



Cellular & Molecular Foundations of Neurobiology

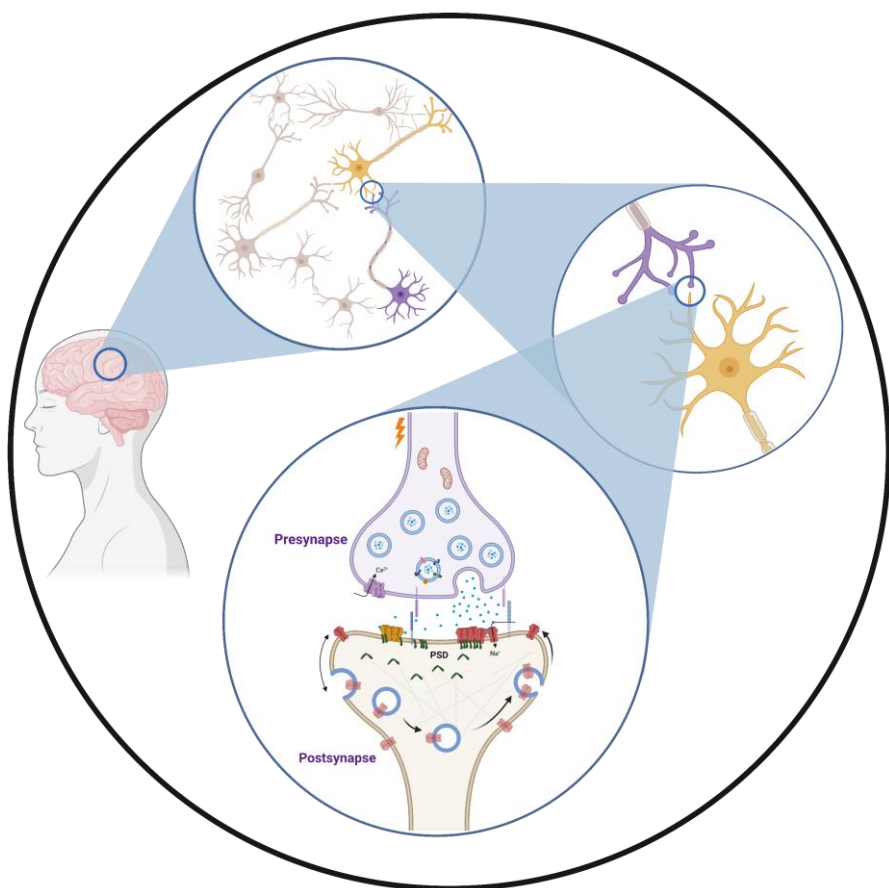
Name of the PMRF student

Vanika Dhingra

Required background of the students taught

Undergraduates & Postgraduates in Biological Sciences

Anybody curious to learn the basic biology of the brain



Details of the content of the module

1. Brief history of neuroscience
2. Cellular organization of nervous system
 - Structure of Neuron
 - Neuronal classification
 - Non-neuronal cells
3. Neuronal membrane at rest
4. Ionic basis of resting membrane potential
5. Action Potential
6. Neurotransmitter
 - Synthesis, storage & release
7. Neurotransmitter receptors & effectors
8. Synapse
 - Ultra-structure of pre- & post-synapse
 - Principles of synaptic transmission & integration
9. Molecular mechanism of Learning and Memory

Schedule of the module

Start date: 31 August 2024

End date: 30 November 2024

Lecture: Saturdays, 11:30 am to 12:30 pm

Discussion sessions: First Sunday of the month, 12pm

Meeting link : Will be shared later

Contact email ID: vanikad@iisc.ac.in

Registration link:

<https://forms.gle/sc35gnMwUmjay6mr7>