

*The School of Humanities and Social Sciences cordially invites you to the Lecture Series.*

*Topic of the Lecture:*

**The Dynamics of Central-Peripheral Stress Responses  
after Acute Psychosocial Stress: A Multimodal Perspective**



*Synopsis of the Lecture*

Stressful conditions lead to central and peripheral physiological signals interact, resulting in a unique temporal characteristic. The bidirectional information flow of these physiological signals shapes cognitive processes and results in a complex stress response. Investigating the dynamics of both brain and body signals during and after an encounter with a stressor allows us to understand the underlying principle of the acute stress response. This has been shown to be atypical in various psychiatric disorders. However, a detailed understanding of stress response largely remains unexplored. This lecture will explore the acute stress response dynamics in pre-and-post ScanStress task conditions using a multimodal approach. The first part will discuss the electroencephalography (EEG) based vigilance markers of stress. The second part will focus on the interaction between different stress response systems using functional connectivity extracted from the functional magnetic resonance imaging (fMRI) data across three core resting state brain networks (central executive network, salience network, and default mode network). Furthermore, how such interaction between the resting state networks affects the heart rate variability in resting state pre- and post-ScanStress task.

*About the Speaker*

Dr. Tara Chand is an Assistant Professor at the Jindal Institute of Behavioural Sciences (JIBS), O.P. Jindal Global (Institution of Eminence Deemed To Be University), Sonipat. He received his Ph.D. in Cognitive Science (Magna Cum Laude) from the University of Tübingen, Germany at the intersection of the Max Planck Institute for Biological Cybernetics and the Psychiatry Clinic in Tübingen. After his doctorate, he worked as a postdoc at the Institute of Psychology at the Friedrich Schiller University of Jena, Germany. The focus of his research is the investigation of affective processing in the brain and body by means of multimodal acquisition and analysis approaches.



*Speaker :*

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*Day and Date: Thursday, 14 March, Time: 4:00 PM*

*Venue: POD 1C-301 ( SHSS Seminar Hall)*