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# SIXTH DUTCH ENDO-NEURO MEETING



NeuroFederatie

NWO



ALW

MAGW

FIRST DUTCH  
ENDO-NEURO-PSYCHO  
MEETING

Park Hotel 'De Branding' Doorwerth  
4 - 7 June 2002

**PARTICIPATING ORGANIZATIONS**

Netherlands Federation of Neuroscience Organizations  
(Dutch Neurofederatie)  
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)  
Marjanne Everts (UU, Utrecht)  
Rob Heinsbroek (ZonMw, Den Haag)  
Gert ter Horst (RUG, Groningen)  
Jelle Jolles (UM, Maastricht)  
Bert Joosten (UM, Maastricht)  
Paul Lucassen (SILS, UvA, Amsterdam)  
Hanno Pijl (LUMC, Leiden) *committee secretariat*  
Wim Scheenen (KUN, Nijmegen) *treasurer*  
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Erno Vreugdenhil (LACR, Leiden)  
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*Secretariat registration*

Thea Laan

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Tini Eikelboom

*Program committee Endocrinology*

Marjanne Everts  
Hanno Pijl (*chair*)  
Anton Scheurink  
Jenny Visser

*Program committee Neuroscience*

Gerard Boer (*chair*)  
Gert ter Horst  
Bert Joosten  
Paul Lucassen  
Wim Scheenen  
Erno Vreugdenhil  
Ineke van der Zee

**SPONSORS** (in alphabetical order)

*Organizations*

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

*Companies*

Applied Biosystems (Nieuwerkerk aan den IJssel)  
[www.eur.appliedbiosystems.com](http://www.eur.appliedbiosystems.com)  
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Numico Research (Wageningen)  
[www.numico.com](http://www.numico.com)  
Organon B.V. (Oss)  
[www.organon.com](http://www.organon.com)

***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 1 is the small meeting room, Sub 2 the luggage room, and Sub 3 is the slide control 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 3.

***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 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](mailto: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. If you have asked for a slide projector, this will be installed for you by the room assistant.

***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 drawingpins, which will be available at the meeting. The Endocrinology session on Tuesday 4 June includes a lunch, all other sessions are combined with a coffee/tea break.

# T I M E T A B L E / L E C T U R E R O O M S

## *TUESDAY 4 JUNE*

10.15	Opening	Branding
10.30	Endocrinology Keynote Lecture	Branding
11.15	Break	
11.30	Session 1	Gelderland
	Session 2	Branding
	Session 3	Doorwerth
13.00	Posters Endocrinology (incl. lunch)	Branding
15.00	Plenary Session 4	Branding
16.00	Break	
16.30	Session 5	Patio
	Session 6	Branding
	Session 7	Gelderland
	Session 8	Doorwerth
18.15	NVE annual meeting	Branding
19.00	Dinner	
	Poster Award Endocrinology	
21.15	Laqueur Lecture	Branding
22.00	Drink	

## *WEDNESDAY 5 JUNE*

08.30	Session 9	Branding
10.00	Break	
10.30	Session 10	Patio
	Session 11	Gelderland
	Session 12	Doorwerth
	Session 13	Branding
12.00	Lunch	
13.30	Plenary Session 14	Branding
	Satellite Biorhythms 1	Renkum
14.30	Poster Neuroscience 1 (incl. break)	Branding
16.00	Marius Tausk Lecture	Branding
16.45	Break	
17.00	Session 15	Doorwerth
	Session 16	Patio
	Session 17	Branding
	Session 18	Gelderland
	Satellite Circadian rhythms 2	Renkum
18.00	Board meeting Psychiatry Societies	Sub 1
19.00	Dinner	
21.15	Neurofederatie Lecture	Branding

