

WEDNESDAY, MAY 9th

Special Workshop: Ion Channel Drug Discovery

- 17:00 CHAIR/Perspective: **M.K. AHLJANIAN** (Industry Consultant)
- 17:20 **O. McMANUS** (Q-State Biosciences): *"Phenotypic assays of neuronal function to support drug discovery"*
- 17:50 **H. DRAHEIM** (Boehringer Ingelheim): *"Why drugs fail in psychiatry – The RDoC initiative"*
- 18:20 Open discussion with young scientists

Opening Plenary

- 20:15** CHAIR: **J. STRIESSNIG** (Univ. of Innsbruck)
W. A. CATTERALL (Univ. of Washington)
- 21:15** **WELCOME PARTY – wine & cheese**

THURSDAY, MAY 10th

Ion Channel Regulation I

- 8:15 CHAIR/Perspective: **N. DASCAL** (Tel Aviv Univ.)
- 8:25 **J. HELL** (UC Davis): *"Regulation of Cav1.2 by β 2 adrenergic signaling"*
- 8:55 **R. COLBRAN** (Vanderbilt Univ.): *"CaMKII interactions with voltage-gated calcium channels"*
- 9:25 **B.C. SUH** (DGIST, Korea): *"Designed translocatable voltage-gated Ca²⁺ channel β subunits"*
- 9:55 **P. LORY** (Univ. of Montpellier): *"De novo mutation screening in Childhood Cerebellar Atrophy (ChCA) identifies gain of function mutations in the Cav3.1 T-type calcium channel"*

10:25 COFFEE BREAK

Ion Channels in Sensory Systems

- 10:55 CHAIR/Perspective: **J. ENGEL** (Saarland Univ.)
- 11:05 **T. PANGRISIC** (Univ. Göttingen) *„Modulation of synaptic inner hair cell calcium channels by calcium-binding proteins CaBPs“*
- 11:35 **MICHALAKIS** (LMU, Munich): *"Gene Therapy for CNG3-linked Achromatopsia"*

12:05 LUNCH

AFTERNOON ACTIVITIES

- 16:15 CHAIR/Perspective: **E. CARBONE** (Univ. of Torino)
- 16:25 **M. DELL'ACQUA** (Univ. of Colorado): *"Regulation of dendritic Ca²⁺ signaling and neuronal excitation-transcription coupling by L-type Ca²⁺ channels"*
- 16:55 **M. NAVEDO** (UC Davis): *"New insight into regulation of vascular Cav1.2 channels."*

17:25 DINNER AT HOTEL BÖGLERHOF

Ion Channel Structure

- 19:30 CHAIR/Perspective: **H. COLECRAFT** (Columbia Univ.)
- 19:40 **F. VAN PETEGEM** (Columbia Univ.): *"Crystallographic analysis of STAC and Calmodulin binding to voltage-gated calcium channels"*
- 20:10 **J. YANG** (Columbia Univ.): *"Structures of the endolysosomal calcium channel TRPML3 in three distinct states reveal mechanisms of activation and regulation"*

Brief Communications:

Research Flashes 5 min + 3 min Discussion

- 20:40 CHAIR: **D. PIETROBON** (Univ. of Padova)
- 21:00 BEER & CHIPS @ POSTERS**

FRIDAY, MAY 11th

Special Topic: Ion Channel Crosstalk/Conformational Coupling

- 08:20 CHAIR/Perspective: **I. DICK** (Univ. of Maryland)
- 08:30 **L. F. SANTANA** (UC Davis): *"Tuning L-type calcium channel activity in arterial smooth muscle by Kv channel-mediated clustering"*
- 09:00 **M. SHAPIRO** (Univ. of Texas): *"Neuronal signaling via multiple types of calcium-permeable ion channels: distinct roles governed by cell and nanodomain-specific localization of multi-protein complexes."*
- 09:30 **K.G. BEAM** (Univ. of Colorado): *"Calcium channel signaling complexes in Muscle and Nerve"*

