

ZNZ PhD Retreat 26, Clinic Valens

04 - 06 June 2026

Program (Version 1 June 2026; Stay in Bad Ragaz)

Thursday, 04 June

14:00 – 16:00	Check-in at Hotel Schloss Ragaz
16:10 – 16:30	Extra Bus from Bad Ragaz, Tamina Therme, to Clinic Valens
16:45 – 17:00	Introduction
17:00 – 19:00	Short Talks on PhD Research Projects, Part I , break/drinks at 17:45, 6 talks
19:00 – 19:45	Serendipity and Deciphering of Nature's Hidden Therapeutic Principles Plenary Talk by Dr. Karsten Henco, Biotech Founder
20:00	Dinner (Restaurant Zanai)
22:02	Last public Bus 451 from Clinic Valens to Tamina Therme / Hotel Schloss Ragaz

Friday, 05 June

08:37 – 08:57	Public Bus 451 from Bad Ragaz, Post*, to Clinic Valens
09:15 – 12:00	Short Talks on PhD Research Projects, Part II , coffee break at 10:15, 9 talks
12:00 – 13:00	Patient Presentations by Dr. Roman Gonzenbach, Clinic Valens
13:15 – 14:15	Lunch (Restaurant Zanai)
14:15 – 15:00	Guided Tour through the Neurorehabilitation Clinic
15:00 – 17:00	Poster Session , coffee at 16:00, 36 posters (in front of Wilhelm Zinn Saal)
17:00 – 17:45	Technology-Assisted Neurorehabilitation: From Clinic to Home to Maximise Therapy Dose Plenary Talk by Prof. Olivier Lambercy, Inst. of Robotics and Intelligent Systems, ETH Zurich
18:02 – 18:19	Public Bus 451 from Clinic Valens to Bad Ragaz, Dorfbad*
19:15	Extra Bus leaving from Bad Ragaz, Tamina Therme, to Lurgass Torkel, Maienfeld

Saturday, 06 June

	Checkout at Hotel Schloss Ragaz after breakfast
08:37 – 08:57	Public Bus 451 from Bad Ragaz, Post*, to Clinic Valens
09:15 – 12:00	Short Talks on PhD Research Projects, Part III , coffee at 10:15, 9 talks
12:00 – 12:30	Feedback on the ZNZ PhD Program in Neuroscience
13:02	Public bus 451 to Bad Ragaz, Bahnhof

* Bus stop "Bad Ragaz, Post (or Dorfbad)", is about 15 walking minutes away from Hotel Schloss Ragaz

Short Talks on Ph.D. Research Projects:

(10 minutes talk and five minutes discussion)

Part I, Thursday, 17:00 – 19:00

1. Jules Lubetzki, Brain Research Institute, UZH

[How does novelty affect CA1 neuronal encoding and replay during episodic memory formation?](#)

2. Raphael Angerbauer, Brain Research Institute, UZH

[Cellular and network mechanisms of sharp-wave ripple generation in the CA1 hippocampal circuit](#)

3. Iryna Ivanova, Institute for Neuroscience, ETH

[Investigating germline effects of paternal environmental exposure on offspring phenotype](#)

4. ---

5. Hala Rasras, Brain Research Institute, UZH

[IpRGC-mediated luminance signaling in early cross-modal cortical development](#)

6. Moritz Heinemann, Brain Research Institute, UZH

[Multisensory salience processing in brain circuits of healthy mice and ASD mouse models](#)

Part II, Friday, 9:15 – 12:00

7. Romeo Benedetta, Institute of Pharmacology and Toxicology, UZH

[A cell-specific chemogenetic approach to investigate stress in glial–neuronal networks](#)

8. May Ly Leclair, Brain Research Institute, UZH

[Neural mechanisms of multisensory memory consolidation in mice neocortex](#)

9. Jana Vaterlaus, Brain Research Institute, UZH

[Role of astrocytes during hippocampal sharp-wave ripples](#)

10. Mai Akahoshi, Institute for Neuroinformatics, UZH/ETH

[The effect of contingent social interaction and juvenile-directed song in zebra finch vocal learning](#)

