



**EMBO Global
Exchange Lecture
Course**
**Neural
circuits in
health and
disease**

13 – 17 March 2025 |
Mohali, India

Program Schedule

Day 1 | 13 March 2025

16:00-19:00
Registration
19:00- 21:00
Dinner (only for speakers)
Dinner

Day 2 | 14 March 2025

8:30- 9:00 Opening remarks
09:00-09:45 Spinal circuit plasticity for movement adaptation [Aya Takeoka]
09:45-10:30 A new minimal model for cognition: uncovering spatial cognitive maps in the zebrafish brain [Jennifer Li]
10:30-11:15 Tea/ Coffee break
11:15-11:30 Role of olfactory bulb inhibitory interneurons in the modulation of threat perception in mice [Sanyukta Pandey]
11:30-11:45 The Role of Olfactory Plasticity in Sensory Compensation After Visual Impairment [Oisorjo Chakraborty]
11:45-14:00 Lunch
14:00-14:45 A peripheral to central neural pathway in sensing and modulating scratching [Wenqin Luo]
14:45-15:30 TBA [Vanessa Stempel] (online)
15:30-16:45 Poster session
Tea/Coffee break
16:45-17:15 Synaptic pruning sculpts cerebellar circuits and modulates motor behaviours [Vatsala Thirumalai]
17:15-17:45 Hindbrain circuits for satiety and aversion [Amber Alhadeff](online)
17:45-18:15 Neuropeptidergic circuits and innate behaviours [Aurnab Ghose]
19:00-21:00 Dinner with speakers / Networking sessions

Day 3 | 15 March 2025

09:00-09:45
A sex-specific thalamo-amygdalar circuit dysfunction mediates chronic pain and anxiety after early-life stress [Sebastian Wieland]
09:45-10:30
Representation of pain states in somatosensory cortex [Liam Browne]
10:30-11:00 Tea/ Coffee break
11:00-11:45
Neural circuits centered on the lateral hypothalamus drive how stress influences pain and itch [Arnab Barik]
11:45-12:00
Parabrachial-thalamic circuitry drives nociplasticity for affective-motivational responses to cold pain [Mousmi Rani]
12:00-12:15
Manipulating endogenous nicotinic receptors and associated behaviors with photoactivatable agonists. [Nicolas Guyon]
12:15-14:00 Lunch
14:00-14:45
Circuit solutions for programming body actions [Silvia Arber] (online)
14:45-15:30
On Modeling Addiction in Rodents [Véronique Deroche-Gamonet] (online)
15:30-16:45 Poster session | Tea/Coffee break
16:45-17:15
A novel medial amygdala (MeA) to nucleus accumbens (NAc) circuit mediates social reward [Jai Polepalli]
17:15-18:00
Spinal circuit adaptation to physiological and pathological states [Graziana Gatto]
18:00-18:45
TBA [Sarah Ross](online)
19:00-21:00 Dinner.

Day 4 | 16 March 2025

09:00-09:45	Choosing between food and cocaine: shaping individual preferences through the mesolimbic dopamine system [Christian Lüscher]
09:45-10:15	Opioid-Sensitive Habenular Neurons: Key Regulators of Negative Affect [Emmanuel Darcq]
10:15-10:45	Tea/ Coffee break
10:45-11:15	Behavioral timescale plasticity- same players different roles [Anant Jain]
11:15-11:30	A novel role of the post-synaptic density protein Presol in group I metabotropic glutamate receptor internalization [Ayan Mandal]
11:30-11:45	Neural representations of appetitive and aversive stimuli in the Nucleus Accumbens [Carina Soares-Cunha](online)
11:45-14:00	Lunch
14:00-14:45	Brain control of peripheral immunity [Ivan De Arujajo]
14:45-15:15	Circuits of environment-driven overeating [Hasan Mohammad]
15:15-15:45	Tea/Coffee break
15:45-16:15	Top-down regulation of non-homeostatic feeding behaviour [Fu Yu]
16:15-17:00	Specific contributions of hippocampal dynamics to memory [Abhilasha Joshi]
17:00- 17:45	Natural behavior across scales [Sandeep Robert Dutta] (online)
19:00-21:00	Gala Dinner

Day 5 | 17 March 2025

08:30-09:15	Dynamic encoding of emotional states in amygdala circuits [Andreas Luthi]
09:15-9:45	Learning to learn in complex, multi-choice environments [Ashesh Dhawale]
9:45-10:15	Functional diversity of amygdala circuits [Sabine Krabbe]
10:15-10:45	Tea/ Coffee break
10:45-11:30	Advanced optomechanical devices for continuous neural and behavioral recording of freely moving animals across circadian timescales [Drew Robson]
11:30- 12:30	Career Development Mentorship sessions Multiple speakers
12:30- 13:00	Concluding remarks and awards
13:00-17:00	Trip to "Le Corbusier Architectures in Chandigarh City (for speakers) Lunch

