

Saturday, July 7

Technical Workshops

12:30 – 15:30

- W01** Two-photon holographic optogenetics: technical advances and experimental in vivo applications
- W02** Investigating neural substrates of perception and cognition with large-scale data
- W03** 3D print your own lab equipment: open hardware, education and global research capacity building
- W04** Using insights from basic science to improve the methodology of transcranial magnetic stimulation

Special Lecture

16:00 – 17:00

- SL01** The EJN Special Feature
Stephanie Cragg (UK)
Lisa Marshall (Germany)

Opening Ceremony

17:00 – 18:00

Opening Ceremony

Plenary Lecture

18:00 – 19:00

- PL01** Fred Kavli Opening Lecture
Digital Phenotyping: Rethinking Behavior
Tom Insel (USA)

Sunday, July 8

Plenary Lecture

08:30 – 09:30

- PL02** Development, reprogramming and modeling of the central nervous system: from the embryo to human brain organoids.
Paola Arlotta (USA)

Special Interest Events

8:30 – 12:30

- SiE** The Brain Bee Competition

Poster Sessions

09:30 – 13:00

Parallel Symposia

09:45 – 11:15

- S01** Developmental logic underlying the functional diversity of cortical interneurons
- S02** Exploring an uncharted territory of the brain: the role of habenula in animal behavior
- S03** Neurotransmitter signaling in brain development and disease – looking beyond synapses
- S04** Through the eye of a fly: from brain wiring to function
- S05** Thalamo-cortical circuits in sleep and cognition
- S06** Deep brain imaging of neuronal ensembles in freely moving animals using miniaturized microscopes
- S07** Cortical plasticity following sensory loss and restoration
- S08** Cannabinoid regulation of stress, emotion and memory: mechanisms and clinical implications

Special Interest Events

12:30 – 13:30

- SiE** The crisis of reproducibility in biology (12:30–13:30)
- SiE** Communicating Animal Research: Challenges and Opportunities (12:30–13:30)

Special Lectures & Events

13:30 – 14:25

- SL02** The Brain Prize Lecture 2017 (13:30 – 15:00)
Peter Dayan (UK)
Ray Dolan (UK) & Wolfram Schultz (UK)
- SL03** IBRO – Kemali Prize
Guillermina Lopez-Bendito (Spain)
- SL04** EDAB – Lecture on Neuroethics
Helen Mayberg (USA) +
International Neuroethics Society (14:15–14:25)

Poster Sessions

14:00 – 17:30

Parallel Symposia

15:45 – 17:15

- S09** Parvalbumin neurons, perineuronal nets and network plasticity
- S10** Aberrant pre- and post-synaptic mechanisms in parkinson's: pre-degeneration to late stage disease
- S11** Dissecting striatal circuits involved in stress, motivation and repetition
- S12** Context-dependent modulations of neural coding in primary sensory cortices
- S13** Cells and circuits signaling spatial orientation
- S14** Lost and found again: the engram! are we there yet?
- S15** Crispr/cas9-based gene editing for modeling and treating neurological disorders
- S16** Two to tango: brain-immune interactions

Plenary Lecture

17:30 – 18:30

PL03 The Hertie Foundation Lecture

Thirst for blood: The neurobiology of mosquito behavior

Leslie Vosshall (USA)

Special Interest Event

17:15 – 17:30

SiE Brain Bee Award Ceremony

Monday, July 9

Plenary Lecture

08:30 – 09:30

PL04 The Tianqiao and Chrissy Chen Institute Lecture

Prosocial Animals: Empathy and Cooperation

Frans de Waal (USA)

Poster Sessions

09:30 – 13:00

Parallel Symposia

09:45 – 11:15

S17 Evolutionary and ethological perspectives to understand neural circuits and behaviour

S18 Schwann cell development and repair in health and disease

S19 Ampa-receptor plasticity at synapses as an instrument to adapt behavior

S20 Tissue clearing technologies– study of biological mechanisms in see-through organisms

S21 Exciting new technologies emerging from the u.s. national institutes of health brain initiative

S22 The mystery of rapid eye movement sleep: new circuits and insights

S23 Decision, action, and navigation in rodent parietal cortex

S24 Cortical and hippocampal inhibitory GABA function in cognition and behavior

Special Interest Events

12:30 – 13:30

SiE Alternative Careers for Neuroscientists (12:00 –13:30)

SiE EBC – to be submitted (12:30–13:30)

SiE Neuroscience Outreach Awards Ceremony (13:10 –13:30)

Funding opportunities for investigator-driven research in Europe (12:30 –13:30)

Special Lectures & Events

13:30 – 14:15

SL05 Host Society Special Lecture

Hans Lassmann (Austria)

SL06 EDAB / Max Cowan Special Lecture

Karel Svoboda (USA)

