

**WEDNESDAY, MAY 16<sup>th</sup>**20:00 **Welcome/CHAIR:** J. STRIESSNIG (INNSBRUCK)**20:15 Opening Plenary  
W. A. CATTERALL (SEATTLE)**

Calcium Channel Structure and Regulation

**21:15 WELCOME PARTY****THURSDAY, MAY 17<sup>th</sup>****Voltage-gated Ca<sup>2+</sup> Channels: Physiology and Disease**

8:15 I.SCHULTZ-HOFER (GERMAN ACAD.SCI.)

Leopoldina welcome address

8:20 CHAIR/Perspective: J. STRIESSNIG (INNSBRUCK)

8:30 A. DOLPHIN (UCL)

Trafficking of calcium channel alpha2delta subunits

9:15 B. LISS (ULM)

Ion channels orchestrating function and fates of dopamine neurons: specific roles of L-type Ca<sup>2+</sup> channels?

9:45 A. RAJADHYAKSHA (CORNELL)

L-type Ca<sup>2+</sup> channels and cocaine-induced behavioral and molecular plasticity

10:15 T. REINBOTHE (MALMÖ)

The human L-type calcium channel Cav1.3 regulates insulin release and its expression is in turn regulated by glucose

**10:35 COFFEE BREAK**

11:05 CHAIR/Perspective: B. FLUCHER (INNSBRUCK)

11:15 P. TULUC (INNSBRUCK)

A single amino acid residue determines Cav1.1 gating properties

11:45 T.W. SOONG (SINGAPORE)

RNA editing and alternative splicing modulate Ca<sup>2+</sup>-dependent inactivation of Cav1.3 L-type channels

12:15 Y. MORI (KYOTO)

Calcium entry channel protein complexes: Emerging roles and changing paradigms

**13:00 LUNCH****AFTERNOON ACTIVITIES**

16:30 CHAIR/Perspective: E. CARBONE (TORINO)

16:40 M. MANGONI (MONTPELLIER)

Physiopathological role of Cav1.3 Ca<sup>2+</sup> channels in heart automaticity

17:10 D. PIETROBON (PADOVA)

Calcium channel dysfunction in migraine

17:40 P. LORY (MONTPELLIER)

Involvement of T-type calcium channels in tonic seizures

18:00 S.CAIN (VANCOUVER)

Sustained or suppressed: altered burst firing properties of two distinct thalamic nuclei in a rat absence epilepsy model

**18:15 DINNER****Technical workshop: Cell- and gene-therapy\***

20:00 CHAIR/Perspectives: J. ENGEL (HOMBURG)

K. LAUGWITZ (MUNICH)

20:10 Human disease modeling of channelopathies with iPSC technology

B. FLEISCHMANN (BONN)

20:40 Stem cell-based modulation of heart function

**Research Flash**

21:10 CHAIR: A. KOSCHAK (VIENNA)

F. MAYER (THÜBINGEN), G. C. DEMONTIS (PISA),

R. SCHNEIDER (MAGDEBURG), M. CAMPIGLIO (INNSBRUCK)

**21:45 BEER & CHIPS @ POSTERS****FRIDAY, MAY 18<sup>th</sup>****SYMPOSIUM IN HONOR OF FRANZ HOFMANN**

8:30 CHAIRS/Perspectives: P. RUTH (TÜBINGEN); H. GLOSSMANN (INNSBRUCK)

8:40 N. DASCAL (TEL AVIV)

Modulation of cardiac Cav1.2 by protein kinases A and C in a heterologous system: Mechanisms and uncertainties

9:25 F. HOFMANN (MUNICH)

Regulation of the cardiac L-type calcium channel

9:55 P. LIPP (HOMBURG)

The role of TRPC1/C4 for physiological calcium handling and contractility in cardiac myocytes

**10:25 COFFEE BREAK**

11:00 CHAIR/Perspectives: V. FLOCKERZI (HOMBURG)

11:10 K. AKTORIES (FREIBURG)

Modification of cytoskeleton by bacterial toxins

11:40 J. BEAVO (SEATTLE)

Phosphodiesterase regulation of cardiac and hormonal function

12:10 J.E. SCHULTZ (TÜBINGEN)

Signaling by the TSR receptor: Identification of a signal processing unit in adenylyl cyclases

12:40 M. RONJAT (GRENOBLE)

Cacnb4 directly couples electrical activity to gene expression, a process defective in juvenile epilepsy

**13:00 LUNCH****14:30 POSTER SESSION (EVEN NUMBERS)****16:15 COFFEE BREAK****16:30 POSTER SESSION (ODD NUMBERS)****18:15 DINNER****Special workshop: Women in science (Alpbacherhof)**

18:15 CHAIR: A. KOSCHAK (VIENNA); J.ENGEL (HOMBURG)

*\*Last-Minute Change: Workshops were switched!***Technical workshop: Photoactivatable probes\***

20:00 CHAIR: G. ZAMPONI, Editor of Channels (CALGARY)

20:10 P. HEGEMANN (BERLIN)

Advanced optogenetics using novel channelrhodopsin variants

20:40 D. TRAUNER (MUNICH)

"Making blind ion channels see"

**Research Flash**

21:10 CHAIR: M. FREICHEL (HEIDELBERG)

D. VANDAEL (TORINO), A. JURIK (MUNICH), J. M.

FERNÁNDEZ (BARCELONA), N. WEISS (CALGARY/GRENOBLE)

**21:45 BEER & CHIPS @ POSTERS****SATURDAY, MAY 19<sup>th</sup>****TRP-, TPC- and other channels**

8:30 CHAIR/Perspectives: K. GROSCHNER (GRAZ)

8:40 D. REN (PHILADELPHIA)

The NALCN channel complex in neuronal excitability regulation

9:25 H. TAKESHIMA (KYOTO)

TRIC channels are essential partners for Ca<sup>2+</sup> release

9:55 Y. KIRICHOK (UCSF)

How Brown Fat Makes Heat: Mechanism of Thermogenic Proton Leak across the Mitochondrial Inner Membrane

**10:25 COFFEE BREAK**

11:00 CHAIR/Perspectives: A. LUDWIG (ERLANGEN)

11:10 T. GUDERMANN (MUNICH)

TRPC channels in acute hypoxia, ischemia and reperfusion

11:40 M.A. VALVERDE (BARCELONA)

Role of TRPV4 N-terminus in channel gating and cell shape

12:10 H.-S. SHIN (SEOUL)

T-type Ca<sup>2+</sup> Channels, thalamic firing modes and control of fear memory**13:00 LUNCH****AFTERNOON ACTIVITIES**

16:00 CHAIR/perspectives: M. Biel (MUNICH)

16:10 C. WAHL (MUNICH)

Ca<sup>2+</sup> signaling via two pore channels

16:40 M.X. ZHU (HOUSTON)

Endolysosomal functions of two-pore channels

17:10 C. ROMANIN (LINZ)

The STIM/Orai coupling machinery

**17:40 DINNER**19:30 **Closing Plenary/CHAIR:** V. FLOCKERZI (HOMBURG)**B. NILIUS (LEUVEN)**

Tasty and healthy after dinner TR(i)Ps

Closing remarks by J. STRIESSNIG

**GOODBYE PARTY & Champions League****20:45 Football Final**