## **ASHBi SEMINAR**

Marmoset as a Model System for Studying Neural Basis of Vocal Communication

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## Date: Friday, 22<sup>nd</sup> November 2019 Time: 17:00–18:00 Venue: Seminar Room 106, Faculty of Medicine Bldg. C

Vocal communication is one of the most important natural behaviors of both humans and many animal species. In the past, studies of echolocating bats and songbirds have provided important insights into neural mechanisms of vocal communication. In comparison, much less has been learned from nonhuman primates. The common marmoset (Callithrix jacchus), a highly vocal New World monkey species, has emerged in recent years as a promising model system for studying neural basis of hearing and vocal communication. Marmoset offers several critical advantages over other non-human primate species, including a rich vocal repertoire in captivity, a relatively short postnatal development period and the feasibility in generating genetically modified models. In the past 20 years, my laboratory has pioneered a number of behavioral and electrophysiological techniques to study neural activity in the marmoset brain during natural vocal behaviors. Our studies have shed important light on the brain mechanisms for processing communication sounds. They also demonstrated the tremendous potentials of the marmoset as a primate model for studying neural mechanisms underlying vocal communication and social interactions.

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