
SECOND DUTCH ENDO-NEURO-PSYCHO MEETING



NeuroFederatie

NWO



ALW

MAGW

Park Hotel 'De Branding' Doorwerth
2 - 5 J u n e 2 0 0 3

DEAR PARTICIPANT

The organizers proudly welcome you at the 2nd Dutch Endo-Neuro-Psycho Meeting, the unique annual meeting for the Dutch endocrinologist and neuroscientist in the broadest sense. This Endo-Neuro-Psycho Meeting 2003 (ENP2003) is the 7th meeting of its kind, which started in 1997 as the 1st Dutch Endo-Neuro Meeting, but since then has grown to *the* forum of national scientific exchange. A bit of its history and its success story can be found on <http://www.enpmeeting.nl/enp/history>.

One of the aims of the ENPmeeting is to present the most recent developments in clinical and pre-clinical research in various fields of endocrinology and the neurosciences. The present program again offers many exciting sessions in the fields of basal and clinical endocrinology, neuroendocrinology, neurosciences and behavioral neurosciences. To this end, many scientists, participating as moderators in the meeting, have organized topic-oriented sessions in which both internationally well-known speakers from Europe or the USA were invited to present their view on the future prospects as well as junior scientists who will contribute with their latest results. This approach is chosen as to create an ideal atmosphere that promotes interaction between junior investigators and established senior scientists, the important second aim of the meeting.

In addition, poster sessions are organized that are open for both young and established scientists. We would like to encourage everyone to actively attend these sessions.

The ENP2003 is again held in Parkhotel De Branding in Doorwerth. The pleasant atmosphere of this conference site has proven to be very stimulating for scientific and social exchange in all previous meetings, and no doubt it will do so in 2003.

Finally, the organizers would like to stress and acknowledge the important contribution of the session moderators: they organized the sessions and together they are responsible for the exciting program of this years meeting. In addition, the 2nd Dutch Endo-Neuro-Psycho Meeting 2003 would not exist without the generous financial support from our sponsors.

On behalf of the organizing committee, we wish you a fruitful meeting in Doorwerth,

Gerard Boer (*chair Organizing committee and Program committee Neuroscience*)

Hanno Pijl (*chair Program committee Endocrinology*)

Jeroen Schmitt (*chair Program committee Cognitive and behavioral neuroscience*)

MEETING WEBSITE

The organization of the Endo-Neuro-Psycho Meeting has a permanent website on which past, present and future information can be found. It also provides further information on how to apply as moderator for a session at a future meeting. The site has the address www.enpmeeting.nl/enp/index_all.htm. The direct link to the pages of the present 2003 meeting is www.enpmeeting.nl/enp/enp2003.

CONTACT ADDRESSES

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About general information

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FUTURE MEETINGS AND CALL FOR PROPOSALS

The Dutch Endo-Neuro-Psycho Meeting will continue in 2004, and again in the first week of June. Preliminary dates for the next meeting is 1-4 June 2004.

Suggestions for sessions of the 2004 meeting can already be submitted. Announce your suggestions as moderator via the special form available in the program booklet available at the meeting, or via the electronic version on <http://www.enpmeeting.nl/enp/ENP2004>.

All Dutch participants of Dutch Endo-Neuro-Psycho Meetings will receive an e-mail in September 2003 reminding them about the possibility to organize a session at the 3rd Dutch Endo-Neuro-Psycho Meeting 2004 / 8th Dutch Endo-Neuro Meeting 2004.

Detailed instructions for moderators will be published on the above mentioned web pages of the Endo-Neuro-Psycho Meeting. The e-mail address for correspondence is enpmeeting@neurofederatie.nl.

PARTICIPATING ORGANIZATIONS

Netherlands Federation of Neuroscience Organizations
(Dutch Neurofederation)
Netherlands Organization for Health Research and
Development (ZonMw)
Netherlands Society for Endocrinology (NVE)
NWO Foundation 'Aard- en Levenswetenschappen'
(NWO-ALW)
NWO Foundation 'Maatschappij en
Gedragwetenschappen' (NWO-MaGW)

ORGANIZING COMMITTEE

Gerard Boer (NIH, Amsterdam) *president*
Sytze van Dam (UMCU, Utrecht)
Michaela Diamant (VU, Amsterdam)
Marjanne Everts (UU, Utrecht)
Bert Joosten (UM, Maastricht)
Albert Postma (UU, Utrecht)
Hanno Pijl (LUMC, Leiden) *committee secretariat*
Wim Scheenen (KUN, Nijmegen) *treasurer*
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Jenny Visser (ErasmusMC, Rotterdam)
Erno Vreugdenhil (LACR, Leiden)
Ineke van der Zee (KUN, Nijmegen)

Secretariat registration

Thea Laan

Secretariat abstracts

Tini Eikelboom

Program committee Endocrinology

Sytze van Dam
Michaela Diamant
Marjanne Everts
Hanno Pijl (*chair*)
Anton Scheurink
Jenny Visser

Program committee Neuroscience

Gerard Boer (*chair*)
Bert Joosten
Wim Scheenen
Erno Vreugdenhil
Ineke van der Zee

Program committee Cognitive & behavioral neuroscience

Albert Postma
Jeroen Schmitt (*chair*)
Miranda van Turennot

Lay-out booklet

Gerard J. Boer and Tini Eikelboom

SPONSORS (in alphabetical order)

Organizations

Dutch Brain Foundation (HsN, Den Haag)
www.hsn.nl
Dutch-Belgian Society for Experimental and Clinical
Neuroscience (EKN, Antwerpen, Belgium)
www.ekn.org
Graduate School Neurosciences Amsterdam (ONWA,
Amsterdam)
www.onwa.med.vu.nl
Graduate School Animal Health (GSAH, Utrecht)
www.vet.uu.nl
Graduate School of Behavioral and Cognitive
Neurosciences (BCN, Groningen)
www.bcn.rug.nl/bcn
Netherlands Institute for Brain Research (Amsterdam)
www.nih.knaw.nl
Netherlands Organization for Health Research and
Development (ZonMw, Den Haag)
www.zonmw.nl
Netherlands Society for Endocrinology (NVE,
Nijmegen)
www.nve.nl
NWO Foundation 'Aard- en Levenswetenschappen'
(NWO-ALW, Den Haag)
www.nwo.nl/alw
NWO Foundation 'Maatschappij en
Gedragwetenschappen' (NWO-MaGW, Den Haag)
www.nwo.nl/magw

Companies

Chemicon (Harrow, UK)
www.chemicon.com
Elsevier Science B.V. (Amsterdam)
www.elsevier.nl
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www.ferring.nl
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www.noldus.com
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www.novonordisk.nl
Organon B.V. (Oss)
www.organon.com
Pharmacia (Woerden)
www.pharmacia.nl

CONFERENCE SITE

Parkhotel 'De Branding', Kabeljauwallee 35, 6865 BL Doorwerth, tel. 0317 319010.

The following lecture rooms are used: Branding (plenary and poster sessions), Renkum, Doorwerth, Patio and Gelderland. Sub 2 and 3 are small meeting rooms available throughout the meeting (contact the registration desk), and Sub 1 is the luggage room.

INSTRUCTIONS FOR ACCOMMODATION

After registration for the meeting, you will be requested to check-in at the hotel desk. You obtain with your room number and key, dinner and lunch tickets and a hotel beverage card. The latter card is used to register bar expenses which are at your own costs.

Hotel accommodation includes breakfast that is served in the restaurant from 07.00 h onwards.

Check-out should be done before 13.00 h at the hotel desk, and you are requested to hand over your beverage card and pay the expenses noted as well as telephone costs.

Luggage can be stored at all times in Sub 1.

INSTRUCTIONS FOR DAY ATTENDANTS

After registration for the meeting, you should collect lunch and dinner tickets at the hotel desk. A hotel beverage card will be handed over as well. Upon leave you are requested to go to the hotel desk and to pay the bar expenses registered on this card.

INSTRUCTIONS FOR INVITED SPEAKERS FROM ABROAD

Upon registration for the meeting, you will receive a travel reimbursement form in case you have been elected for payment of travel costs. Please fill out this form as requested and return it at the registration desk during the meeting or send it to the treasurer after the meeting within a month. If properly filled out and returned soon, you can count upon a very rapid bank transfer from the organization (within a month after submission).

Note that the costs of travel eligible for reimbursement are based on air fare APEX tourist class, 2nd class train fares and local taxi costs, and that the organizers need a copy of all your tickets.

The address of the meeting treasurer:

W. Scheenen

Dept. of Experimental Animal Science

Catholic University of Nijmegen

P.O. Box 9010

6500 GL Nijmegen

e-mail scheenen@sci.kun.nl.

INSTRUCTIONS FOR ORAL PRESENTATIONS

Oral presentation time includes 10 min (long) or 5 min discussion time (short presentations).

