Sunday July 11, 2010

15.00 - 19.00 Registration

19.00 - 21.00 Reception

Monday July 12, 2010

08.30 Welcome/announcement

Plenary Lecture:
Professor Tomas Hökfelt (Stockholm, Sweden): Peptidergic influences on proliferation, migration, and placement of neural progenitors in the adult mouse forebrain.

Symposium: 09.30 - 10.30
Novel opioid peptide agonists and antagonists

Chairs: James Zadina & Aleksandra Misicka
Santi Spampinato: Interactions between atypical opioid agonists and MOR
Andrzej Lipkowski: Opioid-tachykinin chimeric peptides for chronic pain treatment
James Zadina: Novel opioid peptide derived agonists

Coffee-break 10.30 - 11.00

Symposium: 11.00 - 12.30
Transcription and epigenetics of opioid peptide genes

Chairs: Georgy Bakalkin and Li-Na Wei
Li-Na Wei: Epigenetic control of opioid receptor genes
Georgy Bakalkin: Differences in the regulation of the prodynorphin gene in human and animals
Jaques Drouin: Epigenetic aspects on POMC transcription

Hot topics/Discussion

Lunch 12.30 - 14.00

Symposium: 14.00 - 16.00
Ligand-directed Signaling and Functional Selectivity

Chairs: Lakshmi Devi & Brigitte Kieffer

Laura Bohn: Agonist-directed signaling of the serotonin 2A receptor
**Stéphane Allouche**: SK-N-BE cells: a human neuroblastoma cell line as a model for studying delta opioid receptors  
**Amynah Pradhan**: Ligand-directed trafficking of the delta opioid receptor in vivo: two paths towards analgesic tolerance  
**Graciela Pineyro**: Functional selectivity determines post-endocytic sorting and tolerance potential of delta opioid receptor (DOR) ligands

**Hot topics/Discussion:**

*Coffee-break 16.00 - 16.30*

**Poster session 1**: 16.30 - 19.00

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**Tuesday July 13, 2010**

**08.30 - 09.30**

**Plenary Lecture:**  
**Professor Tony L Yaksh** (UCSD, La Jolla, CA): Spinal opiates and analgesia - A real bench to bedside story

**Symposium: 09.30 - 10.30**  
Opioids in neuropathic pain  
Preclinical part  
*Chairs: Lei Yu & Hiroshi Ueda*  
**Hiroshi Ueda**: Epigenetic control of opioid receptor gene expression in neuropathic pain model.  
**Zsuzsanna Wiesenfeld-Hallin**: Studies of anti-hyperalgesic effect of various opioids in a rat model of mononeuropathy.  
**Masahiro Ohsawa**: Interaction with naloxone and substance P pathways in neuropathic pain

*Coffee-break 10.30 - 11.00*

**Symposium: 11.00 - 12.30**  
Opioids in neuropathic pain  
Clinical part  
*Chairs: Eija Kalso & Torsten Gordh*  
**Torsten Gordh**: Opioid sensitivity in chronic pain patients correlates with the expression level of opioid peptide systems.  
**Setsuro Ogawa**: Use of opioid analgesics and its potential problem in patients with
neuropathic pain.  
**Tomas Tölle:** Functional magnetic resonance imaging to assess the effects of opioids on human brain  
**Inna Belfer:** Genetic basis for individual variations in pain perception and the development of a chronic pain condition.

**Hot topics/Discussion:**

**Lunch 12.30 - 14.00**

**Symposium: 14.00 - 16.00**  
Opioids & stem cell research - Recent progress in the stem cell biology and adult neurogenesis  
*Chairs: Minoru Narita and Kurt Hauser*  
**Pamela Knapp:** Opiates and HIV interact to alter CNS progenitor function in a stage-specific manner  
**Minuru Narita:** Recent progress in the stem cell biology and adult neurogenesis related to drugs of abuse  
**Amelia Eisch:** Adult hippocampal neurogenesis and opiates: implications for addiction

**Hot topics/Discussion:**

**Coffee-break 16.00 - 16.30**

**Poster session 2: 16.30 - 19.00**

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**Wednesday July 14, 2010**

**08.30 - 09.30**

**Founders Lecture:**

Professor Masamichi Satoh (Hiroshima, Japan)