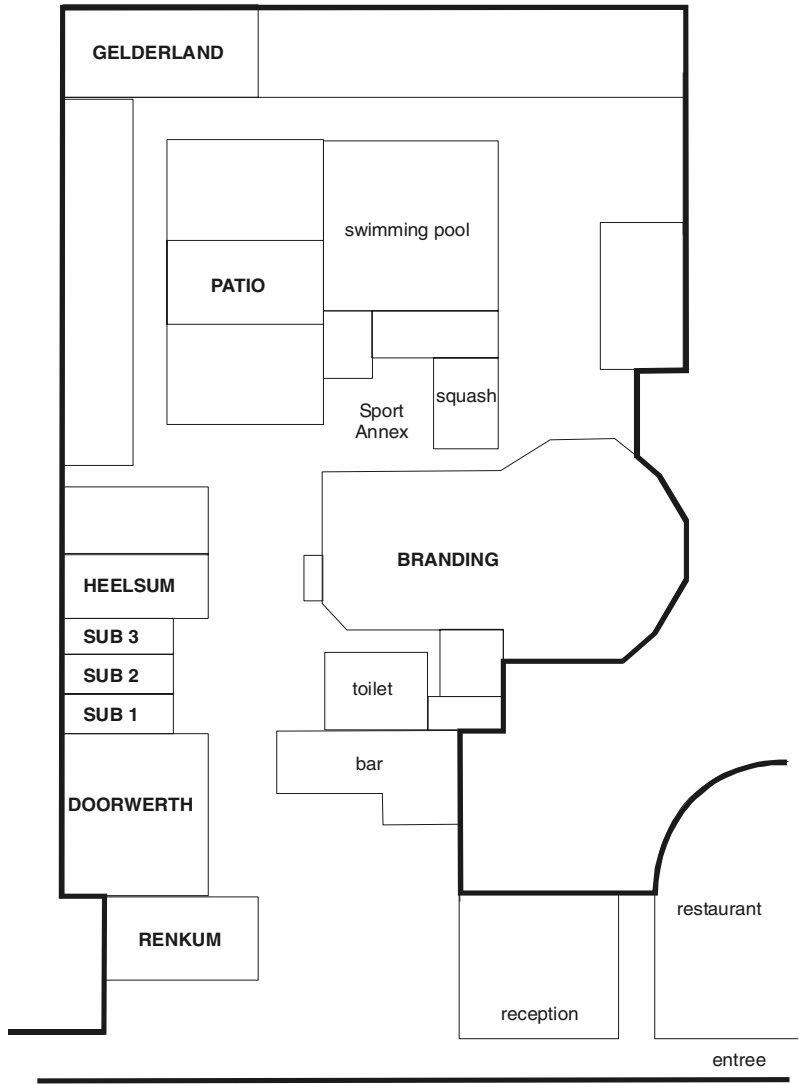
## *THURSDAY 6 JUNE*

08.30	Session 19	Doorwerth
	Session 20	Branding
	Session 21	Gelderland
	Session 22	Patio
10.00	Poster Neuroscience 2 (incl. break)	Branding
	NWOGpD 1	Renkum
11.30	Session 23	Branding
	Session 24	Doorwerth
	Session 25	Gelderland
	Session 26	Patio
	NWOGpD 2	Renkum
13.00	Lunch	
14.00	Hersenstichting Lecture	Branding
	Poster Award Neuroscience	
14.45	Break	
	Board meeting Neurofederation	Sub 1
15.00	Session 27	Branding
	Session 28	Doorwerth
	Session 29	Gelderland
	Session 30	Patio
16.30	Break	
17.00	Session 31	Gelderland
	Session 32	Branding
	Session 33	Doorwerth
19.00	Dinner	
21.15	Behavior Keynote Lecture	Branding

## *FRIDAY 7 JUNE*

08.30	Session 34	Doorwerth
	Session 35	Branding
10.00	Posters Cognition & Behavior	Branding
	(incl. break)	
11.30	Plenary session 36	Branding
	Poster Award Cogn. & Behavior	
12.30	Lunch	
13.30	Session 37	Doorwerth
	Session 38	Branding
15.00	Break	
15.30	Session 39	Doorwerth
	Session 40	Branding
	Session 41	Patio
17.00	Closure	Branding