Beamer equipment is available in all lecture rooms. The moderator(s) of your session is (are) in charge of the computer part of the projection. Room assistants are available during each session for additional help.

INSTRUCTIONS FOR POSTER PRESENTATIONS

Poster sessions are in the rear of lecture room Branding.

Posters can be displayed on the day of the session and have to be removed before 08.00 h the next day. Poster boards are sized 100 x 120 cm. Posters can be mounted by drawing pins, which will be available at the meeting. The Endocrinology session on Monday 2 June includes a lunch, all other sessions are combined with a coffee/tea break.

POSTER AWARDS

For the Endocrinology, Neuroscience 1 and 2 and Cognitive and behavioral neuroscience poster sessions posters will be awarded for presentation and quality. Poster selection committees appointed by the three scientific program committees will announce the winners in Poster award ceremonies that will be held respectively during the dinner of 2 June (Endocrinology), the dinner of 3 June (Neuroscience 1), following the EKN Lecture on 4 June (Neuroscience 2) and at the end of the meeting on 5 June (Cognitive and behavioral neuroscience).

TIME TABLE / LECTURE ROOMS

MONDAY 2 JUNE

10.15	Opening	Branding
10.30	Endocrinology Keynote Lectures	Branding
11.30	Session 2	Doorwerth
	Session 3	Branding
	Session 4	Gelderland
	Satellite Biorhythms	Patio
13.00	Posters Endocrinology (incl. lunch)	Branding
15.00	Marius Tausk Lecture	Branding
	Satellite Biorhythms	Patio
16.00	Break	
16.30	Session 6	Branding
	Session 7	Doorwerth
	Session 8	Gelderland
	Satellite Biorhythms	Patio
18.15	NVE annual meeting	Branding
19.00	Dinner	Restaurant
	Poster Award Endocrinology	
21.15	Organon Award Lecture	Branding

TUESDAY 3 JUNE

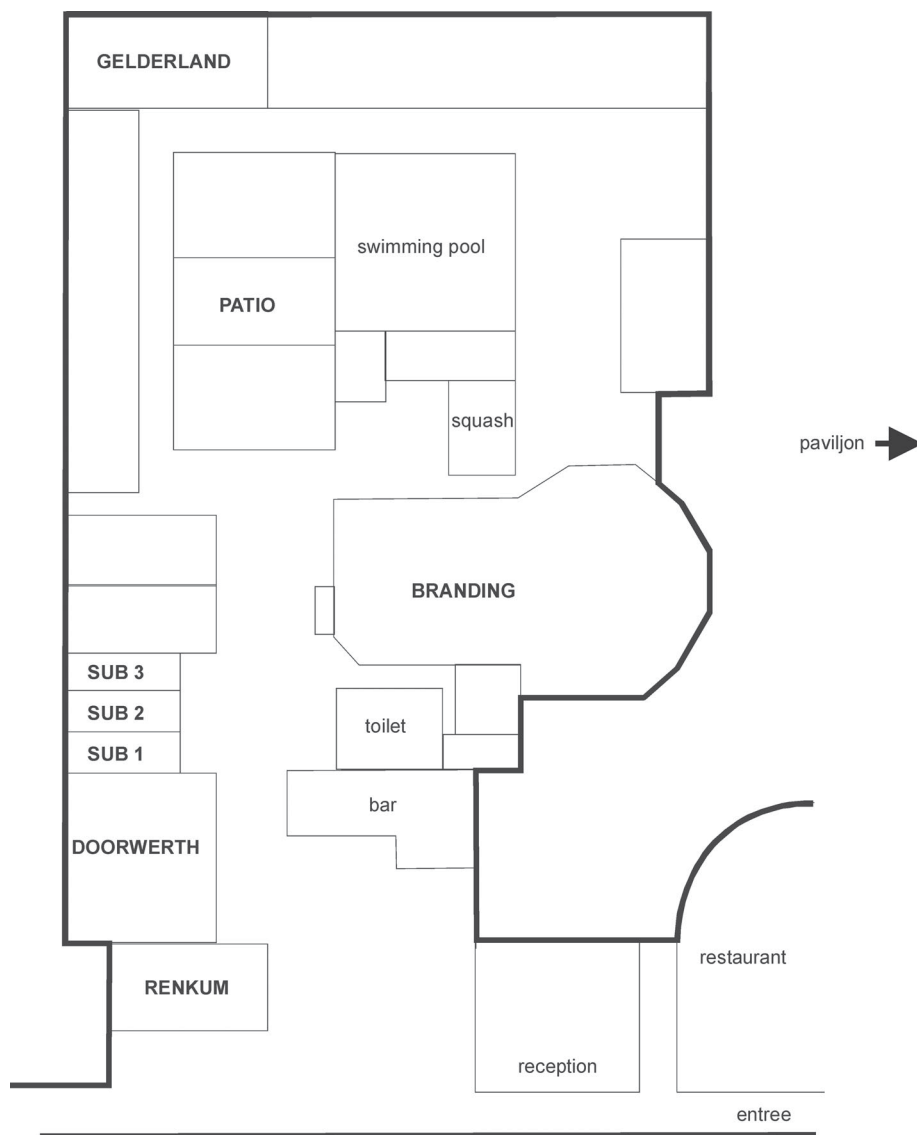
08.30	Session 10	Branding
10.00	Break	
10.30	Session 11	Doorwerth
	Session 12	Gelderland
	Session 13	Branding
	Session 14	Patio
12.00	Lunch	Paviljoen
13.30	Session 15	Doorwerth
	Session 16	Branding
	Session 17	Gelderland
15.00	Poster Neuroscience 1 (incl. break)	Branding
16.30	Session 18	Doorwerth
	Session 19	Branding
	Session 20	Gelderland
19.00	Dinner	Restaurant
	Poster Award Neuroscience 1	
21.15	Neurofederatie Lecture	Branding

WEDNESDAY 4 JUNE

08.30	Session 22	Renkum
	Session 23	Branding
	Session 24	Doorwerth
	Session 25	Gelderland
10.00	Poster Neuroscience 2 (incl. break)	Branding
11.30	Hersenstichting Lecture	Branding
12.15	Lunch	Paviljoen
13.30	Session 27	Branding
	Session 28	Doorwerth
	Session 29	Patio
	Session 30	Gelderland
15.00	Break	
15.30	EKN Lecture	Branding
	Poster Award Neuroscience 2	Branding
16.30	Session 32	Branding
	Session 33	Doorwerth
	Session 34	Gelderland
	Session 35	Patio
19.00	Dinner	Restaurant
21.15	Elsevier Lecture	Branding

THURSDAY 5 JUNE

08.30	Session 37	Gelderland
	Session 38	Branding
	Session 39	Doorwerth
10.00	Posters Cognition & Behavior (incl. break)	Branding
	Satellite GpD	Patio
11.30	Plenary session 40	Branding
12.30	Lunch	Restaurant
13.30	Session 41	Branding
	Session 42	Gelderland
	Session 43	Doorwerth
15.00	Break	
15.30	Session 44	Gelderland
	Session 45	Doorwerth
	Session 46	Branding
17.00	Poster Award Cogn. & Behavior	Branding
	Closure	Branding



LOCATION OF LECTURE ROOMS IN PARKHOTEL 'DE BRANDING'