**Symposium: 09.30 - 10.30**  
Opioids, Incentive Drive and Habit  
*Chairs: Tony Shippenberg*  
**Nigel T Maidment (Los Angeles, USA):** Licking, liking and longing: opioid modulation
of goal-directed actions

Agustin Zapata (Baltimore, USA): Kappa opioid receptors and cocaine seeking habits
A 3rd speaker will be added:

Coffee-break 10.30 - 11.00

Symposium: 11.0 - 12.30
Opioid addiction – Clinical aspects
Chairs: Claes Post and Mats Berglund


Mary Jeanne Kreek: Aspects on methylation of DNA of opioid receptor genes in heroin addicts.
A 3rd speaker will be added:

Hot topics/Discussion:

Lunch 12.30 - 13.00

Afternoon free

Thursday July 15, 2010

08.30 - 09.30

Plenary Lecture:
Professor Dan Larhammar (Uppsala, Sweden): Opioid evolution

Symposium: 09.30 - 10.30
Opioids in alcohol addiction
Preclinical research
Chairs: Ingrid Nylander & Christine Gianoulakis:

Ingrid Nylander: The impact of early environmental factors on ethanol-induced effects on opioid peptides in adult male rats.

Christine Gianoulakis: Effects of ethanol on opioid peptide release in CNS regions related to addiction
A 3rd speaker will be added:

Coffee-break 10.30 - 11.00
Symposium: 11.00 - 12.30
Opioids in addiction to alcohol and central stimulants
Clinical research
*Chairs: Mary Jeanne Kreek & Johan Franck*

**Karl Mann:** The opioid system as a target for treating alcoholism.

**Tanya Williams (New York, USA):** Opioid peptide related genes and association with cocaine/alcohol co-dependence.

**Johan Franck:** The opioid receptor naltrexone attenuates the subjective effects of amphetamine in patients with amphetamine dependence.

Hot topics/Discussion:

**Lunch 12.30 - 14.00**

**Symposium 8: 14.00 - 15.00**
Endogenous opioids and addiction to gambling
*Chair: Fred Nyberg*

**Mark Potenza:** The neurobiology and genetics of impulse control disorders: relationships to drug addictions.

**Sandra J Wallner-Liebman:** Endogenous opioids in patients addictive to gambling

15.00 - 16.30 NIDA-symposium

**Coffee-break 16.30 - 17.00**

17.00 Business Meeting

19.30 Banquette dinner

Friday July 16, 2010

**Symposium: 09.00 - 10.30**
Opioids in neuroendocrinology – abuse of steroids
*Chairs: Ruth Wood & Mathias Hallberg*
**Ingemar Thiblin:** Violent crime and substance abuse: a medico-legal comparison between deceased users of anabolic androgenic steroids and abusers of illicit drugs.

**Mathias Hallberg:** Anabolic androgenic steroids and their molecular interaction with circuits mediating effects of alcohol and opioids

**Ruth Wood:** Interactions between androgens and rewarding behaviors in the adolescent brain – Testosterone self administration and impact on opioid and dopaminergic pathways

*Coffee-break 10.30 - 11.00*

**Friday July 16, 2010**

**Symposium:** 11.00 - 12.30
Opioid and cannabinoid interaction (joint session with the ICRS)
*Chairs: Rafael Maldonado & Walter Fratta*

**Rafael Maldonado:** Advances in the field of cannabinoid–opioid cross-talk.

**Walter Fratta/Liana Fattore:** Cannabis and reward – interaction with opioids

3rd speaker to be announced:

**End of conference**

*Lunch 12.30 - 13.30*
**Program committee:**

Fred Nyberg (Chair)

**Members:**

Lakshmi A Devy (USA, INRC President)
Georgy Bakalkin (Sweden)
Johan Franck (Sweden)
Eija Kalso (Finland)
Alexandra Misicka (Poland)
Minoru Narita (Japan)
Ingrid Nylander (Sweden)
Toni Shippenberg (USA)
Lei Yu (USA)

**Local organizing**

Fred Nyberg (Sweden)
Georgy Bakalkin (Sweden)
Johan Franck (Sweden)
Torsten Gordh (Sweden)
Mathias Hallberg Sweden)
Ingrid Nylander (Sweden)
Claes Post (Sweden)