L A N L E C T U R E R O O M S



*LOCATION OF LECTURE ROOMS IN PARKHOTEL 'DE BRANDING'*

- 09.00 **Registration** (until 14.00 h)
- 10.00 Posters Endocrinology session to be mounted (from 9.30 onwards)
- 10.15 **Opening** (*Branding*)  
**Anton Scheurink** (Groningen)
- OPENINGS ENDOCRINOLOGY KEYNOTE LECTURE** (*Branding*)  
Chairperson: Paul Lucassen (Amsterdam)
- 10.30 **Jonathan Seckl** (Edinburgh, UK)  
11 $\beta$ -hydroxysteroid dehydrogenase type 1: a new aetiology and therapeutic avenue in the metabolic syndrome
- 11.15 Break
- Parallel sessions 1-3**
- Session 1 (Gelderland)*  
**THE HYPOTHALAMUS-PITUITARY-GONADALAXIS AND METABOLISM**  
(sponsored by BCN, Groningen)  
Moderators: Eline van der Beek (Wageningen) and Esther van de Wall (Groningen)
- 11.30 **Clive Coen** (London, UK)  
CNS regulation of LH release
- 12.00 **Annelieke Franke** (Wageningen)  
Age and female reproductive function
- 12.15 **Inge Palm** (Wageningen)  
In search for a rat model for polycystic ovary syndrome
- 12.30 **Evelien van Dam** (Amsterdam)  
Increase in daily luteinizing hormone secretion in response to short-term caloric restriction in obese women with polycystic ovary syndrome
- 12.45 **Esther van de Wall** (Groningen)  
Glucose homeostasis during the oestrous cycle of the rat
- Session 2 (Branding)*  
**PITUITARY-DEPENDENT HYPERADRENOCORTICISM (PDH)**  
(sponsored by Graduate School Animal Health, GSAH)  
Moderators: Hans Kooistra and Björn Meij (Utrecht)
- 11.30 **Hans Kooistra** (Utrecht)  
Correlation between impairment of glucocorticoid feedback, plasma concentrations of ACTH precursors and the size of the pituitary gland in dogs with PDH
- 11.45 **Nico Schoemaker** (Utrecht)  
Hyperadrenocorticism in ferrets
- 12.00 **Rosalinda van der Vlugt-Meijer** (Utrecht)  
Imaging of the pituitary gland in canine and feline pituitary-dependent hyperadrenocorticism
- 12.15 **Wouter de Herder** (Rotterdam)  
Optimizing the results of transphenoidal pituitary surgery in humans with Cushing's disease
- 12.45 **Björn Meij** (Utrecht)  
Transsphenoidal hypophysectomy for treatment of PDH in dogs and cats
- Session 3 (Doorwerth)*  
**FETAL ORIGIN OF ADULT DISEASE**  
Moderator: Henriette Delemarre-van de Waal (Amsterdam)
- 11.30 **Bertie Lumey** (New York, NY, USA)  
Prenatal nutrition, birth weight and adult disease
- 12.00 **Michel Aubert** (Geneva, Switzerland)  
Metabolic sequelae of intrauterine malnutrition in the rat
- 12.15 **Mirjam van Weissenbruch** (Amsterdam)  
Metabolic sequelae of a low birth weight in children
- 12.30 **Joost Bakker** (Utrecht)  
Metabolic imprinting by dexamethasone in the rat
- 12.45 **Roel Bolt** (Amsterdam)  
The pituitary adrenal axis in children born small for gestational age
- 13.00 **POSTER SESSION ENDOCRINOLOGY** (*Branding*)  
(including lunch)

*Session 4 (Branding)*

**PLENARY SESSION**

Chairperson: Hanno Pijl (Leiden)

15.00 **Richard Wurtman** (Boston, MA, USA)  
(sponsored by Numico Research, Wageningen)  
Nutritional control of brain neurotransmitters  
and membranes

15.30 **Floor van Leeuwen** (Amsterdam)  
Increased risk and less favorable prognosis of  
endometrial cancers after tamoxifen use

16.00 Break

**Parallel sessions 5-8**

*Session 5 (Patio)*

**HORMONAL AND METABOLIC EFFECTS  
OF FOOD SUPPLEMENTS**

(sponsored by Numico Research, Wageningen)

Moderator: Arie Nieuwenhuizen (Wageningen)

16.30 **Arie Nieuwenhuizen** (Wageningen)  
Research on food supplements

16.45 **Hink Perdok** (Rotterdam)  
Use of additives to optimize technical  
performance of food animals

17.00 **Peter Wielinga** (Groningen)  
Food supplements affecting fat metabolism

17.15 **Eva Kovacs** (Maastricht)  
The effect of (-)-hydroxycitrate on body weight  
regulation in humans

17.30 **Monica Mars** (Wageningen)  
Leptin and insulin responses to a four day  
energy deficient diet in men with different  
weight history

17.45 **Zhi-Chao Dang** (Leiden)  
Molecular mechanisms of soy isoflavone  
genistein action and their application in food  
supplements

*Session 6 (Branding)*

**TOWARDS THERAPY FOR HORMONAL  
CANCERS**

Moderator: Leen Blok (Rotterdam)

16.30 **Gerald Mickisch** (Rotterdam)  
New aspects of hormone therapy for prostate  
cancer

17.00 **Mike Grossmann** (Rochester, MN, USA)  
Heat shock protein 70 bound peptides for  
immunotherapy

17.30 **Eline Hanekamp** (Rotterdam)  
A differential role for progesterone and its  
receptor in invasion and metastasis of  
endometrial cancer

*Session 7 (Gelderland)*

**CLINICAL AND EXPERIMENTAL  
MUTATIONS IN THYROID-RELATED  
GENES**

Moderators: Theo Visser (Rotterdam) and  
Marianne Everts (Utrecht)

