

75th WPI IIS Seminar

Fighting for breath: how the brain wakes up from apnea during sleep

During sleep apnea, affected individuals stop breathing due to collapse of their airway. Their life is saved, multiple times per night, by a reflex awakening that opens the airway, but the mechanism for this awakening is not understood. We created a mouse model of chronic intermittent hypercarbia and hypoxia, as occurs during apnea, and identified brain pathways that are activated by high CO₂ - low O₂. By manipulating these pathways genetically, we show that activation of these pathways is necessary to awake from apnea during sleep.

Speaker:

Dr. Clifford B. Saper

Harvard Medical School Chairman
Department of Neurology,
Beth Israel Deaconess Medical Center



Date: Thursday, February 25, 2016

Time: 12:30 - 13:30

**Venue: 1F Auditorium, IIS Building
University of Tsukuba**

★ Light refreshments will be served.



**Contact: International Institute for Integrative Sleep Medicine
Phone: 029-853-8080 (ext.8080)**