浙江大学 ZHEJIANG UNIVERSITY | האוניברסיטה העברית בירושלים THE HEBREW UNIVERSITY OF JERUSALEM الجامعة العبرية في اورشليم القدس

2023 LEAD LECTURE SERIES

TOPIC Neuroscience **DATE** 30 May,2023

Prof. Yonatan Kupchik

Department of Medical Neurobiology
Institute for Medical Research – Israel Canada (IMRIC), Faculty of Medicine
The Hebrew University of Jerusalem

Dr. Ping Su

International School of Medicine, Zhejiang University

Prof. Yael Stern-Bach

Department of Biochemistry and Molecular Biology
Institute for Medical Research Israel-Canada (IMRIC), Faculty of Medicine

17:00–17:30 (CN) / 12:00–12:30 (IL)

Title: Differences between nucleus accumbens neurons expressing the dopamine receptors D1 or D2 in an animal model of cocaine withdrawa

Prof. Yonatan Kupchik studies the synaptic mechanisms in the reward system of the brain underlying excessive consumption of rewards, as seen in animal models of drug addiction and overeating. After studying the cellular processes modulating the release of synaptic vesicles in his PhD (under the supervision of the late Prof. Itzchak Parnas at the Hebrew University), Dr. Kupchik joined the laboratory of Dr. Peter Kalivas at the Medical University of South Carolina, where he studied the roles of two neuronal subpopulations in the nucleus accumbens, the neurons that express the D1 or the D2 dopamine receptors, in drug addiction. In his research as a postdoc and as an independent principal investigator, Dr. Kupchik identified dynamic changes induced by withdrawal from drugs in the synapses of these two neuronal subpopulations and in synapses of a downstream region of the ventral pallidum. These studies were published in leading scientific journals. In addition, Dr. Kupchik serves as the head of the Addiction Research Center at the Faculty of Medicine of the Hebrew University.

17:30–18:00 (CN) / 12:30–13:00 (IL)

Title: The role of membrane protein complexes in psychiatric disorders

Dr. Ping Su's research focuses on investigating the mechanisms that membrane proteins-associated complexes involved in psychiatric disorders, including schizophrenia, post-traumatic stress disorder, major depression and neurodevelopmental disorders. Dr. Su also aims to identify new biomarkers of these mental illnesses in human samples and develop cell penetrating peptides with potential therapeutic effects. She determined the role of membrane protein complexes in psychiatric disorders, such as D2R-DISC1 complex in schizophrenia, and GR-FKBP51 in PTSD, and also confirmed that the levels of these complexes in peripheral blood are potential biomarkers for these diseases. These studies provided novel insights into the mechanisms of psychiatric disorders and may help improve the diagnosis and therapeutics of these diseases.

VENUE

Room 502, International Institutes ofMedicine, Zhejiang University

Zoom meeting ID:883 6173 2982
Password:0530