09.00	Registration (till 13.00) Mounting posters Endocrinology session		<i>Session 4 (Gelderland)</i> GnRH AND GnRH RECEPTORS IN HUMAN AND NON-HUMAN SPECIES <i>Moderator: Cornelis Lambalk (Amsterdam)</i>
10.15	Opening Gerard Boer (Amsterdam)	11.45	Sietse Mosselman (Oss) GnRH and GnRH receptors in human and non-human species: outline of the issue
	<i>Session 1 (Branding)</i> ENDOCRINOLOGY KEYNOTE LECTURES <i>Chairperson: Marjanne Everts (Utrecht)</i>	12.00	Jimmy Neill (Birmingham, AL, USA) GnRH and GnRH receptor genes in the human genome
10.30	Peter Trainer (Manchester, UK) (sponsored by Pharmacia, Woerden) Metabolic effects of GH antagonism in patients with acromegaly Theo Visser (Rotterdam) Genetics of thyroid function	12.30	Jan Bogerd (Utrecht) Differences in structure-function relations between nonmammalian and mammalian gonadotropin-releasing hormone receptors
	Parallel sessions 2-4	12.45	Judith Huirne (Amsterdam) FSH releasing hormone; is there a role for GnRH type II?
	<i>Session 2 (Doorwerth)</i> THYROID AND THE HEART <i>Moderators: Marjanne Everts (Utrecht) and Warner Simonides (Amsterdam)</i>	13.00	Jurgen Piek (Amsterdam) GnRH and its receptors in human female reproductive organs
11.45	Warner Simonides (Amsterdam) Role of thyroid hormone in heart failure	11.45	SATELLITE BIORHYTHM 1 (Patio) <i>see page 30</i>
12.15	Ivaylo Stoykov (Amsterdam) Zonal distribution of thyroid hormone receptors in the heart	13.15	POSTER SESSION ENDOCRINOLOGY including lunch (<i>Branding</i>) <i>see page 13</i>
12.30	Edith Friesema (Rotterdam) The role of monocarboxylate transporter 8 in tissue-specific uptake of thyroid hormone	15.00	<i>Session 5 (Branding)</i> MARIUS TAUSK LECTURE <i>Chairperson: Ron de Kloet (Leiden)</i>
12.45	Sabine van der Heide (Utrecht) Thyroid hormone metabolism in cardiac fibroblasts of adult rats		Jan-Åke Gustafsson (Stockholm, Sweden) New paradigms in estrogen signaling
13.00	Mieke van Beeren (Amsterdam) Dronedarone: a thyroid hormone receptor alpha 1 selective antagonist	15.00	SATELLITE BIORHYTHM 2 (Patio) <i>see page 32</i>
	<i>Session 3 (Branding)</i> NUCLEAR HORMONE RECEPTORS AS LIPID SENSORS <i>Moderator: Sander Kersten (Wageningen)</i>		
11.45	Pascal Ferré (Paris, France) SREBP-1c, a transcription factor involved in insulin action		
12.15	Aldo Grefhorst (Groningen) The role of liver X receptors in control of hepatic fat and carbohydrate metabolism		
12.30	Robert Kleeman (Leiden) New insights into the anti-inflammatory action of PPARalpha		
12.45	Stephane Mandard (Wageningen) Characterization of PPAR target genes		
13.00	Tineke Kok (Groningen) Enterohepatic circulation of bile salts in FXR-deficient mice: efficient intestinal bile salt absorption in the absence of ileal bile acid-binding protein (IBABP)		

Parallel sessions 6-8

Session 6 (Branding)

**ADULT CONSEQUENCES OF
CHILDHOOD ENDOCRINE DISORDERS**

Chairperson: Jan Maarten Wit (Leiden)

- 16.30 **Gianni Bocca** (Amsterdam)
Transitional care of pituitary disease, the
paediatrician's perspective
- 16.45 **Saskia ten Have** (Rotterdam)
Transitional care of pituitary disease, the adult
endocrinologist's perspective
- 17.00 **Nike Stikkelbroeck** (Nijmegen)
Transitional care of congenital adrenal
hyperplasia, the paediatrician's and adult
endocrinologist's perspective
- 17.30 **Annemieke Boot** (Rotterdam)
Protecting the teenage skeleton against future
osteoporosis

Session 7 (Doorwerth)

**LOCAL REGULATION OF HORMONE
BIOACTIVITY IN TARGET CELLS**

Moderator: Theo Visser (Rotterdam)

- 16.30 **Brian Walker** (Edinburgh, UK)
Regulation of corticosteroid bioactivity by
11beta-hydroxysteroid dehydrogenase
- 17.00 **George Kuiper** (Rotterdam)
Regulation of thyroid hormone bioactivity by
deiodination
- 17.15 **Hans van Leeuwen** (Rotterdam)
Regulation of vitamin D3 bioactivity by
hydroxylation
- 17.30 **Pim de Ronde** (Rotterdam)
Testosterone: androgen and estrogen
- 17.45 **Joop Janssen** (Rotterdam)
Regulation of IGF-1 bioactivity by IGF-1
binding proteins

Session 8 (Gelderland)

**NEUROENDOCRINOLOGY OF GUT
PEPTIDES**

*Moderators: Tanja Adam (Maastricht) and
Anton Scheurink (Groningen)*

- 16.30 **Thomas Lutz** (Zürich, Switzerland)
Gastrointestinal and pancreatic hormones in the
regulation of energy balance
- 17.00 **Tanja Adam** (Maastricht)
Long term effect of physical activity-induced
weight loss on GLP-1 release in overweight
subjects
- 17.15 **Cor van der Leest** (Rotterdam)
Ghrelin as a new tumor marker for neuroendo-
crine tumors
- 17.30 **Esther van der Wall** (Groningen)
Central and peripheral cholecystokinin in the
control of feeding behavior and meal induced
thermogenesis
- 17.45 **Pieter Wielinga** (Groningen)
The role of leptin in a rat model for anorexia
nervosa
- 16.30 **SATELLITE BIORHYTHM 3 (Patio)**
see page 32
- 18.00 Registration (till 19.00)
- 18.00 Annual member meeting NVE (*Branding*)
- 19.00 Dinner (*Restaurant*)
including **Poster Award Ceremony
Endocrinology**
- 21.15 *Session 9 (Branding)*
'ORGANON AWARD' LECTURE

- 1
Van der Eerden BCJ
Regulation of the epithelial Ca^{2+} channels, TRPV5 and 6, along with other proteins involved in calcium transport in human osteoblasts
- 2
Eijken M
Evidence for a feedback mechanism in the control of glucocorticoid action in human osteoblasts
- 3
Van Driel M
Different vitamin D metabolites stimulate differentiation and mineralisation of human osteoblasts
- 4
Piersma D
Luteinizing hormone signalling and breast cancer: polymorphisms and age of diagnosis
- 5
Span PN
Cyclin-E is a strong predictor of endocrine therapy failure in human breast cancer, independent of estrogen receptor status
- 6
Corstens GJH
Melanotrope cell plasticity: a flow cytometric study
- 7
Van den Hurk MJJ
The extracellular calcium-sensing receptor stimulates the frequency of intracellular Ca^{2+} steps and action current firing in pituitary melanotropes
- 8
Wang LC
Activity-dependent dynamics of coexisting BDNF, POMC and αMSH in melanotrope cells of *Xenopus laevis*
- 9
Kempers MJE
Congenital hypothyroidism of central origin due to maternal gestational hyperthyroidism; detection where prevention failed
- 10
Moreno JC
Cloning and characterization of the human thyroid dehalogenase
- 11
Pauws E
A novel homeobox gene involved in thyroid carcinoma and thyroid development
- 12
Sibug RM
Urinary gonadotrophins affect expression of flt-1 and flk-1 but not of CRH and CRH receptor type 1 in the mouse uterus during the peri-implantation period
- 13
Timmer DC
In search of a reliable housekeeping gene in postmortem liver samples of critically ill patients
- 14
Gruijters MJG
Identification of the anti-Müllerian hormone signaling pathway in the ovary
- 15
Sonneveld E
CALUX® reporter cell lines as sensitive bioassays for monitoring biological activity of various nuclear hormone receptor ligands
- 16
Meijer OC
Prediction of novel steroid responsive regulatory regions from the complete human genome using a bioinformatics approach
- 17
Brouwer JP
Thyroid and adrenal axis in outpatients with major depression: a controlled study
- 18
Sotthewes GGJ
Development of an ex vivo pancreatic islet amyloidosis assay for the evaluation of new therapies for diabetes mellitus type II
- 19
Van Rossum EFC
The ER22/23EK polymorphism in the glucocorticoid receptor gene protects against white matter lesions and dementia
- 20
Russcher H
Decreased transcriptional activity of the glucocorticoid receptor gene is caused by the ER22/23EK polymorphism
- 21
Smit P
Differential effects of glucocorticoids on gene expression levels of IL-2 and glucocorticoid-induced leucine zipper (GILZ) in peripheral blood mononuclear cells
- 22
Kok P
Reduction of plasma FFA levels enhances GH secretion in obese women: impact of body fat distribution
- 23
Lok A
Homocysteine in recurrent depression
- 24
Bosch RR
Inhibition of protein kinase $\text{C}\beta_{II}$ increases glucose uptake in 3T3-L1 adipocytes through elevated expression of GLUT-1

08.00 Registration (till 13.00)
Posters Neuroscience 1 session to be mounted

Session 10 (Branding)
**NVE TEACHING SESSION ON
EXPERIMENTS OF NATURE**
Chairperson: Hans Romijn (Leiden)

08.30 **Marcel Karperien** (Leiden)
Small and mentally retarded: in search for the gene defect

09.00 **Jan Mol** (Bethesda, MD, USA)
Between mouse and man; the dog as a spontaneous model for mammary and prostate cancer

09.30 **Sadaf Farooqi** (Cambridge, UK)
Lessons from monogenetic obesity syndromes

10.00 Break

Parallel sessions 11-14

Session 11 (Doorwerth)
**HORMONES AND THE BRAIN:
IMPLICATIONS FOR AGING AND
COGNITION**

*Moderators: Sytze van Dam and
Hans Koppeschaar (Utrecht)*

10.30 **William Sonntag** (Durham, NC, USA)
Growth hormone / IGF-1 and the genesis of brain aging

11.00 **Lucia Arwert** (Amsterdam)
Brain imaging, the somatotrophic axis and cognition in aging people

11.15 **Marijn Lijffijt** (Utrecht)
Cognitive function and CNS physiology in growth hormone deficiency

11.30 **Sanne Manschot** (Utrecht)
Hyperglycemia and cognitive function: a model for accelerated aging?

