

41st WPI IIIS Seminar

“Serotonin 2a receptor-expressing cells in the central amygdala control the hierarchy between innate and learned fear”

The molecular and cellular mechanisms underlying integrative processing of innate and learned fear remain poorly understood. We optimized the chemical structure of a predator odorant and developed a series of thizaoline-related fear odors (tFOs), which are potent inducers of innate fear. Innate fear induced by a tFO, but not learned fear, was accompanied by reduction of cutaneous temperature along the spine and body core temperature by as much as 3 ° C, and sleep-like slow oscillation. Using tFOs, we studied the integrative and hierarchical nature of innate and learned fear by in vivo imaging and pharmacogenetic approaches, and will show the molecular and cellular framework of these phenomena.



Speaker: Dr. Reiko Kobayakawa

Osaka Bioscience Institute

Department of Functional Neuroscience

Date: Tuesday, September 2, 2014

Time: 14:00-15:00

Venue: Room #402, 4F, Health and Medical Science Innovation Laboratory, University of Tsukuba



IIIS

INTERNATIONAL INSTITUTE FOR INTEGRATIVE
SLEEP MEDICINE



Contact: International Institute for Integrative Sleep Medicine

Phone: 029-853-5857 (ext. 5857)