Theories in Human Adaptation

This is a seminar that introduces students to the formal definition of science and theories in science. This course analyzes several topics that are rich in theoretical arguments, and that have been areas of contention for over 150 years, since the inception of the scientific recognition of human evolution. These topics include the assessment, categorization, and importance of human biological variation; what is disease? What is adaptation? human genetic differences in behavior, responses to medical treatment, and life-history variables; attempts to reconstruct the cognitive status and social behavior of fossil humans, from the earliest human species to the Neanderthals; animal tool behavior; the origins of complex cognition in animals; and the continuing course of human biological evolution. These topics are placed within the context of the history of evolutionary anthropology from the 19th through the 21st centuries.

Students will investigate contrasting theoretical approaches to human adaptation in a short paper, and will individually explore a theoretically contentious area in a longer paper. Students will participate in an in-class exercise on cooperation and competition in small groups, which will illustrate problems of social interaction in non-verbal animals. If students have access to pet dogs, they will assess temperament in these animals using the Dognition framework employed by Emory University researchers to examine dog cognition. Students will give an oral report on animal cognition, regardless of whether the Dognition framework is used. Students will engage in directed class discussion on a number of current topics in human evolution and adaptation, while learning to frame these topics in an historical perspective.