11.45 **Eva Hogervorst** (Oxford, UK)
Testosterone and gonadotropin levels in men with dementia

Session 12 (Gelderland)

**CENTRAL REGULATION OF PERIPHERAL
ENERGY METABOLISM**

*Moderators: Michaela Diamant (Amsterdam)
and Hanno Pijl (Leiden)*

10.30 **Silvana Obici** (New York, NY, USA)
The role of central insulin signaling in peripheral energy metabolism

11.00 **Margriet Ouwers** (Leiden)
Molecular aspects of insulin signaling in the brain

11.15 **Felix Kreier** (Amsterdam)
The role of the autonomic nervous system in energy metabolism

11.30 **Celine Morens** (Groningen)
Central regulation of protein metabolism

11.45 **Anita van der Hoek** (Leiden)
The effect of neuropeptide Y on glucose and lipid metabolism

Session 13 (Branding)

**STRESS HORMONES, ANTI-
GLUCOCORTICIDS AND BRAIN
FUNCTION**

*Moderators: Ron de Kloet and Erno
Vreugdenhil (Leiden)*

10.30 **Ted Dinan** (Cork, Ireland)
Hypothalamic-pituitary-adrenal axis dysfunction in depression: causation and physical consequences

11.00 **Martin Verkuyl** (Amsterdam)
Corticosteroids regulate neuronal control of HPA-axis at the level of the PVN

11.15 **Alexa Veenema** (Groningen)
Basal and stress-induced differences in HPA regulation in two mouse lines selected for high and low aggression

12.00 **Ron de Kloet** (Leiden)
Antiglucocorticoids: putative action mechanism as anti-depressant

Session 14 (Patio)

CHILDHOOD EPILEPSY

Moderator: Onno van Nieuwenhuizen (Utrecht)

10.30 **Ineke Bos** (Utrecht)
Early markers of epileptogenesis in blood

10.45 **Floor Jansen** (Utrecht)
Diffusion-weighted MRI identifies the epileptogenic tuber in patients with tuberous sclerosis

11.00 **Robbert Notenboom** (Utrecht)
Altered expression of mGluR1 in an animal model of febrile seizures

11.15 **Mark Nellist** (Rotterdam)
Constitutional and somatic mutations in tuberous sclerosis

11.30 **Martin Staudt** (Tübingen, Germany)
Brain plasticity after early lesions in the child

12.00 Lunch

Parallel sessions 15-17

Session 15 (Doorwerth)

NEURAL REGULATION OF BODY WEIGHT

Moderator: Roger Adan (Utrecht)

13.30 **Roger Cone** (Portland, OR, USA)

The melanocortin system and the neuroendocrine control of energy homeostasis

14.00 **Anneke Alkemade** (Amsterdam)

The human hypothalamus in nonthyroidal illness

14.15 **Jacqueline Hillebrand** (Utrecht)

Increased melanocortin system activation in activity-based anorexia

14.30 **Koert de Vries** (Groningen)

Differential effects of long-term central melanocortin or leptin administration on metabolism and body weight

14.45 **Martien Kas** (Utrecht)

Brain region specific forms of obesity

Session 16 (Branding)

TROPHIC ACTIONS OF ESTROGENS: IMPLICATIONS FOR COGNITION, MOOD AND NEUROPROTECTION

Moderators: Katalin Horvath and Paul Luiten (Groningen)

13.30 **Christian Behl** (Mainz, Germany)

Hormones for the brain: protection against neurodegeneration

14.00 **Paula Jansen** (Maastricht)

Estrogens impair learning in apolipoprotein E-knockout mice

14.15 **Katalin Horvath** (Groningen)

Trophic actions of estrogens and the cholinergic system

14.30 **Marjolein Gerrits** (Groningen)

Female stress vulnerability: the role of estrogens in chronic stress reactivity

14.45 **Guillen Fernandez** (Nijmegen)

Hormone and region specific changes in cortical representations of language during the menstrual cycle: an fMRI study

Session 17 (Gelderland)

NEUROMODELING: AN APPROACH TO THE STUDY OF EPILEPTOGENESIS

Moderators: Tineke van Rijn (Nijmegen) and Pauly Ossenblok (Heeze)

13.30 **Klaus Lehnertz** (Bonn, Germany)

What can we expect from mathematical models of epileptic phenomena?

14.00 **Fabrice Wendling** (Rennes, France)

Mathematic models for convulsive epileptic phenomena

14.30 **Piotr Suffczynski** (Heemstede)

Mathematic models for non-convulsive epileptic phenomena

14.45 **Michael van Putten** (Den Haag)

Proposed link rates in the human brain

15.00 **POSTER SESSION NEUROSCIENCE 1**

including break (*Branding*)

see page 18

Parallel sessions 18-20

Session 18 (Doorwerth)

MARKERS OF NEURODEGENERATIVE DISEASES

Moderator: Marcel Verbeek (Nijmegen)

- 16.30 **Magnus Sjögren** (Göteborg, Sweden)
Cerebrospinal fluid markers of neurodegenerative disorders with emphasis on Alzheimer's disease
- 17.00 **Niki Schoonenboom** (Amsterdam)
Differentiation of early onset Alzheimer's disease from frontotemporal lobar degeneration by CSF tau phosphorylated at threonine 181 combined with CSF amyloid β 42
- 17.15 **Wilson Abdo** (Nijmegen)
Biochemical differentiation of multiple system atrophy from Parkinson's disease by cerebrospinal fluid analysis
- 17.30 **Bart van de Warrenburg** (Nijmegen)
Cerebrospinal fluid autoantibodies in patients with cerebellar ataxia
- 17.45 **Evelien Lemstra** (Amsterdam)
Cerebrospinal fluid 14-3-3 proteins in diagnosing Creutzfeldt-Jakob disease

Session 19

EARLY LIFE EVENTS (Branding)

Moderators: Harm Krugers and Marian Joëls (Amsterdam)

- 16.30 **Michael Meany** (Montreal, Canada)
Maternal care, DNA methylation and HPA function
- 17.15 **Patrick Kamphuis** (Wageningen)
Long lasting effects of neonatal dexamethasone treatment on spatial learning and hippocampal synaptic plasticity. Involvement of the NMDA receptor complex
- 17.30 **Mathias Schmidt** (Leiden)
Molecular and neuroendocrine effects of maternal deprivation in mice lacking the CRH receptor type 1
- 17.45 **Bernette Elzinga** (Leiden)
Late consequences of early traumatic experiences in humans

Session 20 (Gelderland)

GENE THERAPEUTIC APPROACHES IN NEURODEGENERATIVE DISEASES

Moderator: Gerard Boer (Amsterdam)

- 16.30 **Frits Fallaux** (Amsterdam)
Developments in viral vector-mediated gene therapy for neurodegenerative diseases
- 16.45 **Anne-Marie van Dam** (Amsterdam)
Towards viral-vector mediated gene transfer in experimental multiple sclerosis
- 17.00 **Veerakumar Balasubramanian** (Groningen)
Bone marrow stem cells as a source for cell transplantation in MS
- 17.15 **Liselijn Wisman** (Utrecht)
Gene therapy in an in vivo ALS model
- 17.30 **William Hendriks** (Amsterdam)
Towards improved regeneration of spinal ventral roots following avulsion, by using viral vector-mediated expression of neurotrophins
- 17.45 **Ronald Verwer** (Amsterdam)
Basic studies on human postmortem tissue slices exploring gene therapeutic approaches

18.00 Registration (till 19.00)

19.00 Dinner
including **Poster Award Ceremony Neuroscience 1**

Session 21 (Branding)

NEUROFEDERATIE LECTURE

Chairperson: Gerard Boer (Amsterdam)

- 21.15 **Patrick Aebischer** (Lausanne, Switzerland)
Gene therapy based delivery of GDNF in Parkinson disease patients: are we ready for a clinical trial?

1

Gerlach OHH

The aging brain: less neurons could be better, the cerebellum

2

Rutten BPF

Plaque induced neuronal loss in the hippocampus of mice transgenic for mutant β -amyloid-precursor protein and presenilin

3

Hestiantoro A

Changes in estrogen receptor α and β in the infundibular nucleus of the human hypothalamus are related to the occurrence of Alzheimer's disease neuropathology

4

Van Tijn P

Transgenic mice models for +1 proteins

5

Wilhelmus MMM

Small heat shock proteins inhibit cerebrovascular amyloid- β toxicity

6

Van Horssen J

The distribution of heparan sulfate proteoglycans in Alzheimer's disease brains

7

Muller M

Endogenous sex hormones level and cognitive function in aging men; is there an optimal level?

