

ASHBi DISTINGUISHED SEMINAR

Adolescent Stress as a Risk Factor for Schizophrenia

Lecturer: **Anthony A. Grace Ph.D.**

Distinguished Professor of Neuroscience, Professor of Psychiatry and Psychology
University of Pittsburgh



Date: **Wednesday, 29 May 2024**

Time: **16:00 - 17:00**

Venue: **Conference Room**
B1F, Faculty of Medicine Bldg. B

Eligibility: **Academic Researchers and Students**

Register here



In addition to genetic susceptibility, peripubertal stress is known to be a risk factor for the development of schizophrenia and other major psychiatric disorders. In a developmental disruption rat model of schizophrenia, we found that the animals show increased anxiety and responsivity to stressors prepubertally, and treating the stress circumvents the transition to a hyperdopaminergic schizophrenia-like state in adults. Moreover, multiple stressors presented prepubertally to normal rats also yield a schizophrenia-like phenotype in adults, but only in male rats. In contrast, female rats are resilient to prepubertal stress but sensitive to postpubertal stress, leading to increased affective disorders in adults. This is highly consistent with susceptibility to affective and psychotic disorders in humans. Interestingly, male and female rats express this vulnerability via distinct pathways in the brain.

Hosted by Institute for the Advanced Study of Human Biology (WPI-ASHBi)

Contact: Prof. Tadashi Isa

[E-mail] isa.tadashi.7u@kyoto-u.ac.jp