16.30 **Ralf Paschke** (Leipzig, Germany)  
Activating TSH receptor mutations in patients  
with thyroid adenoma

17.00 **Carrie Ris** (Amsterdam)  
Gene mutations in patients with congenital  
hypothyroidism

17.30 **George Kuiper** (Rotterdam)  
Mutational analysis of iodothyronine  
deiodinases

*Session 8 (Doorwerth)*

**TYPE 1 DIABETES: CLINICAL IMPACT OF  
BASIC RESEARCH**

Moderator: Bart Roep (Leiden)

16.30 **Bart Roep** (Leiden)  
The pathogenesis of type 1 diabetes: how to  
resist an indecent proposal

17.00 **Ralph Kupda** (Utrecht)  
Bipolar disorders: thyroid autoimmunity and  
autoreactive T-cells

17.15 **Wai Kwan Lam-Tse** (Rotterdam)  
Autoantibodies to neuroendocrine tissues in  
type 1 diabetes and their first degree relatives

17.30 **Jan Rozing** (Groningen)  
Early dietary changes and the influence on  
development of type 1 diabetes

17.45 **Astrid van Halteren** (Leiden)  
Redirection of human autoreactive T cells upon  
interaction with dendritic cells modulated by  
TX527, an analogue of 1,25 dihydroxyvitamin D<sub>3</sub>

18.15 NVE Annual member meeting (*Branding*)

19.00 Dinner  
including **Poster Award Ceremony**  
**Endocrinology**

**'LAQUEUR' LECTURE** (*Branding*)  
(sponsored by Netherlands Society of  
Endocrinology)

Chairperson: Hans Romijn (Leiden)

21.15 **Ad Rijnberk** (Utrecht)  
Endocrine diseases of dogs and cats, similarities  
and discrepancies with endocrine diseases in  
humans

22.00 Drink  
(offered by Organon B.V., Oss)

1

**G.J.H. Corstens**

Analysis of the role of cortical actin in melanotrope cell function

2

**M.J.J. van den Hurk**

A Ca<sup>2+</sup>-sensing receptor stimulates Ca<sup>2+</sup> oscillations and peptide secretion of melanotrope cells of *Xenopus laevis*

3

**B. Zandieh Doulabi**

Zonal distribution and diurnal rhythm of thyroid hormone receptors TR $\alpha$ 1 and TR $\alpha$ 2 in rat liver

4

**R.P. Peeters**

Clinical correlates of plasma thyroid hormone levels and tissue deiodinase activities in intensive care patients

5

**H.H.A.G.M. van der Putten**

Evidence for an active uptake mechanism for T<sub>3</sub> and T<sub>4</sub> in heart

6

**D.C. Timmer**

The effect of serum from patients with nonthyroidal illness on splicing factors and alternative splicing of thyroid hormone receptor alpha mRNA

7

**S. Gielen**

The IGF's and IGFBP's in steroid sensitive endometrial carcinoma cell lines

8

**H.H. van Vugt**

Effect of estrogen on somatostatin cells in the periventricular nucleus of young and middle-aged rats

9

**M.M. Buijs**

Hyposomatotropism promotes protein oxidation and blunts protein synthesis in abdominally obese women

10

**M.M. Buijs**

Hyposomatotropism of abdominal obesity is accompanied by increased GH sensitivity of hepatic glucose metabolism

11

**M. Lijffijt**

Selective attention and growth hormone deficiency: performance and electrophysiology

12

**A.J.W. Scheurink**

Coping styles and insulin resistance

13

**J.J.G. Hillebrand**

Metabolic and endocrine changes in activity-based anorexia

14

**T. Adage**

Hormonal, metabolic and behavioural consequences of high intensity workloads in rats

15

**A.C.M. Heinsbroek**

Peripherally produced GLP-1 causes satiety

16

**M. Ruiter**

Food intake and the biological clock control daily plasma glucagon concentrations

17

**K. de Vries**

Food intake, but not diet type determines insuline resistance during reduced CNS MC receptor activity

18

**S.W. Kok**

Reduction of plasma leptin levels and loss of its circadian rhythmicity in hypocretin (orexin) deficient narcoleptic humans

19

**J. Terpstra**

An attenuated response to stressful stimuli in an animal model for neurodevelopmental psychopathological disorders: relevance to schizophrenia

20

**O.C. Meijer**

Promoter-dependent differential coactivation of mineralo and glucocorticoid receptors by SRC-1 splice variants

21

**S.W. Kok**

Dynamics of the Pituitary-Adrenal ensemble in hypocretin (orexin) deficient narcoleptic humans: blunted basal ACTH release and evidence for normal time-keeping by the master pacemaker

