Physical Anthropology: The Evolving Human

Lesson 8 *Methods of Paleoanthropology*

Program Description

Experts at the cutting edge of paleoanthropological research show how it's done. In this lesson, students are introduced to the ways researchers gather data in order to answer the basic human question: Who are we and where do we come from? The multidisciplinary approach to this research is shown through interviews with established paleoanthropologists and with researchers in related areas such as archaeology, geology, the reconstruction of paleoenvironments, geomorphology, paleontology, and paleobotany. There is a strong focus on Koobi Fora, one of the most important field sites in paleoanthropology. In the last segment, relative and chronometric dating methods are explained in ways that will demonstrate state-of-the-art methods for discerning the age of a specimen.

Learning Objectives

After successfully completing all assignments in this lesson, the student should be able to:

1. Define the term *hominid* and describe hominid characteristics.
2. Give an overview of the multidisciplinary approach of paleoanthropology.
3. Briefly describe how potential hominin sites are located, excavated, and analyzed.
4. Compare and contrast relative and chronometric dating techniques and give examples.
5. Summarize the types of hominin sites found at Olduvai Gorge and why Olduvai Gorge is an important location.
6. Describe the types of experimental archaeology used to gain insights into hominin stone-tool technology.
7. Discuss the types of data used to create scenarios of the past, including the origins of bipedalism.

Experts in Video	
Robert J. Blumenschine, Ph.D. Co-Director of Research, Olduvai Gorge & Director, Center for Human Evolutionary Studies, Rutgers University **Eric Delson**, Ph.D., Professor & Chair of Anthropology, Lehman College, City University of New York **Geoff Duller**, Ph.D., Professor of Quaternary Science & Director, Aberystwyth Luminescence Research Laboratory, University of Wales Aberystwyth **Jack Harris**, Ph.D., Professor of Anthropology, Rutgers University & Research Associate, National Museum of Kenya **Tom Higham**, D.Phil., Deputy Director, Radiocarbon Accelerator Unit, Oxford University	**Stephen Merritt**, M.A., Graduate Student, Department of Anthropology, Rutgers University **Kari Prassack**, Ph.D., Postdoctoral Researcher, Center for Human Evolutionary Studies, Rutgers University **Christopher Ramsey**, D.Phil., Director, Radiocarbon Accelerator Unit, Oxford University **Matt Sponheimer**, Ph.D., Assistant Professor of Anthropology, University of Colorado, Boulder **Ian Gordon Stanistreet**, Ph.D., Senior Research Fellow, University of Liverpool