

# ASHBi / HBRC JOINT SEMINAR

## Forebrain control of posture and locomotion

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Date **Friday, 13 December 2024**

Time **17:00 – 18:00 [JST]**

Venue **Seminar Room  
(1F, Faculty of Medicine Bldg.)**

Language **English**

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### Abstract

Forebrain structures such as the cerebral cortex and basal ganglia control posture and gait by activating the brainstem and spinal cord mechanisms. Based on our results in the cat experiments, this seminar will outline the control mechanisms of posture and locomotion by the brainstem and spinal cord, (2) those by the basal ganglia-brainstem system, and (3) those by the cerebral cortex. Consideration will be further made as to whether the findings in animal experiments help understand human posture-gait disturbances such as frontal gait disorders and Parkinson's disease.

大脳皮質や基底核などの前脳構造は、脳幹と脊髄の機構を駆動することで姿勢と歩行を制御する。本セミナーでは、ネコを用いた実験結果に基づいて、(1) 脳幹と脊髄、(2) 基底核-脳幹系、そして、(3) 大脳皮質による姿勢と歩行の制御機構について概説する。さらに、動物実験での知見が、前頭葉歩行障害やパーキンソン病などヒトの姿勢-歩行障害の理解に有用であるか否かを考察する。

Organizer : Human Brain Research Center  
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