22

**A. Umar**

mCLIM1: a potential androgen-regulated protein identified with proteomics

23

**E.M. van der Beek**

Selective changes in reproductive characteristics of male rats following postnatal treatment with estradiol benzoate

24

**C.A. Berrevoets**

Repression of androgen receptor transcriptional activity by the corepressor N-CoR

25

**F.P.M. Kruijver**

Sex dependent differential expression of estrogen receptor  $\alpha$  and  $\beta$  in the human hypothalamus

26

**D. Piersma**

Breast cancer and the luteinizing hormone signaling pathway: polymorphisms and age of onset



27

**J.A. Visser**

Identification of the anti-Müllerian hormone signaling pathway in the ovary

28

**M.J.G. Gruijters**

Anti-Müllerian hormone and its regulatory role in the ovary

29

**M. Mulder**

Estrogens impair cognitive functioning of apolipoprotein E knockout mice

08.00	<b>Registration</b> (until 14.00)		
08.30	Posters Neuroscience 1 session to be mounted		
	<i>Session 9 (Branding)</i> <b>PLENARY NVE TEACHING SESSION: MOLECULAR BIOLOGY OF HORMONE ACTION</b>		
	Chairperson: Hans Romijn (Leiden)		
08.30	<b>Ton Maassen</b> (Leiden) Insulin		
09.00	<b>Wilmar Wiersinga</b> (Amsterdam) Thyroid hormones		
09.30	<b>Albert Brinkman</b> (Rotterdam) Androgens		
10.00	Break		
	<b>Parallel sessions 10-13</b>		
	<i>Session 10 (Patio)</i> <b>TOO MUCH BONE. WHAT DO WE KNOW? WHERE DO WE GO?</b>		
	Moderator: Neveen Hamdy (Leiden)		
10.30	<b>Neeven Hamdy</b> (Leiden) Too much bone: birds eye view on sclerosing bone disorders		
11.00	<b>Clemens Löwik</b> (Leiden) What do we know?: implications of newly discovered osteosclerotic genes		
11.30	<b>Socrates Papapoulos</b> (Leiden) Where do we go?: potential osteoporosis therapy and the future		
	<i>Session 11 (Gelderland)</i> <b>MELATONIN</b>		
	Moderator: Dries Kalsbeek (Amsterdam)		
10.30	<b>Mireille Masson-Pévet</b> (Strasbourg, France) Melatonin and its receptors		
11.00	<b>Jörg Stehle</b> (Frankfurt, Germany) Molecular biology of the neuroendocrine pineal gland		
11.30	<b>Frank Scheer</b> (Amsterdam) Melatonin and hypertension		
11.45	<b>Rixt Riemersma</b> (Amsterdam) 24-Hour salivary melatonin pattern in demented elderly		
	<i>Session 12 (Doorwerth)</i> <b>STRESS AND DEPRESSION I - GENES</b>		
	Moderators: Erno Vreugdenhil (Leiden), Marian Joëls and Witte Hoogendijk (Amsterdam)		
10.30	<b>Nick Barden</b> (Ste-Foy, Canada) Glucocorticoid receptors, their responsive genes and depression		
11.15	<b>Dorine Feldker</b> (Leiden) SAGE and GeneChip hippocampal expression profiles of wild house mice selected for long and short attack latency and of mice exposed to chronic psychological stress		
11.30	<b>Marjan Kromkamp</b> (Utrecht) Differential gene expression related to psychosis		
11.45	<b>Gerben Meynen</b> (Amsterdam) Increased arginine vasopressin mRNA expression in the human supraoptic nucleus in depression		
	<i>Session 13 (Branding)</i> <b>MODERN TECHNIQUES IN ENDOCRINOLOGY AND NEUROSCIENCE</b>		
	Moderators: Fred van Leeuwen and Cyriel Pennartz (Amsterdam)		
10.30	<b>Fritjof Helmchen</b> (Heidelberg, Germany) Multiphoton microscopy and its applications		
11.00	<b>Kees Jalink</b> (Amsterdam) Using FRET to read out intracellular signals		
11.30	<b>Ronald Plasterk</b> (Utrecht) The mechanism of RNA interference and transposon silencing in <i>Caenorhabditis elegans</i>		
12.00	Lunch		
	<i>Session 14 (Branding)</i> <b>PLENARY SESSION ON GENETIC POLYMORPHISM AND DISEASE</b> (sponsored by Applied Biosystems)		
	Chairperson: Erno Vreugdenhil (Leiden)		
13.30	<b>Steve Picton</b> (Warrington, UK) Millions of single nucleotide polymorphisms in the human genome: what do they mean?		
14.00	<b>André Uitterlinden</b> (Rotterdam) Genetics of osteoporosis: population-based screening of candidate gene polymorphisms		
	<i>Satellite session (Renkum)</i> <b>CIRCADIAN RHYTHMS I</b> (see separate page)		
13.30			
14.30	<b>POSTER SESSION NEUROSCIENCE I</b> (Branding) (including break)		

