

Arch/BioAnth Lunch Talk

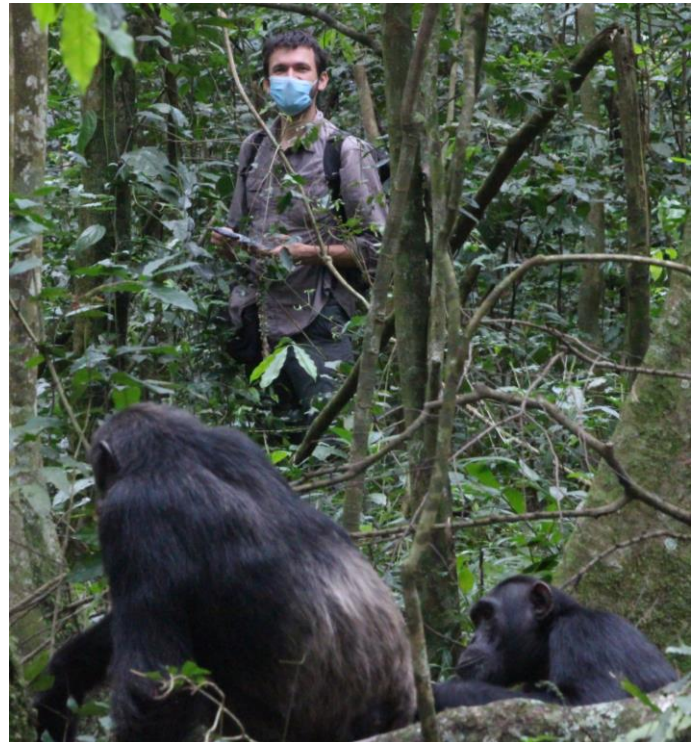
Wednesday, **February 5th**, 2020, 12:00pm
Soc Sci I, 261

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Ethanol within chimpanzee-consumed fruit: presence, preference, and significance

Human attraction to alcohol has been hypothesized to be evolutionarily rooted through prolonged ancestral exposure to low dietary concentrations within fermenting fruit, and alcoholism to be the result of a mismatch between the evolutionary dosage and modern-day availability. This evolutionary predisposition towards ethanol by hominids and primates in general is called **the “drunken monkey” hypothesis**. Preference for ethanol is thought to have evolved in response to the action of ethanol as a long-distance olfactory signaling molecule – of caloric reward in the form of fermenting fruit sugars. Early studies on the topic have shown that ethanol is in fact present in low concentrations within a variety of wild fruit. In this talk I will flesh out the basis for these ideas and present my recent findings on fruit ethanol concentrations within chimpanzee-consumed fruit, as well as con-



centrations of airborne ethanol around these same fruit trees (i.e. with respect to olfaction). Many questions remain to be answered, such as whether sensation of ethanol concentrations is part of a sensory modality that determines fruit preference in wild foraging animals, and how the inadvertent consumption of fruit ethanol has influenced the evolution of ethanol metabolism in various primate lineages.

Aleksey is a

graduate student in the Animal Flight Laboratory at UC Berkeley (PI Robert Dudley) and long-time resident of the East Bay. His interested in a wide variety of questions concerning the sense and significance of life on earth. That’s probably why he’s a biologist.

He also enjoys tree climbing.