

STONY BROOK UNIVERSITY
CELEBRATES DARWIN DAY 2020



FRIDAY FEBRUARY 14, 2020
7:30 P.M.

STONY BROOK UNIVERSITY, WANG CENTER AUDITORIUM
(you can park free in the SBU Main Entrance Parking Structure)

Prof. **Jeroen Smaers**
Anthropology Department
Stony Brook University

“The Evolution of the Brain and Intelligence”

SUMMARY

One of the enduring questions in Darwin’s theory of evolution is how it explains the evolution of what is arguably the most complex biological system: the brain of higher vertebrates. As the biological substrate of behavior, the brain plays a key role in shaping life on earth. But despite its importance, some of the most fundamental questions about its evolution remain unanswered. For example, how did intelligence evolve multiple times independently in distantly related species? In the last two decades technological advancements in neuroimaging have spurred a genuine data revolution in the neurosciences. This new data is allowing for in-depth studies of an ever increasing variety of species. In this presentation I will use the full array of diversity in brain structure and function across higher vertebrates to describe how the latest research in brain evolution informs on large scale patterns of species evolution, what ‘intelligence’ consists of, and who we are as a species.

BIO

Jeroen Smaers is an internationally recognized evolutionary neuroscientist at Stony Brook University and the American Museum of Natural History. He has made major advancements in the study of human and primate brain evolution. He quantifies neuroanatomical differences among species and uses this information to answer large scale evolutionary questions about the origin and nature of intelligence. Smaers has graduate degrees in Psychology, Social Anthropology, Archeology, and Biological Anthropology and obtained his PhD from the University of Cambridge. He was a postdoc at University College London before joining Stony Brook University in 2013. He has published in major scientific journals on the evolution of the brain in humans, primates, bats, carnivorans, cetaceans, dinosaurs, birds, and sharks.