

International Symposium

7. - 9. October 2010



Marburg, Germany

Aula der Alten Universität
Lahntor 3, 35037 Marburg

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**K_{2P} -Kanäle - vom Molekül zur
Physiologie und Pathophysiologie**

FOR 1086

Jena - Marburg - Münster - Regensburg - Würzburg



T. Baukrowitz



T. Budde



J. Daut



N. Decher



J. Hoyer



R. Köhler



S.G. Meuth



E. Schulze-Bahr



R. Warth

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OF FOR 1086

Thursday, 7th Oct.

Aula der Alten Universität, Lahntor 3, 35037 Marburg

15:00 Opening remarks

15:30 Steve Goldstein (Univ. of Chicago)
Keynote:
SUMO regulates TASK channels in cerebellar granule neurons via $K_{2P}1$

16:30 Gyorgy Panyi (Univ. of Debrecen, Hungary)
Keynote:
Ion channels in lymphocytes: physiological roles and therapeutic targeting

18:00 Welcome reception / Get together

19:00 Dinner

Friday, 8th Oct.

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Invited speakers

8:40 Alistair Mathie (Univ. of Kent)
Regulation and gating of TASK and TREK K_{2P} channels

9:20 Douglas Bayliss (Univ. of Virginia)
TASK channels: expression, regulation and physiological roles

10:00 Donghee Kim (Rosalind Franklin Univ. of Medicine and Science)
TASK and TREK in excitable cells

Friday, 8th Oct.

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Coffee break

11.00 Nicholas Franks (Imperial College, London)
TASK potassium channels and general anaesthetics

11.40 Florian Lesage (CNRS, Sophia Antipolis, France)
Direct and indirect regulations of TREK and TWIK channel activities

12.00 Erhard Wischmeyer (Univ. of Würzburg)
TRESK and TREK-1 as potential therapeutic targets

Lunch break

14:00 Marc Borsotto (CNRS, Sophia Antipolis, France)
Spadin, a Sortilin-Derived Peptide, Targeting Rodent TREK-1 Channels: A New Concept in the Antidepressant Drug Design

14:40 Bill Wisden (Imperial College, London)
 K_{2P} channels and neuronal homeostasis

15:20 Stephen Brickley (Imperial College London)
Thinking about the nodal leak: two-pore channels and action potential repolarisation

Coffee break

16:20 Jürgen Daut (Univ. of Marburg)
Intracellular traffic of TASK channels

17:00 Keith Buckler (Univ. of Oxford)
Background potassium channels, metabolism and oxygen sensing

Saturday, 9th Oct.

Kleiner Hörsaal, Instituts f. Physiologie u. Pathophysiologie, Deutschhausstr. 2

Progress report of FOR 1086

9:00 **P1:** Thomas Baukrowitz (Jena)
Pore structure and gating in K_{2P} channels probed by high affinity pore blockers and scanning mutagenesis

9:40 **P2:** Thomas Budde / Sven Meuth (Münster, Würzburg)
The modulation of TASK channels in thalamic neurons

10:20 **P3:** Niels Decher / Jürgen Daut (Marburg)
The role of TASK-1 channels in the heart

Coffee break

11:20 **P4:** Ralf Köhler / Joachim Hoyer (Odense, Marburg)
Physiological and pathophysiological role of vascular K_{2P} channels

12:00 **P5:** Eric Schulze-Bahr (Münster)
 K_{2P} channel genes, variance and phenotypes

12:40 **P6:** Richard Warth (Regensburg)
The adrenal phenotype of the TASK-3 knockout mouse

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