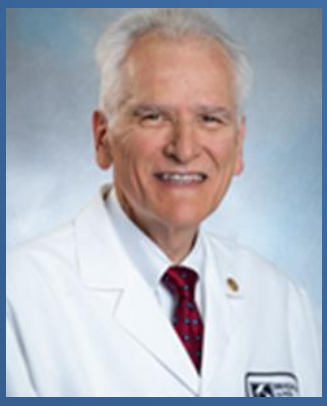
188th WPI-IIIS Seminar

Fundamental Properties of the Central Circadian Pacemakers in Humans: Implications for Health and Disease

Over the past 50 years, major advances have been made in understanding the fundamental properties of the brain's central circadian pacemakers that regulate circadian rhythms and sleep-wake functions in humans, and how these timekeeping systems interact with and are affected by peripheral circadian oscillators and sleep-wake homeostatic processes. Retinal exposure to light is the most powerful circadian synchronizer in humans; photic resetting responses are dependent on the timing, intensity, duration, wavelength, and continuity of the light exposure, and prior light exposure history. Understanding the fundamental properties of circadian pacemakers and the sleep-wake homeostat has major implications for health and disease.



Dr. Charles A. Czeisler

Division of Sleep Medicine,
Harvard Medical School

Date: **Wednesday, September 20, 2023**
Time: **9:30 – 10:30**
Venue: **1F Auditorium, IIIS Building**

✻On-site participation only

IIIS
INTERNATIONAL INSTITUTE FOR INTEGRATIVE SLEEP MEDICINE

wpi

MOONSHOT RESEARCH & DEVELOPMENT PROGRAM

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