How to find us

i Einfahrt Klinikgelände

000 Die Zahlenangaben entsprechen den Gebäudenummern

400 Crona Kliniken
420 Anästhesiologie
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THG-Chirurgie
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410 Kinderklinik

480 Gesundheitszentrum
Ambulante Rehabilitation, Physiotherapie, Psychosomatische Tagesklinik, Sportmedizin, ukfit, Gästehaus

500 Medizinische Klinik

510 Blutspendezentrale

520 Konferenzzentrum
Casino, Cafeteria

530 Nuklearmedizin

600 Hals-Nasen-Ohrenklinik

610 Medizinische Mikrobiologie, Medizinische Virologie

620 Augenklinik

University Clinic Tübingen
Kliniken Berg CRONA
Lecture Hall, 4th floor, room 200
Hoppe-Seyler-Str. 3
72076 Tübingen

Conference link for online participants/speakers:
https://med-uni-tuebingen-de.zoom-x.de/j/69452016734?pwd=FpVvfMyrx2KqEa9374SZ7CS9cHPW58.1
Meeting-ID: 694 5201 6734
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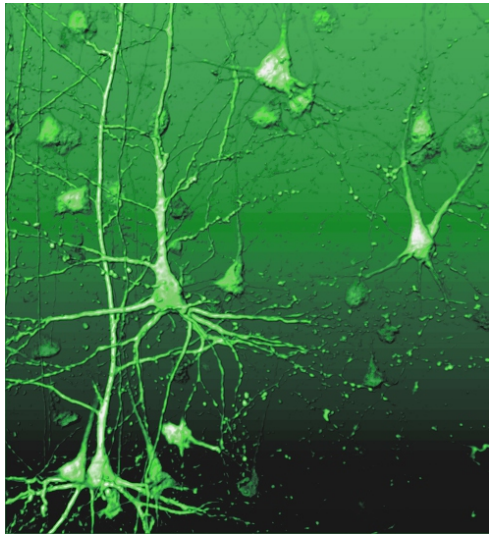
EBERHARD KARLS UNIVERSITÄT TÜBINGEN

3rd Channelopathy Meeting Tübingen

Genetic epilepsies and other neuronal ion channel disorders: Mechanisms and therapeutic perspectives