8

Dalm S

Aging affects the circadian rhythm of the hypothalamic-pituitary-adrenal (HPA) axis in mice

9

Teunissen CE

Evaluation of 3-nitrotyrosine as a marker for 3-nitropropionic acid induced oxidative stress in Lewis and Wistar rat whole brain spheroid cultures

10

Vlug AS

The role of tyrosine nitration in neuronal degeneration

11

Maatkamp AJ

Decreased heat shock protein 25 expression precedes motoneuron death in a transgenic mouse model for amyotrophic lateral sclerosis

12

Van der Hoeven JH

Cushing myopathy: characterisation and follow-up by muscle fiber conduction velocity, ultrasound and force measurements

13

Andringa G

Tissue transglutaminase catalyzes the formation of alpha-synuclein crosslinks in Parkinson's disease

14

Lucassen PJ

The antidepressant tianeptine prevents apoptosis in the hippocampus in a subregion specific manner

15

Steinbusch HWM

Mosaic of discrete quantitative histologic alterations in the brain of schizophrenics, providing clues to the disease pathogenesis

16

Ruwhof C

T cell activation, dexamethasone resistance, and thyroid auto-immunity in bipolar disorder

17

Spuijbroek A

Activity-based anorexia: specificity of the model

18

Stevens J

The effects of leptin in the rat model for hyperactivity in anorexia nervosa

19

Van der Kam EL

The influence of environmental conditions on alcohol intake in the apomorphine susceptible and unsusceptible ratline

20

Van der Borght K

Associative and spatial learning have no effect on hippocampal neurogenesis

21

Boekhoorn K

Expression of a double-cortin like protein in the early embryonic nervous system

22

Zareno JH

The effects of stress exposure on cell proliferation and its influence on the neuroangiogenic relationship in the rat dentate gyrus

23

Van Lier H

Effects of anxiolytics on EEG depend on the type of behaviour in the open field in rats

24

Van Lier H

Behavioural transitions modulate hippocampal EEG correlates of behaviour in rats

25

Geerse GJ

Duodenal pain in freely moving rats: model validation and effects of stress-sensitisation

26

Van Broekhoven F

Effects of PhD examination stress on allopregnanolone and cortisol plasma levels and peripheral benzodiazepine receptor density

- 27
Karssen AM
Glucocorticoid receptor antagonist C-1073 (RU486) inhibits P-glycoprotein-mediated efflux transport of cortisol
- 28
Van den Hove DLA
The effect of gestational stress on dam weight, birth weight and developmental cell proliferation
- 29
Enthoven L
Dynamics of stress system development after maternal deprivation in mice
- 30
Calle M
The cerebrospinal fluid and the broadcasting hypothesis
- 31
Kozicz T
Urocortin expression in the Edinger-Westphal nucleus is down-regulated in transgenic mice over-expressing neuronal corticotropin-releasing factor
- 32
Dirks A
Effects of fluvoxamine on behavior and HPA axis reactivity in transgenic mice overexpressing CRF
- 33
Korosi A
Expression of CRH and CRHR2 α mRNAs in the brain of transgenic mice overexpressing CRH
- 34
Wiegert O
Corticosteroid modulation of hippocampal synaptic plasticity: role of stimulation frequency?
- 35
Alfarez DN
Corticosterone and acute stress reduce synaptic potentiation in mouse hippocampal slices with mild stimulation
- 36
Kamal A
Insulin modulates activity- and frequency-dependent synaptic plasticity in area CA1 of the hippocampus
- 37
Schotanus S
The response of urocortinergerg neurons in the rat Edinger-Westphal nucleus to acute and chronic stress
- 38
Koksma J-J
Oxytocin mediates GABA synapse formation in the adult supraoptic nucleus
- 39
Zhang HY
Differential regulation of voltage-operated Ca²⁺-channels by G_i-coupled receptors in *Xenopus* melanotrope cells
- 40
Van Rijn CM
Orbitofrontal cortex functioning in schizotypy: relationship between spq ratings and punishment learning
- 41
Bouwman BM
Effects of vigabatrin, diazepam and their combination on the EEG spectral power during active behaviour in rats
- 42
Bouwman BM
Effects of vigabatrin on spike and wave discharges in a rat model for absence epilepsy
- 43
Van Luijtelaar ELJM
The focal theory of absence epilepsy: a morphometric Golgi study of two cortical locations
- 44
Sitnikova E
Lidocaine applied in microdoses to the somatosensory cortex could affect the expression of spike-wave discharges in WAG/Rij rats
- 45
Van de Bovenkamp-Janssen MC
Synaptology of the rostral reticular thalamic nucleus of the absence epileptic WAG/Rij rat
- 46
Van Boxtel IV
Assesment of RNA-labeling methods for microarrays
- 47
Prodanov D
Distribution of the nerve fibers in the ventral lumbar roots and peripheral nerves: a morphometric and retrograde tracing study in the rat
- 48
Wu Y-H
Changes of pineal melatonin synthesis and noradrenergic regulation in the earliest stages of Alzheimer's disease

08.00 Registration (until 13.00 h)
Posters Neuroscience 2 session to be mounted

Parallel sessions 22-25

Session 22 (Renkum)

**TRANSGENE ACROSS SPECIES:
NEURONAL DEVELOPMENT &
PLASTICITY**

Moderator: Ineke van der Zee (Nijmegen)

08.30 **Catharina van der Zee** (Nijmegen)
Delayed PNS & CNS axonal outgrowth and
behavioural phenotyping in LAR phosphatase-
deficient mice

09.00 **Rob Collin** (Nijmegen)
Functional studies on beta-amyloid precursor
and related proteins in transgenic *Xenopus*
laevis

09.15 **Chris Jopling** (Utrecht)
Phosphotyrosine in zebrafish development

09.30 **Rene Wouda** (Leiden)
Wnt5 mediates axon guidance in *Drosophila*

09.45 **Sander van der Linden** (Utrecht)
Novel effectors of G-protein signaling that
control behavior in *Caenorhabditis elegans*

Session 23 (Branding)

**EXPERIMENTAL NEUROPHYSIOLOGY 1:
NEURONAL NETWORKS AND SYNAPTIC
FUNCTIONING**

*Moderators: Ype Elgersma and
Christian Hansel (Rotterdam)*

08.30 **Jeffrey Magee** (New Orleans, LA, USA)
Regulation of local dendritic spike initiation
and propagation in CA1 pyramidal neurons

09.15 **John Weber** (Rotterdam)
Climbing fiber-evoked calcium signals and
plasticity in cerebellar Purkinje cells

09.30 **Volker Mack** (Amsterdam)
Conditional expression of GluR-A-dependent
synaptic plasticity in hippocampal connections

09.45 **Ype Elgersma** (Rotterdam)
Genetic enhancement of learning by modulating
transmitter release

Session 24 (Doorwerth)

**MOLECULAR MECHANISMS OF
NEURITE GROWTH-INHIBITORY
FACTORS**

Moderator: Simone Niclou (Amsterdam)

08.30 **Christine Bandtlow** (Innsbruck, Austria)
Axonal regeneration in the CNS: role of the
inhibitory molecules Nogo and MAG and their
receptors

09.15 **Mariette Driessens** (Utrecht)
Signalling of the plexin-B1 semaphorin
receptor to Rho GTPases

09.30 **Joris de Wit** (Amsterdam)
Secreted semaphorins in the adult nervous
system: subcellular localization of epitope-
tagged sema3A

09.45 **Francis van Horck** (Amsterdam)
Essential role of type 1 α phosphatidylinositol-
4-phosphate 5-kinase in neurite remodelling

Session 25 (Gelderland)

BLOOD-BRAIN-BARRIER

*Moderators: Monique Mulder (Maastricht) and
Bert de Boer (Leiden)*

08.30 **Rachid Deane** (New York, NY, USA)
Transport of amyloid- β peptide at the blood-
brain barrier

09.00 **Bert de Boer** (Leiden)
The neurovasculature as a targeting organ

09.15 **Wouter Veldhuis** (Utrecht)
Interferon-beta prevents interleukin-8-induced
neutrophil infiltration and attenuates BBB
disruption

09.30 **Paulien Ravenstijn** (Leiden)
Development and use of a new model for
Parkinson's disease to ultimately study the
relation between disease progression, blood-
brain barrier functionality and effects of
antiparkinsonian drugs

09.45 **Paula Jansen** (Maastricht)
Apolipoprotein E is necessary for the
maintenance of the blood-brain barrier integrity
during aging

10.00 **POSTER SESSION NEUROSCIENCE 2**
including break (*Branding*)
see page 24

Session 26 (Branding)

HERSENSTICHTING LECTURE

Chairperson: Pim French (Rotterdam)

11.30 **Tim Bliss** (London, UK)
LTP and memory: moving closer after 30 years?

