

# AFSUMB 2024

The 16th Congress of the Asian Federation of  
Societies for Ultrasound in Medicine and Biology  
*in conjunction with KSUM 2024*

*Shaping the Future with Ultrasound*

May 9 (Thu) – 11 (Sat), 2024 | Coex, Seoul, Korea



**Speaker:** Hong Chen, United States (U.S.A)

**Affiliation:** Washington University in St. Louis, Biomedical Engineering

**Lecture Title:** Ultrasound-induced Artificial Hibernation

Hibernation is an energy-conserving state in which animals dramatically decrease their metabolic rate and body temperature to survive harsh environmental conditions. This lecture will present the noninvasive, precise, and safe induction of a hibernation-like hypothermic and hypometabolic state in rodents by remote transcranial ultrasound stimulation at the hypothalamus preoptic area.