

WHAT IS MEMORY ?

Molecular, cellular and computational answers

PROGRAM

THURSDAY, FEBRUARY 16, 2023

8:30 Registration

9:00 Opening Remarks: **Carmen Sandi, Johannes Gräff**

SESSION 1 - Of (epi)genes, molecules and cell types

Chair: Johannes Gräff

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| <p>9:10 Andreas Papassotiropoulos (<i>University of Basel, CH</i>)</p> <p>9:50 Andre Fischer (<i>DZNE Göttingen, DE</i>)</p> <p>10:30 Ana Marija Jaksic (<i>EPFL, CH</i>)</p> <p>10:50 Coffee break</p> <p>11:20 Cristina Alberini (<i>New York University, USA</i>)</p> <p>12:00 Inbal Goshen (<i>Hebrew University, IL</i>)</p> <p>12:40 Short talk: Thomas Reber (<i>FernUni, CH</i>)</p> <p>12:55 Lunch and Poster Session</p> | <p>Genetics of human memory: from physiology to drug discovery</p> <p>Memory loss and learning impairment in Alzheimer's disease: An epigenetic approach</p> <p>Natural genetic modifiers of learning and memory</p> <p>Mechanisms of memory consolidation: IGF2 and protein metabolism regulation in memory enhancement and potential treatments for neuropsychiatric diseases</p> <p>Astrocytes in higher brain function</p> <p>Single-neuron mechanisms of neural adaptation in the human temporal lobe</p> |
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SESSION 2 - Of circuits, synapses and engrams

Chair: Carmen Sandi

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| <p>14:00 Richard Morris (<i>University of Edinburgh, UK</i>)</p> <p>14:40 David Dupret (<i>Oxford University, UK</i>)</p> <p>15:20 Short talk: Azza Sellami (<i>University of Bordeaux, FR</i>)</p> <p>15:35 Coffee Break</p> <p>16:15 Steve Ramirez (<i>Boston University, USA</i>)</p> <p>16:55 Paul Frankland (<i>University of Toronto, CA</i>)</p> <p>17:35 Davide Coda (<i>EPFL, CH</i>)</p> <p>17:55 Short talk: Xiaoxiao Liu (<i>Columbia University, USA</i>)</p> <p>18:10 Poster Session and Happy Hour</p> | <p>Anticipatory representations of spatial location and selective retention of everyday memory</p> <p>Modulating sparsity of hippocampal population activity for memory-guided behaviour</p> <p>Balance between retention and forgetting of declarative memory in aging</p> <p>Artificially manipulating engrams to redefine memory</p> <p>A shift in the mechanisms controlling hippocampal engram formation during brain maturation</p> <p>CRISPR-based epigenetic editing of engram cells in fear memories</p> <p>Decoding memory engrams at the epigenetic level</p> |
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FRIDAY, FEBRUARY 17, 2023

SESSION 3 - Of cognition, computation and consciousness

Chair: Wulfram Gerstner

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| <p>9:00 Liz Phelps (<i>Harvard University, USA</i>)</p> <p>9:40 Simone Astori (<i>EPFL, CH</i>)</p> <p>10:00 Short talk: Déborah Fort (<i>University of Lausanne, CH</i>)</p> <p>10:15 Coffee break</p> <p>10:50 Johannes Felsenberg (<i>FMI, Basel, CH</i>)</p> <p>11:30 Claudia Clopath (<i>Imperial College, UK</i>)</p> <p>12:10 Katharina Henke (<i>University of Bern, CH</i>)</p> <p>12:50 Closing Remarks</p> <p>13:00 End of conference</p> | <p>Editing emotional memories in humans: progress and challenges</p> <p>Blunted glucocorticoid responsiveness and fear extinction deficits</p> <p>Treating posttraumatic stress disorder symptoms with a single-session behavioral intervention</p> <p>Recovery of forgotten memory in Drosophila</p> <p>Computational modeling of learning and memory</p> <p>Episodic memory – what's consciousness got to do with it?</p> |
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