12.15 Lunch

Parallel sessions 27-30

Session 27 (Branding)

EXPERIMENTAL NEUROPHYSIOLOGY 2

Moderators: Huib Mansvelder and

Arjen Brussaard (Amsterdam)

- 13.30 **Olga Garaschuk** (Munich, Germany)
In vivo imaging of neuronal networks
- 14.00 **Gerard Borst** (Rotterdam)
Vesicle dynamics in a large brainstem terminal
- 14.15 **Huib Mansvelder** (Amsterdam)
Two-photon imaging of cholinergic modulation of PFC networks
- 14.30 **Laurens Bosman** (Munich, Germany)
BDNF-induced longterm plasticity in climbing fiber-Purkinje cell synapses
- 14.45 **Christiaan de Kock** (Amsterdam)
Somatic release induced by NMDA receptor activation in CNS neurons

Session 28 (Doorwerth)

MOLECULAR MECHANISMS OF LEARNING AND MEMORY

Moderator: Pim French (Rotterdam)

- 13.30 **Dietmar Kuhl** (Berlin, Germany)
Learning about activity-dependent genes
- 14.00 **Pim French** (Rotterdam)
Identification of novel genes associated with the induction of LTP *in vivo*
- 14.15 **Matthijs Verhage** (Amsterdam)
Presynaptic plasticity and memory
- 14.45 **Renate Hukema** (Rotterdam)
Genetic and cellular analysis of salt adaptation in *C. elegans*

Session 29 (Patio)

NEUROGENOMICS

Moderators: Erno Vreugdenhil (Leiden) and

Guus Smit (Amsterdam)

- 13.30 **Cor Verweij** (Amsterdam)
A genomic view on rheumatic disease
- 14.00 **Gerard Martens** (Nijmegen)
A natural knock-down of a gamma-secretase component in a rat model for stress-induced psychopathology
- 14.15 **Dorine Schmidt-Feldker** (Leiden)
Towards the molecular basis of individual differences in vulnerability to stress
- 14.30 **Floor Stam** (Amsterdam)
Gene expression profiling of regenerating and non-regenerating dorsal root ganglion neurons
- 14.45 **Kawan Li** (Amsterdam)
Proteomics analysis of the postsynaptic density

Session 30 (Gelderland)

SPINAL CORD LESIONS: NEW THERAPIES

Moderator: Frank Hamers (Utrecht)

- 13.30 **Michele Basso** (Columbus, OH, USA)
Recovery of function after spinal cord injury: from bench to bedside
- 14.15 **Tanja Effing** (Utrecht)
Body weight supported treadmill training in subjects with a chronic incomplete spinal cord injury: a pilot study including functional health status
- 14.30 **Guido Koopmans** (Maastricht)
The effects of an enriched environment on plasticity in the CPG region of adult rats after spinal cord injury
- 14.45 **Susanne Hermanns** (Düsseldorf, Germany)
Long-distance axon regeneration and functional improvement following suppression of collagenous scarring in spinal cord injury
- 15.00 Break

Session 31 (Branding)

EKN LECTURE

(sponsored by Dutch-Belgian Society for Experimental and Clinical Neuroscience)
Chairperson: Erno Vreugdenhil (Leiden)

- 15.30 **Gert-Jan van Ommen** (Leiden)
From genome to function
- 16.15 **Poster Award Ceremony Neuroscience 2**
(Branding)

Parallel sessions 32-35

Session 32 (Branding)

EXPERIMENTAL NEUROPHYSIOLOGY 3

Moderators: Maarten Kamermans and

Wytse Wadman (Amsterdam)

- 16.30 **Thomas Euler** (Tübingen, Germany)
The role of starburst cells in retinal direction selectivity
- 17.00 **Marjelle van Leeuwen** (Amsterdam)
The retinal mechanism of color constancy
- 17.15 **Matthew Larkum** (Heidelberg, Germany)
Dendritic gain modulation in neocortical layer 5 pyramidal neurons
- 17.45 **Michiel Remme** (Amsterdam)
Control of a local neural network by feedforward and feedback inhibition

Session 33 (Doorwerth)

SCHIZOPHRENIA

Moderator: Jeffrey Glennon (Weesp)

- 16.30 **Gavin Reynolds** (Sheffield, UK)
Amino acid dysfunction in schizophrenia
- 17.00 **Jeffrey Glennon** (Weesp)
Disrupted mediodorsal thalamic-prefrontal cortical transmission in schizophrenia?
Carlsson's hypothesis revisited
- 17.15 **Billy O'Connor** (Dublin, Ireland)
Evidence for a role of the prfrontal cortical GABA-B receptor in the neurobiology of schizophrenia
- 17.30 **Annelies Olijslagers** (Amsterdam)
5-HT₂ receptors differentially modulate dopamine-mediated auto-inhibition in A9 and A10 midbrain areas of the rat
- 17.45 **Samantha Smith** (Sheffield, UK)
The role of cannabinoids in the regulation of glutamate and GABA release from the prefrontal cortex

Session 34 (Gelderland)

SPINAL CORD AND TREATMENT OF PAIN

Moderators: Maarten van Kleef and

Bert Joosten (Maastricht)

- 16.30 **Marshall Devor** (Jerusalem, Israel)
Sensory neurons ring out pain
- 17.00 **Jan van Zundert** (Diepenbeek, Belgium)
Pulsed radiofrequency treatment adjacent to the cervical dorsal root ganglion: sustained effects on c-Fos expression in the spinal cord in rats
- 17.15 **Eline Pragt** (Maastricht)
Animal models for CRPS-I
- 17.30 **Dorien Vrinten** (Utrecht)
'CatWalk' automated quantitative gait analysis as a novel method to assess mechanical allodynia in the rat; a comparison with von Frey testing
- 17.45 **Kris Vissers** (Beerse, Belgium)
Neuro-immunological changes in neuropathic pain and stress

Session 35 (Patio)

TRYPTOPHAN, SEROTONIN AND COGNITION

Moderator: Jeroen Schmitt (Maastricht)

- 16.30 **Wim Riedel** (Cambridge, UK)
Tryptophan, mood and cognition
- 17.00 **Cindy Lieben** (Maastricht)
Challenging the cognitive effects of acute tryptophan depletion in the rat
- 17.15 **Lisbeth Evers** (Maastricht)
Effects of a novel method of acute tryptophan depletion on reversal learning and memory performance
- 17.30 **Sascha Russo** (Groningen)
Neuropsychological investigation into the carcinoid syndrome
- 17.45 **Linda Booy** (Leiden)
The effects of acute depletion of tryptophan on mood and cognitive functions in depression: dose-response relationship?

19.00 Dinner

Session 36 (Branding)

ELSEVIER LECTURE

(sponsored by Elsevier, Amsterdam)

Chairperson: Peter Hagoort (Nijmegen)

- 21.15 **Christian Keijsers** (Parma, Italy)
From mirror neurons to social perception

- 1
El Filali Z
A peptidomic approach in the study of peptidergic neurotransmission regulating male copulation behaviour in *Lymnaea stagnalis*
- 2
Pattij T
Search for animal analogues of human premature ejaculation
- 3
De Jong TR
Citalopram alone does not, but combined with a silent 5-HT_{1A} receptor antagonist does inhibit male sexual behaviour
- 4
Wittendorp MC
CL-IB-MECA induced release of CCL2 by astrocytes: Possible role for the adenosine A3 receptor?
- 5
Zuurman MW
cDNA array analysis reveals differential gene expression in CCL2 stimulated human astrocytes
- 6
Dijkstra IM
Functional activity of human adult microglia in response to CCL21
- 7
Rutten K
Reaction time responding in rats following unilateral cortical ischemic lesioning
- 8
Hoff EI
Real-time imaging of vascular leakage in photochemical cortical infarction
- 9
Schreibelt G
Lipoic acid prevents superoxide-induced monocyte migration across the blood-brain barrier
- 10
Van Weering HRJ
Inhibition of CXCR3-mediated migration by chemokine-like receptor CCX-CKR
- 11
Rappert A
Microglial migration depends on chemokine receptor CXCR3 signaling after brain lesion in vivo
- 12
Van Woerden GM
Cortical and hippocampal dependent learning and memory in mouse models for neurofibromatosis type I and Williams syndrome
- 13
Boelen E
Infections as a cofactor for vascular dementia
- 14
Otte-Höller I
Electron microscopical study of the interaction between amyloid β -peptide and $\alpha\beta$ -crystallin
- 15
Kooistra SM
Dopaminergic differentiation induction of bone marrow derived neural stem cells
- 16
Timmer NM
Induction of oligodendrocyte differentiation in bone marrow derived neural stem cells
- 17
Küst BM
NR3B, an inhibitory NMDA receptor subunit, is downregulated in hSOD1 transgenic mouse spinal motoneurons
- 18
Mantua V
Production of BDNF and IGF-1 in peripheral blood of normal adults
- 19
Ehlert EME
Generation of siRNAs against the Nogo receptor, semaphorins and their receptors to stimulate axon regeneration
- 20
De Bree FM
Gene expression profiling of the olfactory ensheathing glia cell
- 21
Deumens R
Adult olfactory ensheathing cells are more potent in stimulating axonal growth of CNS neurons than neonatal astrocytes *in vitro*
- 22
Eggers R
Comparison of functional recovery after specific spinal tract lesions using three different functional tests
- 23
Van Diepen MT
Characterization of the putative transcription factor BERP and its role in neurite outgrowth
- 24
Mulder J
Chronic excess of corticosterone increases serotonergic fibre degeneration in aged rats
- 25
Swinny JD
Corticotrophin-releasing factor and urocortin modulate Purkinje cell dendritic outgrowth and differentiation
- 26
Dijk F
Expression of AMPA-type glutamate receptor subunits in rod type ON-bipolar neurons in the rat retina
- 27
Verheij MMM
Alpha-adrenoceptors, but not beta-adrenoceptors, regulate the extracellular release of dopamine stored in reserpine-sensitive vesicular storage pools in the nucleus accumbens

