

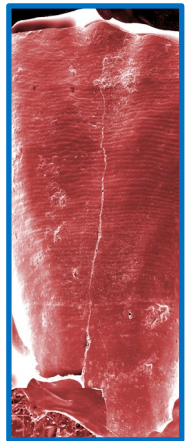
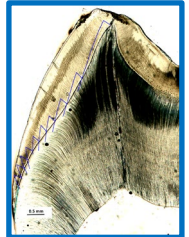
Department of Anthropology

Colloquium Series Spring 2023

The Past and Present of Enamel Formation and Dental Development

Friday, March 24th, 12-1PM, Young Library Auditorium

Much of my research has focused on understanding variation in patterns of enamel formation and rates of dental development in our fossil ancestors and close relatives. Did our Neanderthal cousins, for example, form their dental enamel in a way that is similar to or different from that of modern humans? What about *Homo naledi*, the enigmatic small-brained hominin species that overlapped in time with Neanderthals and anatomically modern humans? With respect to rates of dental development, we know that early hominins developed their teeth more quickly than modern humans do today – but what about Neanderthals and other archaic hominins? Is it clear that their dentitions also developed at a faster pace than those of people today? Finally, my most recent work involves colleagues in the United Kingdom and New Zealand in a collaboration exploring variation in enamel growth rhythms in modern humans in relation to somatic growth.



Left: Dr. Guatelli-Steinberg in the field at the paleontological site of Kromdraai, South Africa; Top: A histological dental thin section; Bottom: A Scanning Electron Micrograph montage of a hominin fossil tooth

Dr. Debra Guatelli-Steinberg, The Ohio State University

Dr. Debra Guatelli-Steinberg is Professor of Anthropology at The Ohio State University, where she also holds a courtesy appointment in the Department of Ecology and Organismal Biology. She also has an honorary appointment at the University of Kent (United Kingdom). In her research, Dr. Guatelli-Steinberg use teeth to answer questions about life history profiles, growth, and biological relationships in primates and fossil hominins. Dr. Guatelli-Steinberg is also interested in dental sexual dimorphism, fluctuating asymmetry, and dental morphology.

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