

Center for Evolution & Medicine Seminar Series

Thursday, January 12, 2017

LSC 202// 12:00pm-1:00pm // Free and open to the public



Cynthia Beall

**Distinguished University Professor and
Sarah Idell Pyle Professor
Department of Anthropology
Case Western Reserve University**

Adaptation to high altitude by natives of the Andes, East Africa, and the Tibetan Plateau

The principal stress at high altitude is hypoxia, less than the normal amount of oxygen in the air and, as a result, in the body. An individual at 13,000' altitude inhales roughly 60% of the oxygen molecules as an individual in Tempe at 1,140', yet the two individuals burn the same amount of oxygen per unit time. Intriguingly, the human biology underlying that remarkable phenomenon is slightly different among natives of the Andean, East African and Tibetan Plateaus. How did that come about and what are the implications for health?

Lunch will be served at 11:45am

Please RSVP at

evmed.asu.edu/upcoming-events

Dr. Beall is a physical anthropologist whose research focuses on human adaptation to high-altitude hypoxia, particularly the different patterns of adaptation exhibited by Andean, Tibetan and East African highlanders. Her current research deals with the genetics of adaptive traits and evidence for natural selection, with the role of nitric oxide in oxygen delivery at high altitude and with the human ecology of high-altitude Tibetan nomads. Professor Beall is a member of the U.S. National Academy of Sciences, American Philosophical Society, and the American Academy of Arts and Sciences.

The ASU Center for Evolution & Medicine

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