*'MARIUS TAUSK' LECTURE (Branding)*  
(sponsored by Organon B.V., Oss)  
Chairperson: Ron de Kloet (Leiden)  
16.00 **Florian Holsboer** (München, Germany)  
From stress physiology to novel therapies of stress-related disease

16.45 Break

**Parallel sessions 15-18**

*Session 15 (Doorwerth)*  
**SYNAPSE PHYSIOLOGY AND NEURONAL NETWORK FUNCTIONING 1**

Moderators: Arjen Brussaard and Wytse Wadman (Amsterdam)  
17.00 **Ole Paulsen** (Oxford, UK)  
Network oscillations and synaptic plasticity in the hippocampus

17.45 **Laurens Bosman** (Amsterdam)  
Postsynaptic GABA-A receptor plasticity in relation to the critical period of the visual system

18.00 **Martin Verkuyl** (Amsterdam)  
Presynaptic GABAergic changes as a consequence of ADX

18.15 **Michele Sons** (Leiden)  
Munc18-1 is a positive regulator of neurotransmitter exocytosis in the mouse neuromuscular junction

*Session 16 (Patjo)*  
**DEVELOPMENT AND FUNCTION OF MESENCEPHALIC DOPAMINERGIC SYSTEM**

Moderator: Martin Smidt (Utrecht)  
17.00 **Marten Smidt** (Utrecht)  
Role of the homeodomain gene Ptx3 in the development and function of the mesencephalic DA system

17.30 **Mirjam Gerrits** (Utrecht)  
Implication of the mu-opioid system for the mesDA theory of addiction

17.45 **Simone Smits** (Utrecht)  
Dopamine dynamics of the mesDA system

18.00 **Misha de Rover** (Amsterdam)  
Changes of the mesolimbic dopaminergic projections lead to changes in synaptic circuitry in the nucleus accumbens

*Session 17 (Branding)*

**NEUROGENOMICS**

Moderator: Guus Smit (Amsterdam)  
17.00 **Hadriano Lacerda** (Amsterdam)  
Towards gene expression profiling in the human brain diseases, the brain microarray

17.30 **Marc Coolen** (Nijmegen)  
Genomics of schizophrenia in an animal model

17.45 **Edwin Jacobs** (Amsterdam)  
Active heroin administration induces specific genomic responses in the nucleus accumbens shell

18.00 **Nicole Datson** (Leiden)  
Expression profiling in the rat hippocampus: evaluation of DNA microarray sensitivity by comparison to SAGE analysis

18.15 **Kawan Li** (Amsterdam)  
Proteomics of the postsynaptic density

*Session 18 (Gelderland)*

**SPINAL CORD DISORDERS AND REPAIR 1 - ASPHYXIA AND OXIDATIVE STRESS**

Moderators: Wilma van de Berg and Bert Joosten (Maastricht)

17.00 **Hans Vles** (Maastricht)  
Disorders of the spinal cord disorders

17.15 **Huseyin Mehmet** (London, UK)  
Inflammatory cytokines and white matter loss in preterm infants with brain damage

17.45 **Liselijn Wisman** (Utrecht)  
Fibroblasts over-expressing catalase to protect motoneurons from oxidative stress in amyotrophic lateral sclerosis (ALS)

18.00 **Anneke Koster** (Utrecht)  
Caspases, cytokines and apoptosis-related cell death after perinatal hypoxia-ischemia in newborn piglets

18.15 **Anton de Louw** (Maastricht)  
Apoptosis in the spinal cord during postnatal development: the effect of perinatal asphyxia on programmed cell death

*Satellite session (Renkum)*

**CIRCADIAN RHYTHMS 2**

(see separate page)

18.00 Board meeting of the Section Biological Psychiatry of the Netherlands Society of Psychiatry and the Interdisciplinary Society for Biological Psychiatry (*Sub 1*)

19.00 Dinner

*'NEUROFEDERATIE' LECTURE (Branding)*  
(sponsored by Elsevier Scientific Publishers, Amsterdam)

Chairperson: Lex Cools (Nijmegen)  
21.15 **Gert Holstege** (Groningen)  
Neurobiology of reproduction

1

**J.J. Plomp**

Roles of complex gangliosides at the neuromuscular junction

2

**C.F. Vogelaar**

Homeobox gene repertoire in adult rat dorsal root ganglia: altered expression following sciatic nerve crush

