



# StratNeuro Retreat 2024

## Day 1: June 4<sup>th</sup>

08.30 Buses leaving KI to Djurönäset (Departs from Aula Medica)

09.15–09.45 Arrival + coffee and buns

### Plenary session 1

09.45–10.00 **Opening of meeting, StratNeuro introduction**

**Konstantinos Meletis**, director for StratNeuro (Neuro, KI)

10.00–10.45 **Keynote Lecture**

*How Nature and Nurture Conspire to Regulate Brain Development and Plasticity*

**Michael Greenberg** (Harvard Medical School, MA, USA)

(Chaired by Onur Dagliyan, MBB, KI)

10.50–11.05 **Junior short talk:**

**Shuyang Yao** (MEB, KI), *Connecting genomic results for psychiatric disorders to human brain cell types and regions reveals convergence with functional connectivity*

(Chaired by Onur Dagliyan, MBB, KI)

11.05–11.15 Coffee break

11.15–11.45 **Sten Linnarsson** (MBB, KI), *Futile wound healing drives mesenchymal-like phenotypes in human glioblastoma.*

(Chaired by Ulrika Marklund, MBB, KI)

11:50–12:20 **Per Svenningsson** (CNS, KI), *The role of P11, serotonin and trace amine GPCRS in neuropsychiatric states*

(Chaired by Ulrika Marklund, MBB, KI)

12.25–12:45 **Poster blitz** (90 sec each, 10 participants, selected among abstracts)

Audience votes best Basic & Translational Blitz

(Chaired by Laura Sardon Puig, Neuro, KI)

12.45–13.50 Lunch

### Plenary session 2

13.50–14.35 **Keynote Lecture**

*Neuron–glial interactions in health and disease: from cognition to cancer*

**Michelle Monje** (Stanford University, CA, USA)



(Chaired by Gonçalo Castelo-Branco, MBB, KI)

14.40–14.55 **Junior short talk:**

**Daniela Calvigioni** (Neuro, KI), *"Esr1+ hypothalamic-habenula neurons shape aversive states"*

(Chaired by Gonçalo Castelo-Branco, MBB, KI)

14.55–15.15 Coffee break + Pick up room keys

### **Plenary session 3**

15.15–15.25 **The NeurotechEU alliance and what it means for Karolinska Institutet**

**Bob Harris** (CNS, KI)

15.30–16.00 **NeurotechEU Lecture**

*"How predictions and prior knowledge shape sensory computations and perception"*

**Floris de Lange** (Radboud University Nijmegen, The Netherlands)

(Chaired by Karin Jensen, CNS, KI)

16.05–16.35 **Valentina Emiliani** (INSERM Sorbonne Univ. Paris, FR), *Holographic manipulation of neuronal circuits*

(Chaired by Paolo Medini, UmU)

16:40–16:50 **Group photo outside**

16:50–17:30 Check-in, Free Time, hanging posters

17.30–20.00 **Poster and Mingle session** (With drinks and finger food)

Group 1 (odd numbered posters): 17:30–18:45

Group 2 (even numbered posters): 18:45–20:00

**-- Take down the posters at the end of the session --**

20.30–22.00 Dinner

22.00– 01:00 (Bar, music, pay for own drinks)



## Day 2: June 5<sup>th</sup>

07.00–09.00 Breakfast (Check-out latest by 11.00)

### **Plenary session 4**

09:30–10:15 **Keynote Lecture**

*Light-gated membrane channels: Discovery and creation of diversity, principles from structure, and cellular access to biology*

**Karl Deisseroth** (Stanford University, CA, USA)

(Chaired by Marie Carlén, Neuro, KI)

10.20–11.00 Coffee Break (Check-out latest by 11.00)

### **Parallell break-out sessions:**

11.00–12.30 **Break-out session I:**

***Organs got nerve: brain and body communication in health and disease***

Chaired by Alessandro Furlan (Neuroscience, KI)

*Discovering the brain–body circuits controlling body weight*

**Alessandro Furlan** (Neuroscience, KI)

*Getting a handle of our gut feelings*

**Dafni Hadjieconomou** (Paris Brain Institute, Institut du Cerveau – ICM)

*Understanding the gut–immune–brain axis using cognitive neuroimaging*

**Esther Aarts** (Radboud University Nijmegen, The Netherlands)

*Harnessing peripheral nerve signals for treatment of inflammation*

**Peder Olofsson** (MedS, KI)

11.00–12.30 **Break-out session II:**

***Solving human-specific neurodevelopmental mysteries with the help of in-vitro systems***

Chaired by: Cristiana Cruceanu (FyFa, KI)

*Combinatorial patterning screens to expand in vitro neural models*

**Gray Camp** (IHB Basel, Switzerland)

*Cellular Crosstalk in Neurodevelopmental Disorders*

**Silvia Cappello** (LMU Munich, Germany)

*Genetic and environmental insights into neurodevelopmental disorders via human in-vitro cell models*

**Kristiina Tammimies** (KBH, KI)

12.45–13.45 Lunch

### **Parallell break-out sessions (continued):**

13.45–15.15 **Break-out session III:**



**Sensory systems**

Chaired by: Karin Jensen

*Activity labeling reveals the neural organization of the peripheral representation of sensory stimuli.*

**Marcin Szczot** (Linköping University)

*Cortical integration of smell and taste during food perception*

**Janina Seubert** (CNS, KI)

*From action to empathy: the role of medial premotor cortex in acute pain*

**India Morisson** (Linköping University),

- **Break-out session IV:**

***Psychedelics in mental health: Pre-clinical and clinical studies***

Chaired by: Juan Pablo Lopez & Mikael Tiger

*Neuroplasticity as the mechanisms of psychedelic and antidepressant action*

**Eero Castren** (University of Helsinki, Finland)

*The PSIPET study*

**Hampus Yngwe** (CNS, KI)

*Pharmacological and clinical aspects of psychedelics*

**Gitte Moos Knudsen** (University of Copenhagen, Denmark)

15.15–15:45 Coffee Break

15:45–16:15 ***Concluding remarks & poster prize awards***

16.30 Buses return to KI (arrival approx.. 17.15)