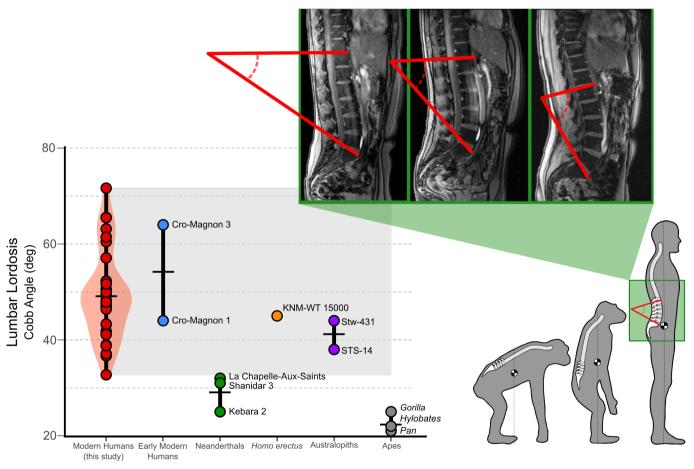
Department of Human Evolutionary Biology

Dissertation Seminar



"The Evolution and Function of Human Lumbar Lordosis Variability" Eric Castillo

Doctoral Candiate, Department of Human Evolutionary Biology



Curvature of the human lower spine, known as lumbar lordosis, was a key adaptation for bipedalism that evolved to balance and stabilize the upright trunk. But measures of lordosis in modern humans and estimates from the fossil record suggest substantial variability within and among hominin groups. Given the clinical and evolutionary importance of lordosis, why is it so variable? What factors drove variations in lordosis, and how did these variations affect spinal function? Eric Castillo's thesis explores the biomechanical consequences of lordosis variability in modern humans to understand the competing evolutionary pressures acting to shape the hominin lumbar spine. These functional tradeoffs not only provide context for interpreting lordosis variations in fossil hominins but also may have important health implications for lumbar spinal pathology today.

Biological Labs Lecture Hall Room 1080, 16 Divinity Avenue Cambridge, MA 02138

Monday, May 1 at 10:00 a.m.