11. Luca Naudszus, D-GESS, ETH

[Representations in melody learning](#)

12. Jeroen Teurlings, Department of Neurosurgery, USZ

[Intraoperative high-frequency oscillation recordings with electrocorticography during epilepsy surgery to improve resection](#)

13. Veronika Gambin, Institute of Forensic Medicine, UZH

[Validating a novel driving simulation-based MWT against the standard MWT in an OSA-cohort challenged by CPAP-withdrawal](#)

14. Aline Brunner, Brain Body Regulation Lab, ETH

[Investigating neural mechanisms underlying sleep-dependent memory consolidation with EEG and temporal interference stimulation](#)

15. Alice Gilmet, Child and Adolescent Psychiatry and Psychotherapy (KJPP), UZH

[The development of multisensory integration and learning in children with and without Autism Spectrum Disorder](#)

Part III, Saturday, 9:15 – 12:00

16. Angela Ng, Social Brain Sciences Lab, D-GESS, ETH

[Music and the relief of stress](#)

17. Tobias Fernandez Borkel, Centre for MR Research, University Children's Hospital Zurich

[Characterizing the neural basis of long-term cognitive development of children with open spina bifida](#)

18. Elisa Vasta, Department of Neurosurgery, USZ

[Sonified neurological EEG events monitoring](#)

19. Yassine Taoudi-Benchekroun, Institute for Neuroinformatics, UZH/ETH

[Towards compositional neural architectures](#)

20. Niclas Pokel, Institute for Neuroinformatics, UZH/ETH

[Compositionality in artificial neural networks \(not official yet\)](#)

21. Raimon Bullich Vilarrubias, Institute for Neuroinformatics, UZH/ETH

[Adaptation, integration of information, and flexible behaviour in animals and machines](#)

22. Erblina Parelku, Institute for Neuroinformatics, UZH/ETH

[Neural mechanisms of perception and learning in uncertainty](#)

23. Youssef Doulfoukar, Institute for Neuroinformatics, UZH/ETH

[Inference and learning in neural circuits](#)

24. Venkata Bharghav Kota, Institute for Neuroinformatics, UZH/ETH

[3D vision for safe mobile manipulation](#)

Posters, Friday, 15:00 – 17:00

Even poster numbers: presenters are at their poster 15:00-16:00

Odd poster numbers: presenters are at poster 16:00 – 17:00

Format: A0 Portrait, i.e. height x width: 1189 x 841 mm. Pins/tape will be available.

P01 Yinan Jin, Brain Research Institute, UZH

[Mapping the monosynaptic outputs of adult-born dentate gyrus granule cells in mouse hippocampus](#)

P02 Shuhui Xie, Dept. of Molecular Life Sciences, UZH

[Elucidating synaptic function using 2D and 3D models of human autism-spectrum disorder](#)

P03 Hunor Sebök, Brain Research Institute, UZH

[Rewiring subcortical circuits in the adult brain through molecular reprogramming](#)

P04 Selina Frei, Institute for Neuroscience, ETH

[Characterization and intercorrelation of DNA modifications in hippocampi of chronically stressed mice](#)

P05 Anjana Madhavan, Institute for Neuroscience, ETH

[Behavioural and molecular determinants of inter-individual variability in stress outcomes](#)

P06 Thomas Negrello, Brain Research Institute, UZH

[How paternal life experiences shape the next generation: An RNA-to-chromatin axis](#)

P07 Alessandra Iocchi, Department of Neurosurgery, USZ

[Neural activity drives pericyte maturation and heterogeneity in the postnatal cortex](#)

P08 Ekin Kaya, Institute of Molecular Health Sciences, ETH

[Calcium appetite during lactation](#)

P09 Celine Heeb, Institute of Veterinary Pharmacology and Toxicology, UZH

[Bridging genetic risk factors with the synaptic hypothesis of Schizophrenia through mechanistic studies in mice](#)

P10 Alexandra California, Department of Neurology, USZ

[In vivo microdialysis in Parkinson's Disease mice: Exploring \$\alpha\$ -synuclein proteostasis sleep-mediated regulation using mCLAS](#)