3

**F.M.S. de Vrij**

Mutant ubiquitin inhibits proteasomal degradation

4

**R. de Pril**

Molecular misreading of ubiquitin in polyglutamine diseases

5

**R.F. Roelofs**

Evidence for neuronal expression of GFAP in Alzheimer patients and identification of novel GFAP splice forms

6

**C.E. de Rijke**

Effects of polymorphisms in the AgRP gene associated with anorexia nervosa

7

**G. Jansen**

Adaptation to salts by the nematode *C. elegans* is mediated by G-proteins

8

**E.R. Pomp**

The role of vagal sensory afferent nerves in the regulation of short-term satiety

9

**F. Kreier**

Parasympathetic innervation of white adipose tissue: functional implications and differential innervation of abdominal and intra-abdominal compartments

10

**H. Zhang**

D<sub>2</sub>-receptor activation inhibits a fast inactivating high-voltage activated Ca<sup>2+</sup> current in *Xenopus* melanotrope cells

11

**L.C. Wang**

BDNF subcellular distribution in the *Xenopus* pituitary with special reference to high pressure freeze-substitution immuno-electron microscopy

12

**C.P.J. de Kock**

Somatodendritic release of oxytocin and adenosine in hypothalamus is under control of the female reproduction cycle

13

**J.J. Koksmma**

Segregated clustering of distinct GABA<sub>A</sub> receptor subtypes is induced in rat oxytocin neurons at parturition

14

**K. Gryszczuk**

Effects of changes of the mesolimbic dopaminergic projections on GABA-ergic transmission in the nucleus accumbens

15

**E. Koya**

Behavioral and biochemical markers of differences underlying vulnerability to drug abuse

16

**I.E.M. de Jong**

Programming of the neuronal stress circuitry by genetics and life experiences: Implications for individual vulnerability to addiction

17

**A.G. Karman**

Individual housing affects vasopressin peptide expression in HR, but not in LR pigs

18

**M. Schmidt**

The effects of maternal deprivation on the hypothalamus-pituitary-adrenal system in CRH receptor 1 knockout and CD1 wild type mice during development

19

**A.M. Karssen**

The efflux transporter P-glycoprotein modulates glucocorticoid access to brain corticosteroid receptors

20

**M.C. Morsink**

Molecular mechanisms underlying corticosteroid action on hippocampal cell function

21

**Y. Qin**

Changes in gene expression of single dentate granule after adrenalectomy in association with apoptosis

22

**P.J. Lucassen**

Dexamethasone-induced viability changes in the adult human hippocampus

23

**I. Huitinga**

A lower degree of hypothalamic-pituitary-adrenal axis activation in multiple sclerosis patients with active lesions in the hypothalamus

24

**A.H. Veenema**

Stress-induced differences in HPA axis activity, 5-HT activity and cell proliferation in the hippocampus of mice selected for high and low aggression

25

**W.J.J.M. Scheenen**

Differences in Ca<sup>2+</sup> oscillations in the rostral reticular thalamic nucleus of developing WAG/Rij and ACI rats

26

**M. Kolkman**

Behavioral phenotyping of different knockout mice: the 12-circular holeboard 'dry maze' confirms findings of 'water maze' spatial learning

27

**M. Vinkenoog**

Lateral and medial perforant pathway fibers make synaptic contacts with subicular neurons. An electron microscopical study in the rat

28

**J.D. Swinny**

The localisation of urocortin in the developing rat cerebellum

29

**F.A.J.L. Scheer**

Repeated melatonin reduces nighttime blood pressure in patients with essential hypertension

30

**P.J. French**

Elp160 a novel WD40 domain protein in rat brain associated with microtubules1

31

**S. Spijker**

Gene expression profiling using microarrays in nucleus accumbens from cocaine-sensitized mice

