *Transforming Archaeology* (Atalay et al. 2014): Intro & Chapter 1 [[e-book](#)]
  - **TrowelBlazer Final Project** [[link](#)]
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