28

Wierda K

The function of Munc-18 in presynaptic vesicle release

29

Westerink RHS

Impaired synaptic plasticity in hippocampal slices of homozygous Calbindin-D_{28k} knock-out mice

30

Houtman SH

Characterization of murine homologues of the enchinoderm microtubule associated protein EMAP

31

Lans H

Six G α subunits regulate odorant responses of the nematode *Caenorhabditis elegans*

32

Zhang YP

Functional analysis of the doublecortin-like kinase gene in the developing nervous system of *Drosophila*

33

Dekkers M

Genetic analysis and molecular imaging of olfactory signalling in *C. elegans*

34

Bakels R

The post-discharge hyperpolarization of neonatal rat hypoglossal motoneurons: currents and relation to frequency-adaptation

35

Rijkers K

Results of vagus nerve stimulation (VNS) in children with malignant childhood epilepsy; a two year follow-up study

36

Kozicz T

Neuropeptide Y contributes to stress-induced activation of urocortin neurons in the Edinger-Westphal nucleus in the rat

37

Morsink MC

Identification of GR-responsive genes in the rat hippocampus

38

Westenbroek C

Chronic stress coping in isolated and socially housed male and female rats

39

Kuipers SD

Chronic stress-induced morphological and functional abnormalities in the frontal cortex of male rats

40

Coolen MW

Down-regulation of a (-secretase component in a rat model for psychiatric disorders

41

Lubbers L

Apomorphine-susceptible and apomorphine-unsusceptible rats: a telemetry study

42

Spijker S

Neurobehavioral vulnerability to nicotine during adolescence

43

Van den Oever M

Neuroplasticity at the synapse: persistent changes in gene expression resulting from heroin and natural reward

44

Struik ML

Cannabinoids modulate the cone light response in goldfish

45

Van der Elst MCJ

Effects of cocaine on tyrosine hydroxylase-immunopositive cell bodies and terminal area's of the limbic dopaminergic system in apomorphine-susceptible and apomorphine-unsusceptible rats

46

Koya E

A molecular gaze after the elevated plus maze: investigating kinase phosphorylation and gene induction differences in the medial prefrontal cortex between high and low grooming rats

47

Homberg JR

Effect of anxiolytic/antidepressant drugs on cocaine self-administration under a PR reinforcement schedule in addiction prone rats

48

Schmidt ED

Identification of neuronal circuitry specifically involved in cue-induced relapse to drug-seeking behaviour

49

Van der Meulen JAJ

Effects of reversal and extinction learning on dopamine and noradrenaline efflux in the medial prefrontal cortex measured with microdialysis

50

Van Gaalen MM

Nicotine-induced impulsive behavior is dopamine-dependent

51

Wierinckx A

Inflammatory gene expression and correlation analysis in spinal cord lesions of multiple sclerosis patients

52

Mercier D

Virus-mediated anti-inflammatory mediator gene transfer to the rat brain: an in vitro and in vivo study

53

De Leonibus E

Distinct roles of the different ionotropic glutamate receptors within the nucleus accumbens in passive-avoidance learning and memory in mice

54

Van Galen E

Development of neuronal network connectivity in
cultured cerebral cortex neurons

55

Ramakers GJA

Activity-dependent regulation of functional TrkB
receptors in rat cerebral cortex neurons

08.00 Registration (until 13.00 h)
Posters Cognitive and Behavioral Neuroscience session to be mounted

Parallel sessions 37-39

Session 37 (Gelderland)

PSYCHOSOMATICS OF CORTISOL AND TRYPTOPHAN

Moderator: Jaap Korf (Groningen)

- 08.30 **Markus Schwarz** (Munich, Germany)
Evidence for an altered tryptophan metabolism in fibromyalgia
- 09.00 **Sietse Jan Koopmans** (Lelystad)
Dietary rations of tryptophan to large neutral amino acids affect behaviour and plasma stress hormones in pigs exposed to social stress
- 09.15 **Mattie Tops** (Groningen)
State-dependent regulation of cortical activation by cortisol
- 09.30 **Arthur van Gool** (Rotterdam)
Depression induced by interferon-alpha as a research model on the pathophysiology of depression
- 09.45 **Rob Markus** (Maastricht)
Effect of dietary-induced increases in brain tryptophan and 5-HT on stress and mental performance

Session 38 (Branding)

MOTOR CONTROL (DISORDERS) AND THE BRAIN

Moderator: Bert Steenbergen (Nijmegen)

- 08.30 **Yves Rossetti** (Lyon, France)
Mediate action versus here-and-now visuo-motor processing: evidence from optic ataxia
- 09.00 **Ron Keulen** (Maastricht)
The influence of distractors on the control and execution of selective reaching
- 09.15 **Amanda Kaas** (Maastricht)
Haptic processing of object orientation: an fMRI study
- 09.30 **Dominique van Roon** (Nijmegen):
Reaching with a hand held spoon in tetraparetic cerebral palsy: effects of accuracy demands on trunk involvement
- 09.45 **Koen van Braeckel** (Groningen)
Pointing behaviour in very preterm born children

Session 39 (Doorwerth)

AUDITORY PROCESSING IN THE BRAIN: FROM SOUND TO LANGUAGE

Moderator: Miranda van Turennot (Nijmegen)

- 08.30 **Elia Formisano** (Maastricht)
Functional MRI of early auditory areas in humans: tonotopy and more
- 09.00 **Michael Schulte** (Nijmegen)
Virtual pitch perception of successive and non-successive harmonics
- 09.30 **Nienke van Atteveldt** (Maastricht)
Graphemes modulate fMRI response to phonemes in auditory cortex
- 09.45 **Frank Eisner** (Nijmegen)
Does perceptual learning in speech perception generalize across speakers?

POSTER SESSION COGNITIVE AND BEHAVIORAL NEUROSCIENCE

in cluding break (*Branding*)

see page 29

- 10.00 **SATELLITE GpD** (*Patio*)
see page 32

Session 40 (Branding)

PLENARY SESSION

Chairperson: André Aleman (Utrecht)

- 11.30 **Michael Sullivan** (Montreal, Canada)
Cogito ergo ouch: the psychology of heightened pain experience
- 12.00 **Philip McGuire** (London, UK)
Mechanisms underlying auditory hallucinations
- 12.30 Lunch

Parallel sessions 41-43

Session 41 (Branding)

FROM PERCEPTION TO ACTION

Moderator: Peter Hagoort (Nijmegen)

- 13.30 **Ivan Toni** (Nijmegen)
Neural correlates of the perception-action cycle
- 14.00 **Jiska Memelink** (Leiden)
Cognitive coding in action
- 14.15 **Lorenza Colzato** (Leiden)
What do we learn from binding features? The relationship between episodic integration and long-term memory
- 14.30 **Floris de Lange** (Nijmegen)
Neurocognitive aspects of chronic fatigue syndrome
- 14.45 **Rogier Mars** (Nijmegen)
Event-related brain potentials elicited by performance feedback in a time-estimation task

Session 42 (Gelderland)

BEHAVIOR MONITORING AND THE BRAIN

Moderator: Richard Ridderinkhof (Amsterdam)

- 13.30 **Markus Ullsperger** (Leipzig, Germany)
Monitoring performance in different situations: action slips and errors in underdetermined responding
- 14.00 **Ellen de Bruijn** (Nijmegen)
The effects of psychopharmacology on action monitoring
- 14.15 **Eveline Crone** (Amsterdam)
Error monitoring and feedback control
- 14.30 **Sander Nieuwenhuis** (Princeton, NJ, USA / Amsterdam)
Error monitoring and reward prediction
- 14.45 **Rob Hartsuiker** (Gent, Belgium)
Error monitoring and speech production

Session 43 (Doorwerth)

SEX DIFFERENCES AND HORMONAL MECHANISMS IN SPATIAL ABILITY

Moderator: Albert Postma (Utrecht)

