

## Other focused conferences during WorldPharma2010

- 1: Clinical pharmacology in emerging and developing countries
- 2: Transmembrane transport: perspectives for disease and drug discovery
- 3: Ion channels in analgesia and anaesthesia
- 4: Pharmacoepidemiology, current controversies and opportunities
- 5: Translational science in the metabolic syndrome: basic and clinical pharmacology
- 6: The heart gone wrong; stabilization of cardiac function
- 7: Simulation and data modelling in drug development. Better drugs faster?
- 8: Developments in the treatment of sexual dysfunction and diseases of the lower urinary tract
- 9: Inflammation and immunopharmacology: new tools for old diseases
- 10: Drugs for half the world: paediatric clinical pharmacology
- 11: G protein-coupled 7<sup>TM</sup> receptors:  
from molecular to physiological function
- 13: Maximising benefits and minimizing harms from drugs
- 14: Addiction and doping:  
neurobiological and clinical basis of emerging treatments
- 15: Endothelium in health and disease
- 16: Natural products: past and future?
- 17: New approaches and targets in psychiatry
- 18: Nuclear receptor targets for treatment of diseases

Danish Society for   
Pharmacology



**BCPT**  
Basic & Clinical Pharmacology & Toxicology



Printed in Denmark

Please find further details on [www.WorldPharma2010.org](http://www.WorldPharma2010.org)



## WorldPharma2010

16th World Congress on Basic and Clinical Pharmacology.  
July 17-23, 2010, Copenhagen, Denmark

WorldPharma2010 will include a  
3-day focused conference on

**Ion channelopathies:  
new windows on complex  
disease and therapy**

**21-23 July 2010**

**Abstract deadline 15 January 2010**  
**Early bird registration deadline 15 March 2010**

## Invitation

July 17-23 2010 is the time for a major event for pharmacology, the science of how drugs affect the living organism. Basic and clinical pharmacology, kept separate for too long, have come together again to encompass the whole process of drug development from molecular biology to clinical practice. This remarriage is to be celebrated in Copenhagen; the world's basic and clinical pharmacologists and all those dealing with the development and use of drugs will meet to discuss how we can work together to meet the need for safe and effective medicines at affordable prices.

WorldPharma2010 is organised by the Danish Society for Pharmacology jointly with the British Pharmacological Society under the auspices of the International Union of Basic and Clinical Pharmacology, IUPHAR.

In the scientific programme, there will be plenary lectures, poster sessions, sponsored symposia, workshops, satellite meetings and focused conferences. Each of the 18 focused conferences contains 4 or 5 half-day sessions all belonging to the same theme. Overleaf is the detailed programme for the focused conference entitled:

### "Ion channelopathies: new windows on complex disease and therapy"

The titles of the other focused conferences are listed on the back of the folder.

In each session there will be free communications as well. We promise you a scientifically excellent programme as well as the opportunity to savour the atmosphere of Copenhagen.



Kim Brøsen  
President



Michael Mulvany  
Secretary General

Congress secretariat

ICS A/S Copenhagen



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## Ion channelopathies: new windows on complex disease and therapy

Focused conference leader: William A. Catterall

### Session 1 Ion channelopathies in the brain: inherited epilepsy and migraine

Chairpersons:  
W. A. Catterall & D. Pietrobon

- Sodium channelopathies and epilepsy  
*I. Scheffer, Australia*
- Mechanisms of hyperexcitability and co-morbidities in severe myoclonic epilepsy of infancy  
*W. A. Catterall, USA*
- Functional effects of sodium channel mutations in inherited epilepsy and migraine  
*M. Mantegazza, Italy*
- Gain-of-function mutations of calcium channels in familial hemiplegic migraine  
*D. Pietrobon, Italy*

### Session 2 Ion channelopathies of peripheral nerve and muscle: inherited pain and periodic paralysis

Chairpersons:  
S. G. Waxman & K. Jurkat-Rott

- Functional effects of sodium channel mutations in inherited chronic pain syndromes  
*S. G. Waxman, USA*
- Selective inhibition of sodium channels by gating modifier toxins  
*T. Cummins, USA*
- Leak-induced pathogenesis and treatment of periodic paralysis  
*K. Jurkat-Rott, Germany*
- Gating pore cation currents in hypokalemic and normokalemic periodic paralysis  
*T. Scheuer, USA*

### Session 3 Ion channelopathies in the cardiovascular system: inherited arrhythmia and hypertension

Chairpersons:  
M. C. Sanguinetti & B. C. Rossier

- Molecular mechanisms of potassium channel dysfunction in long- and short-QT syndromes  
*M. C. Sanguinetti, USA*
- Sodium channelopathies in cardiac arrhythmia  
*A. L. George, USA*
- Molecular mechanism of ryanodine receptor dysfunction in cardiac arrhythmia  
*A. R. Marks, USA*
- Liddle's disease and salt-dependent hypertension  
*B. C. Rossier, Switzerland*

### Session 4 Ion channelopathies in endocrine systems

Chairpersons:  
P. Berggren & L. J. Ptacek

- Calcium channels and insulin release  
*P. Berggren, Sweden*
- Channelopathies of ATP-gated potassium channels and insulin release  
*F. Ashcroft, UK*
- ATP-gated potassium channels in skeletal and cardiac muscle  
*C. G. Nichols, USA*
- Potassium channel mutations in Andersen-Tawil syndrome  
*L. J. Ptacek, USA*

### Session 5 Ion channelopathies in lymphocytes: severe combined immunodeficiency and store-operated calcium channels

Chairperson:  
M. D. Cahalan

- Orai and stim in store-operated calcium release  
*M. D. Cahalan, USA*
- Diverse functions of STIM in store-operated calcium entry  
*R. S. Lewis, USA*
- Severe combined immunodeficiency syndrome  
*S. Feske, USA*
- Calcium signaling in lymphocytes  
*A. Rao, USA*