

# Steven E. Churchill, Associate Professor and Chair, Biological Anthropology & Anatomy and Internal Scientific Advisory Committee

## Contact Info:

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## Education:

- Ph.D., University of New Mexico, 1994
- M.A., University of New Mexico, 1989
- B.S., Virginia Polytechnic Institute & State University, 1981

**Research Interests:** *Human Paleontology; Functional Morphology of Postcranial Skeleton*



I am a human paleontologist studying morphological and behavioral adaptation in archaic and modern humans of the Middle and Late Pleistocene. Through comparative functional-morphological analysis of human fossil remains, coupled with investigation of the archeological record of prehistoric human behavior, my students and I conduct research in the following inter-related areas:

- 1) The ecology, energetics and adaptive strategies of premodern members of the genus *Homo* (especially the Neandertals [*Homo neanderthalensis*] of Europe and western Asia and Middle Pleistocene archaic humans of Africa [variously attributed to *H. heidelbergensis*, *H. rhodesiensis* or *H. helmei*]) and early members of our own species [*H. sapiens*] in Africa, the Near East and Europe.
- 2) The evolution of human subsistence strategies across the Middle and Late Pleistocene, with an emphasis on the nature of the hunting methods employed by various groups.
- 3) The evolution of subsistence technology, especially the origins of true long-range projectile weaponry.
- 4) The community ecology of humans and large-bodied carnivores in Pleistocene Europe and Africa.

In addition to this basic research, our team is also actively engaged in fieldwork in southern Africa, with the goal of improving our understanding of the morphology and

behavior of Middle Stone Age-associated early modern humans and their immediate ancestors (African Middle Pleistocene archaic humans).

## Curriculum Vitae

### **Representative Publications** ([More Publications](#))

1. Rhodes, J.A. and S.E. Churchill. "Throwing in the Middle and Upper Paleolithic: Inferences from an analysis of humeral retroversion." *J. Hum. Evol.* 56 (2009): 1-10.
2. Churchill, S.E.. "Bioenergetic perspectives on Neandertal thermoregulatory and activity budgets." *Neanderthals Revisited: New Approaches and Perspectives*. Ed. K. Harvati and T. Harrison. New York: Springer, 2006. 113-133.
3. Churchill, S.E. and J.A. Rhodes. "How strong were the Neandertals? Leverage and muscularity at the shoulder and elbow in Mousterian foragers." *Periodicum Biologorum* 108 (2006): 457-470.
4. Schmitt, D., S.E. Churchill and W.L. Hylander. "Experimental evidence concerning spear use in Neandertals and early modern humans." *J. Archaeol. Sci.* 30 (2003): 103-114.
5. Franciscus, R.G. and S.E. Churchill. "The costal skeleton of Shanidar 3 and a reappraisal of Neandertal thoracic morphology." *J. Hum Evol* 42 (2002): 303-56.
6. Churchill, S.E.. "Cold adaptation, heterochrony and the Neandertals." *Ev. Anthropol.* 7 (1998): 46-61.
7. Churchill, S.E., A.H. Weaver and W.A. Niewoehner. "Late Pleistocene human technological and subsistence behavior: Functional interpretations of upper limb morphology." *Reduction Processes ("Chaînes Opératoires") in the European Mousterian*. Ed. A. Bietti and S. Grimaldi. Quaternaria Nova 6(1996)
8. Churchill, S.E.. "Weapon technology, prey size selection and hunting methods in modern hunter-gatherers: implications for hunting in the Palaeolithic and Mesolithic." *Hunting and Animal Exploitation in the Later Palaeolithic and Mesolithic of Eurasia*. Ed. In G.L. Peterkin, H.M. Bricker and P.A. Mellars. Archeological Papers of the American Anthropological Association 41993