P11 Yuanzhao Liu, Brain Research Institute, UZH

[Subcellular signal integration in individual astrocytes](#)

P12 Yuhang Wang, Institute for Neuroinformatics, UZH/ETH

[Vocal learning in songbird groups](#)

P13 Anna Kiepura, Institute for Neuroinformatics, UZH/ETH

[Natural language processing for scientific documents](#)

P14 Chiara Laneve, University Children's Hospital

[Sleep on the spectrum: The impact of sleep on the neurodevelopment of pre-schoolers with Autism Spectrum Disorder](#)

P15 ---

P16 Ibon Vales, Brain Body Regulation Lab, ETH

[Modulation of Locus Coeruleus-noradrenergic dynamics and sleep-dependent cognitive processes](#)

P17 Flaminia Pallotti, Brain Body Regulation Lab, ETH

[Unveiling the mechanisms and the clinical potential of arousal self-regulation through pupil-based biofeedback](#)

P18 Theresa Dischner, Department of Child and Adolescent Psychiatry and Psychotherapy, PUK

[Longitudinal brain and language development in children: Disentangling neural, genetic, and environmental contributions to language trajectories and multisensory learning](#)

P19 Hanna Schneider, Department of Child and Adolescent Psychiatry and Psychotherapy, PUK

[Brain Stimulation of the reading network: Investigating letter-speech sound learning with fMRI and tDCS](#)

P20 Anna Morf, University Children's Hospital

[Neurodevelopmental outcomes in children with congenital heart disease: From early brain markers to cognitive function and intervention](#)

P21 Eve Schumacher, Institute of Psychology, UZH

[Investigating neural mechanisms underlying sleep-dependent memory consolidation with EEG and temporal interference stimulation](#)

P22 Sarvagya Gupta, Spinal Cord Injury Center, UZH

[Computational data analysis of spinal cord injury](#)

P23 Anna Leonhartsberger, D-HEST, ETH

[Alterations of pain-autonomic interactions after spinal cord injury](#)

P24 Justus Grabowsky, Institute for Neuroinformatics, UZH/ETH

[The neural dynamics of binding and bundling in speech](#)

P25 Ahmet Akman, Institute for Neuroinformatics, UZH/ETH

[Binding problem: how language is transformed in brain?](#)

P26 Noémie Hehl, Psychiatric University Hospital

[A multi-method investigation of autism heterogeneity and its impact on clinical outcome](#)

P27 Sebastian Hachenberg, Institute of Psychology, UZH

[Blood-brain barrier integrity as a mediator of stress resilience: a longitudinal multimodal study with metformin modulation](#)

P28 Sarina Künzle, Psychiatric University Hospital

[Cognitive and neuronal changes across substance use disorder](#)

P29 Martina Noe, University Children's Hospital

[Macroscale connectomic signatures and environmental factors associated with autistic traits in the developing human brain and mouse brain](#)

P30 Medea Häuselmann, Center of MR Research, University Children's Hospital

[Neurodevelopment in children with complex congenital heart disease: Functional neural correlates and effects of cognitive training](#)

P31 Marwen Mokni, SMS Laboratory, ETH

[R4TeleRehab: Development of an open-source, user-centered immersive XR platform for asynchronous upper limb therapy to improve stroke patient motivation and adherence](#)

P32 Lhea Beumer, Institute for Neuroinformatics, UZH/ETH

[Adaptive learning with replay](#)

P33 Michele Viscione, Institute for Neuroinformatics, UZH/ETH

[Learning as Storage and Compression: How and when generalization occurs in Deep Neural Networks](#)

P34 Joonsu Gha, Institute for Neuroinformatics, UZH/ETH

[Adaptive world models in brains and machines](#)

P35 Maria Isabel Pérez Ribera, Institute for Neuroinformatics, UZH/ETH

[Agitation prediction in dementia patients](#)

P36 Tristan Torchet, Institute for Neuroinformatics, UZH/ETH

[A multi-method investigation of autism heterogeneity and its impact on clinical outcome](#)