



Solving the Serotonin Paradox: From Bench to Bedside and Back

Workshop

Monday, March 30th 2009 in Nijmegen

Marijnenkamer in Huize Heyendaal - Campus St. Radboud University

Registration & entry is free

Funded by **NWO**
Brain & Cognition Programme

Speakers

Judith Homberg (Nijmegen)

The serotonin paradox

Dirk Schubert (Nijmegen)

In vitro approaches for investigating functional connectivity in cortical networks of SERT-KO rats

Astrid Valles (Nijmegen)

From genes to cognition: The molecular underpinnings of somatosensory plasticity in rats

Arend Heerschap (Nijmegen)

Animal brain imaging & metabolic mapping

Amanda Kiliaan (Nijmegen)

Effect of lipid-based nutrition on cerebral haemodynamics and pathology in a transgenic Alzheimer mouse model

Guillen Fernandez (Nijmegen)

Modulating amygdala reactivity

Patricia Gaspar (Paris, France)

Multiple tricks of serotonin during development

Henning Tiemeier (Rotterdam)

Behavioural and cognitive research in a multi-ethnic birth cohort from fetal life onwards. The Generation R Study

Quentin Huys (London, UK)

Behavioural inhibition: a computational revival

Roshan Cools (Nijmegen)

Serotonergic regulation of behavioral and emotional control processes

Organized by Judith Homberg, Dirk Schubert and Rolf Kötter

Registration & info: Secretariat Dept. of Cogn. Neuroscience - E-mail: neuroscience@donders.ru.nl

Solving the Serotonin Paradox: From Bench to Bedside and Back

The aim of this workshop is to bring together expert researchers from multiple disciplines to form new collaborations to resolve one of the major paradoxes of serotonin action: While selective serotonin reuptake inhibitors, such as Prozac, act as antidepressants during adulthood, they appear to induce anxiogenic and depressive effects when exposure took place during the prenatal period. Since pregnancy is a high-risk period for depression and Prozac is frequently prescribed, resolution of this paradox is urgently required. This may only be achieved when expertise on genetics, neuroanatomy, in vitro and in vivo neurophysiology, computational neuroscience, neuroimaging, as well as cognition and behaviour is exchanged and coordinated towards this overarching goal. During the workshop researchers have the opportunity to present and discuss their experimental strategies with the aim to go beyond current frontiers in elucidating serotonin effects at different system levels and time scales.

Schedule

Each speaker has a time slot of max. 20 min. Following each talk is a 15 min discussion.

- 09.15-09.30:** Coffee/tea
- 09.30-09.50:** Introduction Judith Homberg (Nijmegen)
"The serotonin paradox"
- 10.10-10.30:** Dirk Schubert (Nijmegen)
"In vitro approaches for investigating functional connectivity in cortical networks of SERT-KO rats"
- 10.45-11.05:** Astrid Valles (Nijmegen)
"From genes to cognition: The molecular underpinnings of somatosensory plasticity in rats"
- 11.20-11.40:** Coffee break
- 11.40-11.55:** Arend Heerschap (Nijmegen)
"Animal brain imaging & metabolic mapping"
- 11.55-12.10:** Amanda Kiliaan (Nijmegen)
"Effect of lipid-based nutrition on cerebral haemodynamics and pathology in a transgenic Alzheimer mouse model"
- 12.25-12.45:** Guillen Fernandez (Nijmegen)
"Modulating amygdala reactivity"
- 13.00-14.00:** Lunchbreak
- 14.00-14.20:** Patricia Gaspar (Paris, France)
"Multiple tricks of serotonin during development"
- 14.35-14.55:** Henning Tiemeier (Rotterdam)
"Behavioural and cognitive research in a multi-ethnic birth cohort from fetal life onwards. The Generation R Study"
- 15.10-15.30:** Coffee break
- 15.30-15.50:** Quentin Huys (London, UK)
"Behavioural inhibition: a computational revival"
- 16.05-16.25:** Roshan Cools (Nijmegen):
"Serotonergic regulation of behavioral and emotional control processes"
- 16.40-17.00:** Discussion, drinks and snacks

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