10:00 COFFEE BREAK

Ion Channel Regulation II

- 10:30 CHAIR/Perspective: **M. BEN-JOHNY** (Columbia Univ.)
- 10:40 **G. ZAMPONI** (Univ. of Calgary): *"Cellular and molecular mechanisms of pain"*
- 11:10 **T.W. SOONG** (National University of Singapore): *"Regulation and physiological role of Cav1.3 RNA editing"*
- 11:40 **L.Y. WANG** (Univ. of Toronto): *"Underpinning heterogeneity in synaptic transmission by presynaptic ensembles of distinct morphological modules"*
- 11:55 **A. RITTENHOUSE** (Univ. of Massachusetts): *"Diminished Ca²⁺ signaling, Cav1 channel expression, and activity in pancreatic β -Cells expressing truncated DISC1"*

12:10 LUNCH

14:00 POSTER SESSION A

- CHAIR: **G. OBERMAIR** (Medical Univ. of Innsbruck)

15:45 COFFEE BREAK

16:00 POSTER SESSION B

- CHAIR: **A. KOSCHAK** (Univ. of Innsbruck)

17:45 DINNER AT GASTHOF JAKOBER

Special Topic: Ion Channels in Neuropsychiatric Diseases

- 19:30 CHAIR/Perspective: **A. DOLPHIN** (UCL)
- 19:40 **J. DEUSSING** (MPI Munich): *"CACNA1C differentially modulates susceptibility to psychiatric disorders during development and adulthood"*
- 20:10 **A. RAJADHYAKSHA** (Cornell Univ.): *"Relapse to drugs of abuse: Selective recruitment of Cav1.2 channels"*

Brief Communications:

Research Flashes 5 min + 3 min Discussion

- 20:40 CHAIR: **B. LISS** (Univ. of Ulm)
- 21:00 BEER & CHIPS @ POSTERS**

SATURDAY, MAY 12th

TPCs and TRP channels

- 08:30 CHAIR/perspective: **C. WAHL-SCHOTT** (LMU Munich)
- 08:40 **A. GALIONE** (Univ. of Oxford): *"NAADP mediated Ca²⁺ release from endolysosomes"*
- 09:10 **D. REN** (Univ. of Pennsylvania): *"Excitable lysosomes"*
- 09:40 **H. XU** (Univ. of Michigan): *"Ion channels in the lysosome"*
- 10:10 COFFEE BREAK**
- 10:40 **M. ZHU** (Univ. of Texas): *"Two-pore channels in calcium signaling and cellular function"*
- 11:10 **T. GUDERMANN** (LMU, Munich): *"TRP channels and mineral homeostasis"*
- 11:40 **M. MARK** (Ruhr University): *"Lightening the cerebellum from P/Q type calcium channel specific diseases"*
- 12.10 **C.C. CHEN** (LMU Munich): *„Characterization of TRPML2 on intracellular organelles from macrophages“*

12:25 LUNCH

AFTERNOON ACTIVITIES

TRP channels and sensors

- 16:30 CHAIR/Perspective: **P. RUTH** (Univ. Tübingen)
- 16:40 **M. FREICHEL** (Univ. of Heidelberg): *"OCaR1, a gatekeeper of lysosomal and granular Ca²⁺ release and regulated exocytosis"*
- 17:10 **J. SIEMENS** (Univ. of Heidelberg): *„Thermoregulation- a role for TRP ion channels in deep brain temperature detection“*
- 17:40 **R. LUKOWSKI** (Univ. Tübingen): *"The cardiomyocyte mitochondrial BK channel mediates cardioprotection against ischemia and reperfusion injury as effector of cGMP-elevating compounds and ischemic conditioning"*

17:55 DINNER AT HOTEL POST

20:00 Closing Plenary:

- CHAIR: **M. BIEL** (LMU Munich)
- R. W. TSIEN** (NYU): *"How calcium channels regulate nuclear transcription and pre-mRNA splicing"*

- 21.00** Closing remarks: **B. FLUCHER** (Medical Univ. of Innsbruck)
- GOODBYE PARTY – wine & cheese**