Zoophysiology Seminar at Aarhus University

# Vocal neuromechanics: Embodied motor control of the animal voice


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Communication by sound, or vocal communication, is the fastest, most accurate, and information-rich modality and essential to vertebrate survival and speciation. My central aim is to understand how the developing body and brain interact to produce such complex signals. As an essential first step, my lab has over the last 10 years shown that a universal biophysical mechanism underlies sound generation in all vertebrates including birds, frogs, rodents, primates, bats, and most recently also toothed and baleen whales. This was the crucial groundwork for the next program: defining and quantifying the parameters that modulate vocal signals to causally link motor control to sound in major animal model systems. This will elucidate the fundamental motor control and learning strategies of voice production in vertebrates, including humans, from neuromuscular to evolutionary timescales.

**Friday, April 8th, 13.00**
**Zoophysiology Seminar Room (1131-127)**