



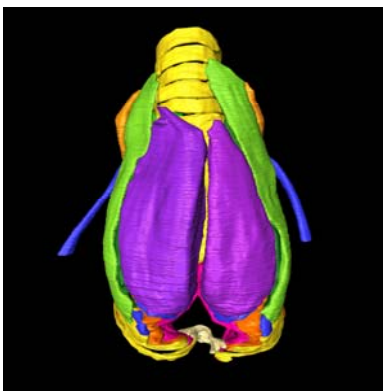
# Singing in the fast lane

## The neuromechanics of sound production in vocal vertebrates

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Songbirds have become an important model system to understand the neural processes and pathologies underlying human speech production and language acquisition.

My research aims at unravelling the question “How are neural signals translated into sound” using experimental and computational methods from neuroscience and biomechanics. We find that sound production systems are pushed to the extremes: tissues violently collide at 100,000 times/sec and extreme performing superfast muscles contract up to 250 times/sec. While focused on songbirds, I use a comparative approach to find unifying principles of motor control and discover new model systems across the vocal vertebrates, from birds to fish, from bats to whales.



Monday June 24th at 13.15  
Seminar room (Room 127 building 1131)