



ONSA/CBIR セミナー・大学院特別講義  
(医歯学先端研究特論) (生命理工学先端研究特論)  
(生命理工医療科学先端研究特論) (医歯理工学先端研究特論)

## Investigation of the inferior olive to understand cerebellar function

演者

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Neuronal Rhythms in Movement Unit, OIST, Okinawa

日時

**2023年3月3日(金) 17:00-19:00**

会場

**ハイブリッド開催 (対面&オンライン)**

会場：大学院講義室2 M&D タワー13階

ZOOM ウェビナー受講希望者は下記の連絡先まで問い合わせてください。なお、本学の学生については出席確認のため、本講義を受ける際は本学の機関登録をした ZOOM ID とパスワードでログインするようお願いします。

講演要旨

**発表言語は英語です (Seminar will be in English)**

The cerebellum is a brain structure that plays a crucial role in motor coordination and control. It has been traditionally studied in the context of motor function, but recent research has expanded our understanding of the cerebellum. This shift in focus highlights the need to examine cerebellar function in a comprehensive manner beyond its classic role in error-based motor learning. In this talk, I will focus on one specific aspect of cerebellar function, the generation of complex spikes in the inferior olive (IO). After a brief historical overview of the current knowledge of the IO structure and function, I will discuss recent findings that suggest these spikes have the potential for a wide range of signaling through the modulation of spike duration and provide an overview of current knowledge about the function of the mouse IO and identify the most pressing questions that remain unanswered. Additionally, I will share our recent findings from investigating input integration in the IO in living animals, which can deepen our understanding of cerebellar function and help provide a more holistic view of the cerebellum.

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