SL07 Boehringer-Ingelheim / FENS Research Award

David Dupret

Poster Sessions

14:00 – 17:30

Parallel Symposia

15:45 – 17:15

S25 Neural encoding of time on the scale of seconds: networks for time-based anticipation and action

S26 Development of early circuits in sensory cortex: from molecules to humans

S27 Everything flows? stability and variability of neuronal long-term representations

S28 Neural circuits underlying stress susceptibility

S29 Hippocampal plasticity: novel synaptic mechanisms

S30 Transforming errors into skills: from spike trains to behavior and back again

S31 From recent to remote memory, and back

S32 Using computational neuroethology to dissect the neural basis of behavior

Presidential Lecture

17:30 – 18:30

PL05 Presidential Lecture

Imaging Perception: Lessons from Pain, Analgesia and Anaesthesia-induced Altered States of Consciousness

Irene Tracey (UK)

Special Interest Events

17:10 – 20:30

SiE Awarding Ceremony: Mentoring and PhD Thesis Prizes 2018 (17:10 –17:30)

SiE East meets West: Building bridges through science (18:45 – 20:30)

Presidential dinner

(20:00–23:30) & Jump the FENS

Tuesday, July 10

Plenary Lecture

08:30 – 09:30

PL06 Stability and Flexibility in Motor Networks
Michael Long (USA)

Poster Sessions

09:30 – 13:00

Parallel Symposia

09:45 – 11:15

- S33** Neuronal diversity in the assembly of association layers
- S34** The ins and outs of the midbrain dopamine system: from cellular systems to behavioral insights
- S35** Mechanisms controlling the localization of axonal ion channels
- S36** Neuronal network and synapse dysfunction in alzheimers disease
- S37** Thermosensation, molecules, circuits, and perception
- S38** Cortical control of skilled forelimb movement
- S39** Neural mechanisms for social cognition in monkeys and humans
- S40** Epigenetic inheritance: from chromatin to behavior across species

Special Interest Events

12:30 – 13:30

- SiE** Start your lab (I)/lunch session (12:30 –13:30)
- SiE** Publishing workshop: What happens to your paper when submitted to a journal? (12:30 –13:30)

Special Lectures & Events

13:30 – 14:15

- SL08** EBBS / Behavioural Brain Research Prize
Eleanor Maguire (UK)
- SL09** Eric Kandel Prize Lecture
Marta Zlatic (USA)

Poster Sessions

14:00 – 17:30

Parallel Symposia

15:45 – 17:15

- S41** Stem cells and the brain: Neurons, niches and organoids
- S42** Dentate gyrus – from circuits to behavior
- S43** Promoting myelin repair in multiple sclerosis
- S44** From neuroethology to autonomous robots
- S45** Epigenetic remodeling of brain function: addiction and neurodegeneration
- S46** Serotonin and antidepressants: molecular mechanisms, neuropharmacology and psychological processing
- S47** Prefrontal mechanisms underlying working memory
- S48** From super-resolution to in vivo imaging: new ways to see and understand synaptic function

Plenary Lecture

17:30 – 18:30

PL07 Immune Mechanisms of Synapse Loss in Disease: Lessons from Development
Beth Stevens (USA)

Special Interest Events

15:00 – 20:15

- SiE** NENS Graduate Schools Programme Fair – session (15:00 –17:00)
- SiE** Start your lab (II)/evening session (18:45 – 20:15)

Wednesday, July 11

Plenary Lecture

08:30 – 09:30

PL08 Neural mechanisms for object representation
Doris Tsao (USA)

Poster Sessions

09:30 – 13:00

Parallel Symposia

09:45 – 11:15

- S49** Cognitive functions of the cerebellum
- S50** Microdomain astrocyte Ca²⁺ signals at the synaptic and vascular interfaces and their functional relevance
- S51** Resolving the cognitive function of prefrontal circuits: from neurons to behavior
- S52** Novel cell-type and region-specific perspectives on hippocampal function
- S53** Neural circuits for odor coding
- S54** Neuronal mechanisms of feeding behaviors: functional organization of hypothalamic circuits
- S55** Neuronal circuits of fear, extinction and beyond: recent advances
- S56** Shared principles of animal behavior across species

Special Lectures & Events

11:30 – 12:45

- SL10** FENS-EJN Awards Lectures (11:30 –12:45)
Silvia Arber (Switzerland)
Lucia Prieto-Godino (Switzerland)
Sophie Steculorum (Germany)
- SL11** ERA-NET NEURON / Excellent Papers in Neuroscience Award (11:45 –12:45)
Cristina Garcia Caceres (Switzerland)

Plenary Lecture

13:00 – 14:00

PL09 The ERA-NET NEURON Closing Lecture
The first steps in vision: cell types, circuits and repair
Botond Roska (Switzerland)