



LIVING WORLD LECTURE
Friday, November 18th
7:30PM – ESS 001



Professor Krishna Veeramah
Department of Ecology and Evolution

**Using hundreds of ancient genomes to
understand the formation of Europe after
the fall of the Roman Empire**

By combining cutting-edge molecular data with archaeological and historical information Professor Veeramah will show some of the new insights we have gained into how communities formed and developed following the fall of the Roman Empire.

Abstract

Between the 5th and 9th centuries Europe experienced the disappearance of the Roman Empire and along with it a fundamental transformation of socioeconomic systems and culture. Migrating Germanic and eastern Steppe groups, often referred to as barbarians, are thought to have played an important role in this transformation and many of the kingdoms they established in former Roman provinces are believed to have formed the basis of modern Europe. Scholars have long debated their origins and social structures but attempts to examine such factors and processes using archaeological and historical sources have proved problematic. However, advances in DNA sequencing capabilities and technology over the last decade now means we can reliably obtain genomic data from ancient skeletons, providing a revolutionary way of looking at past populations, including those that left no written records. In this lecture I present analysis from my lab of almost 1,000 ancient genomes from the Early Middle Ages, c. 400 to 900 C. By combining this new cutting-edge molecular data with archaeological and historical information I will show some of the new insights we have gained into how communities formed and developed following the fall of the Roman Empire. We find a diversity of different regional population dynamics across the continent, ranging from population continuity, extensive admixture, large scale migration and population replacement as well as a variety of different social organizations that evolved through time, showing the great complexity of interactions that likely occurred during one of the most tumultuous periods in Europe's history.

About Professor Veeramah

Professor Veeramah received both his B.Sc. in 2003, and Ph.D. in 2008 from University College London. His Ph.D., conducted under the supervision of Mark Thomas, examined the distribution of genetic variation in Africans. He then moved to UCLA as part of John Novembre's lab where he looked at the genetic architecture of European population isolates. In 2010, he joined Michael Hammer's lab at the University of Arizona in order to lead a project comparing patterns of genomic variation on the autosomes and X chromosome in apes. Dr. Veeramah joined the faculty in the Department of Ecology and Evolution at Stony Brook in January 2014 as part of the new initiative in human evolutionary biology where he now runs the Veeramah Lab.