



NNRIS Bench to Bedside Seminar Series

Date: 19 March 2021 (Friday)

Time: 12:00pm – 1:00pm

Zoom Details: <https://nus-sg.zoom.us/j/85202435477?pwd=WVhrcGQyRXZsSFllVUthQVXliQWg5UT09>

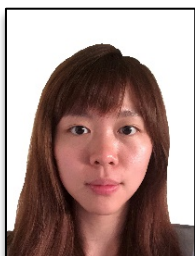
Meeting ID: 852 0243 5477

Password: 636160

Note: Please rename your login name to include your institute to facilitate admission

Moderator: Assoc Prof Hyunsoo Shawn Je
Neuroscience & Behavioural Disorders Programme, Duke-NUS

EXPOSURE THERAPY WITH PERSONALIZED REAL-TIME AROUSAL DETECTION AND FEEDBACK TO ALLEVIATE SOCIAL ANXIETY SYMPTOMS



Ms Bernice Lin Xiangting
Research Assistant
Laboratory of Neurobehavioral
Neuroscience & Behavioural
Disorders Programme
Duke-NUS Medical School

Abstract:

Exposure therapy is highly effective for social anxiety disorder. We developed and examined the feasibility of an arousal feedback-based exposure therapy to alleviate social anxiety symptoms in an analogue adult sample. A randomized, pilot, proof-of-concept trial was conducted to evaluate the acceptability, safety, and preliminary efficacy of our treatment program. This new medium of administering exposure therapy may be feasible for treating a subset of social anxiety symptoms. Our results indicated that it is worthwhile to proceed to a larger trial.

Biography:

Ms Bernice Lin graduated from the National University of Singapore (Psychology), and is currently pursuing a Master's degree in Art Therapy. Her interests lie in translational research and innovative approaches to psychological well-being and recovery.

AUTOIMMUNE BIOMARKER SCREENING AND FUNCTIONAL VALIDATION IN PARKINSON'S DISEASE



Dr Chao Yinxia
Assistant Professor
Junior Principal Investigator
National Neuroscience Institute

Abstract:

Involvement of the immune system in the pathogenesis of Parkinson's disease (PD) has been proposed. However, there is a lack of an integrated platform for large scale immune profile screening and functional validation of shortlisted immune targets specifically for PD. Using NFS (neurotrophic factor S) and alpha-synuclein as examples, I illustrate how my group has built an integrated system to screen and validate the immune markers in PD patients. Using two antibody screening platforms, we have identified a group of autoantibodies in PD patients, including NFS-autoantibody and alpha-syn-autoantibody. We used a peptide library to characterize the alpha synuclein and NFS autoantibody epitopes. NFS and alpha-syn specific T and B cells were also identified in a subset of PD patients. We will further characterize these T and B cells using clonal expansion, and ultimately produce large amount of PD specific NFS- and Alpha-syn- autoantibodies and T cells for further functional study.

Biography:

Assistant Prof Chao Yinxia obtained her MBBS and Master of Medicine in Neurology and practiced as a Neurologist before she moved to Singapore for her PhD study in NUS. She has also been trained as an Immunologist during her PostDoctoral training in Singapore Immunology Network (SIgN, A-STAR). Currently, Dr Chao is a Junior PI and Clinician Scientist at National Neuroscience Institute focusing on immune biomarker and therapeutic target screening in neurodegenerative diseases. She is also the Co-Course Director of Body & Disease course at DUKE-NUS and is in charge of Immunology.