Program

Wednesday, 24th September 2025

8:30-8:40 am	Introduction: Holger Lerche (Tübingen)
8:40-10:15 am	**Session 1: Ion channel mechanisms I** Chair: Dirk Isbrandt (Cologne) & Snezana Maljevic (Melbourne)
8:40 am	Maurizio Taglialatela (Naples): *KCNQ* modulators: from an atomistic view of channel gating
9:00 am	Marisol Sampedro Castaneda (London): *CDKL5* and its interaction with $Ca_v2.3$
9:20 am	Massimo Mantegazza (Valbonne-Sophia Antipolis): Mechanisms of *SCN2A* variants associated with Autism Spectrum Disorder
9:40 am	Ahmed Eltokhi (Columbus): Gating pore current in $Na_v1.2$ mutations: Implications for autism and epilepsy
9:55 am	Daniil Kirianov (Cologne): Unravelling the seizure initiation and progression through the neonatal *Scn2a* (p.A263V) hippocampus
10:15-10:40 am	**Coffee Break**
10:40 am-12:00 pm	**Session 2: Immunological and other epileptogenic mechanisms** Chair: Albert Becker (Bonn) & Christian Geis (Jena)
10:40 am	Harald Prüß (Berlin): Antibody-mediated channelopathies - new disease concepts
11:00 am	Julika Pitsch (Bonn): Microstructural correlates of neuro-immune dysregulation in autoimmune encephalitis
11:20 am	Michael Wenzel (Bonn): Hippocampal spreading depolarization as a key epilepsy disease factor
11:40 am	Christian Geis (Jena): Effects of NMDAR autoimmunity on receptor function and hippocampal circuits
12:00-1:05 pm	**Session 3: Progress in genetic mechanisms and prediction algorithms** Chair: Rikke Møller (Dianalund) & Yvonne Weber (Aachen)
12:00 pm	Alex Hoischen/Holm Graeßner (Nijmegen/Tübingen): Rare diseases – boosting diagnostic yield by data re-analysis and long-read genome sequencing
12:30 pm	Josua Kegele (Tübingen): Short- and long-read genome sequencing in early-onset DEE: results and insights
12:45 pm	Henrike Heyne (Cambridge): Predicting functional effects of genetic variants in ion channels with methods of deep learning
1:05-2:15 pm	**Lunch Break**
2:15-3:25 pm	**Session 4: Gene therapy** Chair: Marius Ueffing (Tübingen) & Gaia Colasante (Milan)
2:15 pm, online	**Keynote lecture** Steven Gray (Dallas): Gene therapy for neurological disorders: the example of *SLC6A1*deficiency
2:45 pm	Dirk Grimm (Heidelberg): Parvoviral vector-mediated gene therapy in the CNS (and beyond): A no-brainer?
3:05 pm	Elvir Becirovic (Zürich): AAV vector-mediated delivery of large genes for retinal gene therapy and beyond
3:25-4:30 pm	**Poster Session (with coffee)**
4:30-6:30 pm	**Session 5: Clinical trials and molecular therapeutic board (case reports)** Chair: Holger Lerche (Tübingen) & Steve Petrou (Praxis Precision Medicines, Boston)
4:30 pm	Victoria Ruschil (Tübingen): Familial episodic pain syndrome in a family with an unknown *SCN11A*-variant
4:40 pm	Walid Fazeli (Bonn)/Matias Wagner (Munich)/Steve Petrou (Praxis Precision Medicines, Boston): Towards disease-modification in *SCN2A* DEE: insights into antisense-oligonucleotide
5:05 pm	Oleg Vinogradov/Elena Kuster (Tübingen)/Henning Steinhagen (Lario, Edinburgh): Towards a targeted therapy for *CACNA1E*-associated DEE: Functional insights and natural history
5:30 pm	Lidia Carotenuto (Antwerp): The fast-dissociating D2 antagonist antipsychotic JNJ-37822681 is a neuronal K_v7-channel opener: potential repurposing for epilepsy treatment
5:40 pm	Rikke Steensbjerre Møller (Dianalund): From disease-causing variants to targeted therapy in GABA-A receptor related epilepsies
5:50 pm	Francesco Miceli (Naples): *In vitro* pharmacological characterization of a potent blocker of the epilepsy-associated $K_v7.2$ channel
6:00 pm, online	Kris Kahlig (Praxis Precision Medicines, Boston): Relutrigine and Vormatrigine: Functional-State Sodium Channel Modulators Advancing Therapies for Rare and
7:30 pm	**Dinner Restaurant „Liquid“**

Thursday, 25th September 2025

8:30-9:35 am	**Session 6: Advanced techniques and model systems** Chair: Ulrike Hedrich (Tübingen) & Michael Wenzel (Bonn)
8:30 am	Simon Musall/Viviana Rincon Montes (Jülich): High-Density Neurophysiology: From Rigid Arrays to Flexible Interfaces
8:55 am	Karen van Loo (Aachen): Gene modulation in epilepsy: using organotypic brain slice cultures to analyze functional and molecular changes
9:15 am	Yvonne Weber (Aachen): Drosophila as a model system for genetic epileptic and developmental epilepsies
9:35 am-1:00 pm	**Session 7: Ion channel mechanisms II** Chair: Thomas Wuttke (Tübingen) & Gabriele Lignani (London)
9:35 am	Evangelos Kiskinis (Chicago): Advanced iPSC models on *KCNQ2* and *KCNH1* associated epilepsy
9:55 am	Franck Kalume (Seattle): Interneuron-specific dual-AAV SCN1A gene replacement for Dravet syndrome: A preclinical update
10:15 am	Gaia Colasante (Milan): Enhancing $Na_v1.1$ translation by gene editing to treat Dravet Syndrome
10:35-11:00 am	**Coffee Break**
11:00 am	Gabriele Lignani (London): Prenatal sodium channel dysfunction in Dravet syndrome alters cortical development
11:20 am	Snezana Maljevic (Melbourne): Outside the Spotlight: The Unexpected Roles of Ion Channels in Early Brain Development
11:40 am	JP Gilbert (Xenon, Burnaby): Selective potentiation of $Na_v1.1$ channels by XPC-A in Dravet mice suppresses spontaneous seizures, prevents SUDEP, and increases long term potentiation
12:00 pm	Alison Obergrussberger (Nanion, Munich): Exploring the role of lysosomal ion channels and transporters in neurodegenerative diseases
12:20 pm	Daniela Miely (Tübingen): Molecular and cellular basis of episodic ataxia 6
12:40 pm	Gaëtan Lesca (Lyon): Involvement of *CACNA2D2* in developmental and epileptic encephalopathy through disruption of calcium channel functionality and synaptic function
1:00-1:30 pm	**Farewell Lunch with free discussions**