



cordially invite you to a

NIMBioS/DySoC Interdisciplinary Seminar

with

Dr. Alexander Bentley

on

"The acceleration of cultural evolution"

Wednesday, February 14, 2018 3:30-5 p.m. Reception & refreshments at 3 p.m.

Hallam Auditorium, Room 206 1122 Volunteer Boulevard



Dr. Alex Bentley began as the new head of the Department of Anthropology at the University of Tennessee, Knoxville in fall 2017. His research focuses on interdisciplinary analysis of culture change, past and present, and involves methodologies in archaeological and computational social science. These two streams of research, comparing patterns of cultural change across thousands of years, are integrated in his book, co-authored with Michael O'Brien, The Acceleration of Cultural Change: From Ancestors to Algorithms (MIT Press, 2017). Bentley has a Ph.D. in Anthropology from the University of Wisconsin and taught at University College London, Durham University, the University of Bristol and the University of Houston.

Abstract: For millennia, sociocultural complexity increased (and occasionally decreased) gradually over many human generations, as people inherited traditional knowledge within kin-based local communities. In these settings, where knowledge was shared within populations and across generations, selection was probably the key driver in norms of human adaptive behavior. In the 21st century, however, knowledge is transmitted across populations and within generations—and evolutionary patterns may resemble random drift more than selection in increasingly many settings. To span these different scales and modes of cultural evolution, different representations are useful, including fitness landscapes and a heuristic representing the transparency of payoffs in social learning. I will use these approaches to discuss how cultural evolution may have profoundly changed—from adaptive selection towards drift—from the ancient past to present-day.



