

# 198<sup>th</sup> WPI-IIIS Seminar

## How can we speak while breathing?

Vocalization is an essential method of communication. Vocal sound is produced in the airway, which we also use for breathing. Vocalization requires closing the airway to produce sound, while we need to open our airway to breathe in. Therefore, dysfunction in controlling the airway can lead to problems with both breathing and vocalization. How are these processes precisely controlled? The brainstem is known for governing vocalization and breathing; however, the circuits involved are heavily intermingled and poorly defined due to technical limitations. Here, I will describe our studies investigating a vocalization-specific neural population in the brainstem.



### Dr. Jaehong Park

Department of Biomedical  
Engineering  
Duke University

Date: **Monday, June 24, 2024**

Time: **10:00 – 11:00**

Venue: **1F Auditorium, IIIS Building**

**\* On-site participation only**



Contact: International Institute for Integrative Sleep Medicine, University of Tsukuba  
029-853-5857 (ext.5857) | [wpi-iiis-alliance@ml.cc.tsukuba.ac.jp](mailto:wpi-iiis-alliance@ml.cc.tsukuba.ac.jp)