- 13.30 **Daniel Voyer** (New Brunswick, Canada)
Influence of sex hormones and experience on sex differences in spatial abilities
- 14.15 **Sander Zuidhoek** (Utrecht)
Differences in haptic spatial performance between men and women
- 14.30 **Channa de Winter** (Utrecht)
Meta-analysis of testosterone effects on spatial cognition
- 14.45 **Celina Cohen** (Utrecht)
Prenatal exposure to testosterone and spatial abilities: a twin study

15.00 Break

Parallel sessions 44-46

Session 44 (Gelderland)

PREDICTORS AND COGNITIVE DEVELOPMENT IN ADHD

Moderator: Hans Vles (Maastricht)

- 15.30 **Hans Vles** (Maastricht)
ADHD, chemistry between structure and function
- 16.00 **Jos Hendriksen** (Maastricht)
Precursors of ADHD questionnaire: development and psychometric properties
- 16.15 **Dorine Slaats-Willemse** (Utrecht)
Cognitive endophenotyping in ADHD: executive functioning as a marker for genetic susceptibility to ADHD
- 16.30 **Anne-Claire Beernink** (Utrecht)
Predictors of externalizing problems in among 14 months old children
- 16.45 **Petra Hurks** (Maastricht)
Cognitive development of children suffering from ADHD

Session 45 (Doorwerth)

COGNITIVE POTENTIALS IN HUMANS AND ANIMALS

Moderator: Gilles van Luijtelaaar (Nijmegen)

- 15.30 **Jurij Brankack** (Prague, Czech Republic / Riken, Japan)
Oddball in rats: P300 and beyond
- 16.00 **Arjan Blokland** (Maastricht)
Evaluation of the mismatch negativity components in rats
- 16.15 **Natasja de Bruin** (Beerse, Belgium)
The rat as an animal model to investigate the neural substrate of P50 gating in humans
- 16.30 **Gilles van Luijtelaaar** (Nijmegen)
Discrimination learning and ERPs in the amygdala of rats
- 16.45 **Anke Sambeth** (Nijmegen)
Occasion setting in humans and rats: an ERP study

Session 46

SPATIAL COGNITION (*Branding*)

Moderator: Miranda van Turenhout (Nijmegen)

- 15.30 **Neil Burgess** (London, UK)
Spatial memory and the hippocampus
- 16.00 **Gabriele Janzen** (Nijmegen)
fMRI evidence on navigational relevance of
object location
- 16.15 **Daniel Haun** (Nijmegen)
Cognitive maps of impossible spaces
- 16.30 **Marieke Scholvinck** (Utrecht)
Knowing roughly where versus exactly where:
an ERP study on categorical and coordinate
spatial processing
- 16.45 **Marieke van Asselen** (Utrecht)
Planning and remembering spatial searches in
Korsakoff patients
- 17.00 **Poster Award Ceremony Cognitive and
behavioral neuroscience**
- 17.15 **Closure**
Jeroen Schmitt (Maastricht)

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Cognitive and motor functioning in children with cerebral palsy: connections with the neonatal cranial ultrasound and family strengths
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Corpus callosum size correlates with asymmetric performance on a dichotic listening task in healthy aging
- 3
Smulders SFA
Age-related changes in sequential effects on speeded information processing
- 4
Van der Flier WM
Memory complaints in patients with normal cognition are associated with hippocampal atrophy
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Age-related decline in speed of information processing and the effects of education and sex: results of the Maastricht Aging Study
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Magnée EHB
The differential decline of memory task performance with age
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De Groot RHM
Cognitive functioning during pregnancy and early-motherhood
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Van Beilen M
What is measured by verbal fluency tests in schizophrenia?
- 10
Van Zandvoort MJE
Disturbances of haptic spatial representations in patients with hemispatial neglect
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Dijkerman HC
A long-lasting reduction of somatosensory deficits after prism adaptation in a neglect patient
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The physiological basis of visual hallucinations after damage to the primary visual cortex
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The psychophysiology of the burnout syndrome: cortisol sampling in burned out subjects
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O'Mahony S
The relationship between behavioural responses and TNF- α concentrations in a rat model of depression
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Effects of methylphenidate on impulsivity of normal rats in an animal model for ADHD
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Performance of different mouse strains in an object recognition task: improved memory performance by phosphodiesterase type 5 inhibition
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The effects of MDMA (XTC) on executive control
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The effect of caffeine on motor fatigue and cognitive task performance in humans
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Lateralization of amygdala activation: a meta-analysis of functional neuroimaging studies
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Subcortical processing of faces modulates the primary visual cortex dependent on emotional expression and facial identity
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Emotional processing in psychometrically psychosis-prone individuals
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Effect of acute stress on memory for neutral and emotional words
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The effect of light intensity on alertness and performance during the daytime - pilot study
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Vigilance decreases due to mental effort, instead of mental ease
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Probability effects of response inhibition in the stop signal paradigm

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Assessment of spatial learning abilities of mice in a new circular maze

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Peripheral nerve repair with a biodegradable nerve guide

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Histological damage of bipolar versus unipolar high frequency stimulation in the rat

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Orbitofrontal cortex functioning in schizotypy: relationship between SPQ ratings and punishment learning

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Behavioral consequences of hypergravity during development in rats

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Muscle and endplate morphology after transection of the sciatic nerve and reinnervation, a study in adult rats

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A modulatory role for facial expressions in prosopagnosia

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Kessels RPC

The effects of errorless and errorful learning on age-related memory loss

GpD satellite posters

GpD1

De Ruiter MB

Discrimination accuracy and response bias in non-clinical dissociation: an ERP study

GpD2

Van Leeuwen FW

Disease-specific accumulation of mutant ubiquitin in the brain is dependent on proteasomal dysfunction

GpD3

Witjes-Ane M-NW

Psychomotor slowing and memory disturbances over a three-year period in 'presymptomatic' carriers for Huntington's disease

GpD4

Witter MP

Diencephalic amnesia: a separate or a combined medial-temporal/profrontal amnesia; a clinical and experimental animal study

GpD5

Verbeek MM

Inhibition of amyloid beta protein-mediated cell death by catalase or insulin

GpD6

Burbach JPH

How do receptors for vasopressin metabolites participate in brain function related to memory

Monday 2 June

Satellite meeting (Patio)

**CIRCADIAN RHYTHM RESEARCH IN
THE NETHERLANDS**

Moderator: Dries Kalsbeek (Amsterdam)

- 11.45 **Stephanie Perreau** (Amsterdam)
Can the Per1 and Per2 genes expression pattern in the SCN explain the melatonin peak re-appearance after an 8-h advance of the light/dark cycle?
- 12.15 **Mariska van Steensel** (Leiden)
Differential responses of circadian activity onset and offset following GABA-ergic and opioid receptor activation
- 12.45 **Barbara Biemans** (Groningen)
Memory and the circadian clock: ageing effects in rodent behaviour and neurochemistry
- 13.15 Lunch / Poster session Endocrinology
- 15.00 **Cathy Cailotto** (Amsterdam)
Synchronization of the liver oscillator by the suprachiasmatic nucleus: Hormonal and/or neural pathways?
- 15.30 **Tom de Boer** (Leiden)
Suprachiasmatic nuclei neuronal activity is influenced by sleep stages
- 16.00 Break
- 16.30 **Marieke Ruiter** (Amsterdam)
The biological clock and its control of glucose homeostasis
- 17.00 **Daan van der Veen** (Groningen)
Peripheral rhythms *a la carte*: circadian rhythms in an ultradian forager
- 17.30 **Ajda Yilmaz** (Amsterdam)
Functional and neuro-anatomical changes of the SCN; cause of consequence of the spontaneous hypertension

Thursday 5 June

Satellite meeting (Patio)

**'NWO PRIORITEITSPROGRAMMA
GEHEUGENPROCESSEN EN DEMENTIE'**

(GpD)

Moderator: Ingrid Bijl (Den Haag)

- 10.00 Opening
- 10.15 **Prof. M. Verhage** (Amsterdam)
Presynaptic plasticity, spatial memory and genetic variation in mice
- 10.40 **Prof. M.P. Witter** (Amsterdam)
Functional differentiation within the medical temporal lobe memory system. An fMRI study
- 11.05 **Prof. R.A.C. Roos** (Leiden)
Molecular and clinical pathology of Huntington disease: nature and course of motor and cognitive dysfunction; their relationship with the protein and the gene
- 11.30 **Dr. D.J. Veltman** (Amsterdam)
Neuro-imaging of dissociative memory processes
- 12.00 **Prof. E.W. Roubos** (voorzitter dwarsverbandcommissie)
Evaluatie van het prioriteitsprogramma Geheugenprocessen en Dementie
- 12.20 Closing words
- 12.30 **POSTER SESSION** (including lunch) (*Branding*) till 13.30
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