

Functional Behavioral Neuroanatomy & Immunology

January 20-21, 2024

Dr. Robert Melillo

Dr. Peter Scire

OUTLINE MODULE 5

The Disconnected Brain - The Role of Timing and Processing in The Brain, Systems Neuroscience, Neuroimmunology and Neuroplasticity. The Neurology of Feeding and Eating Disorders.

Saturday – January 20, 2024 |

9:00AM – 10:00AM | Dr. Melillo

What is a Functional Disconnection Syndrome?
Research on Functional Connectivity

10:00AM - 12:00PM | Dr. Melillo

Neuroanatomy of the thalamus and thalamocortical loops
Review prefrontal cortex, neostriatal loops
Cortico-striato-cerebello-thalamo loops and Human behavior
Thalamo Cortical Oscillations

Lunch 90 Minutes | 12:00PM – 1:30PM

1:30PM – 3:00PM | Dr. Melillo

Polyvagal System
Evolution and development of the autonomic system
Central autonomic network and regulation of the autonomic system
RVLM, CVLM, Amygdala, Hypothalamus, Insula cortex
Parabrachial Nucleus, Vagal Complex
Sympathetic/Parasympathetic Functions

15 Minute Break

3:15PM - 5:00PM | Dr. Melillo

Role of Autonomic and Vagal system in Immune
Kevin Tracy neuroinflammatory reflex

5:00PM – 6:00PM | Dr. Peter Scire

Complete Review Lab testing for Immune system
Review of Results and Normal Values

Sunday - January 21, 2024 |

9:00AM - 10:30AM | Dr. Robert Melillo

Hemispheric functions of eating and eating disorders

Anorexia

Bulimia

Right Brain vs Left Brain Anxiety

Stuttering Neurophysiology

15 Minute Break

10:45AM - 12:15PM | Dr. Peter Scire

Early Limbic Connections and the Hypothalamus

Relationship to feeding HPA Axis

Relationship to Functional Disconnection Syndrome

Lunch | 12:15PM-1:15PM

1:15PM - 3:00PM | Dr. Robert Melillo

Hemispheric regulation of the Immune System

Review research on left vs Right hemisphere regulation and relationship to

Sympathetic/Parasympathetic regulation

Autonomic Assessment Tools

3:00PM - 4:30PM | Dr. Robert Melillo

Vagal Stimulation Tools

Review 32 Different Ways to Stimulate the Vagal System

Most Cutting-Edge Vagal Stimulation Tools and Research

How to Implement this with Patients