- 08.00   **Registration** (until 14.00 h)
- 08.30   Posters Neuroscience 2 session to be mounted
- Parallel sessions 19-22**
- Session 19 (Doorwerth)*  
**STRESS AND DEPRESSION 2**  
 Moderators: Erno Vreugdenhil (Leiden), Marian Joëls and Witte Hoogendijk (Amsterdam)
- 08.30   **Ron de Kloet** (Leiden)  
 Stress and depression: rationale for novel treatment strategy
- 09.00   **Jantien Brouwer** (Amsterdam/Rotterdam)  
 Glucocorticoid receptor polymorphisms in depression
- 09.15   **Els van Riel** (Amsterdam)  
 Changes in serotonergic responsiveness in animal models for chronic hypercortisolism
- 09.30   **Ard Peeters** (Oss)  
 Org 34517, a selective glucocorticoid receptor antagonist with strong antidepressant activity in man: first clinical results
- Session 20 (Branding)*  
**SYNAPSE PHYSIOLOGY AND NEURONAL NETWORK FUNCTIONING 2**  
 Moderator: Christian Hansel (Rotterdam)
- 08.30   **Egidio D'Angelo** (Pavia, Italy)  
 Plasticity and computation at the mossy fiber-granule cell relay: implications for cerebellar function
- 09.00   **Alain Artola** (Utrecht)  
 Metaplasticity: physiology and pathology
- 09.15   **Ype Elgersma** (Los Angeles, CA, USA/ Rotterdam)  
 CaMKII inhibitory auto-phosphorylation controls PSD association, plasticity and learning
- 09.30   **Geert Ramakers** (Utrecht)  
 The role of potassium channels in synaptic transmission and plasticity
- 09.45   **Christian Hansel** (Rotterdam)  
 Long-term depression at the climbing fiber-Purkinje cell synapse in the cerebellum
- Session 21 (Gelderland)*  
**SPINAL CORD DISORDERS AND REPAIR 2 - GLIAL SCARRING, TRANSPLANTATION AND REPAIR AFTER INJURY**  
 Moderators: Bert Joosten (Maastricht) and Gerard Boer (Amsterdam)
- 08.30   **James Fawcett** (Cambridge, UK)  
 Proteoglycans, axon regeneration and plasticity
- 09.00   **Fred de Winter** (Amsterdam)  
 Semaphorin 3A responses following sciatic nerve crush
- 09.15   **Ronald Deumens** (Maastricht)  
 Transplantation of olfactory ensheathing cells in experimental spinal cord injury
- 09.30   **Marc Jan Ruitenber** (Amsterdam)  
 Transient hypersecretion of BDNF and NT-3 by transduced olfactory ensheathing glia implants mediates axonal sprouting, tissue sparing and enhanced functional recovery in rubrospinal tract-lesioned rats
- 09.45   **Henk van de Meent** (Nijmegen)  
 Measuring spinal cord function in laboratory animals and an introduction to the European multicenter spinal cord injury study (EM-SCI)
- Session 22 (Patio)*  
**PROTEIN METABOLISM AND PROTEIN QUALITY CONTROL IN NEURODEGENERATIVE DISEASES**  
 Moderators: Elly Hol and David Fischer (Amsterdam)
- 08.30   **Erich Wanker** (Berlin, Germany)  
 Formation of polyQ-containing protein aggregates in Huntington's disease: implications for therapy
- 09.00   **Ineke Braakman** (Utrecht)  
 Protein folding and molecular chaperones
- 09.15   **Liesbeth Dubelaar** (Amsterdam)  
 Lower neuronal metabolic activity in nucleus basalis neurons as a risk factor for Alzheimer's disease
- 09.30   **Esther van Herpen** (Rotterdam)  
 The effect of tau mutations in frontotemporal dementia
- 09.45   **Renske van Dijk** (Amsterdam)  
 Proteomics on Alzheimer-associated mutant ubiquitin expression
- 10.00   **POSTER SESSION NEUROSCIENCE 2 (Branding)**  
 (including break)
- 10.00   Meeting (*Renkum*)  
**'NWO PRIORITEITSPROGRAMMA GEHEUGENPROCESSEN EN DEMENTIE'**  
 (GpD)  
 (see separate page)

**Parallel sessions 23-26**

*Session 23 (Branding)*

**SYNAPSE PHYSIOLOGY AND NEURONAL NETWORK FUNCTIONING 3**

*(sponsored by Graduate School Neurosciences Amsterdam)*

Moderators: Wytse Wadman and Arjen Brussaard (Amsterdam)

- 11.30 **Paul Tiesinga** (La Jolla, CA, USA)  
How to compute with neural synchrony?
- 12.00 **Aren Borgdorff** (Bordeaux, France)  
Intracellular calcium and synaptic localisation regulate AMPA receptor movements
- 12.30 **Stefano Taverna** (Amsterdam)  
Plasticity and neuromodulation of NMDA and AMPA receptor currents in rat nucleus accumbens
- 12.45 **Ingrid van Welie** (Amsterdam)  
Rapid modulation of somatic hyperpolarization-activated inward currents by synaptic activity in rat hippocampal neurons

*Session 24 (Doorwerth)*

**STEM CELLS IN THE ADULT BRAIN**

*(sponsored by Chemicon)*

Moderators: Ineke van der Zee (Nijmegen) and Paul Lucassen (Amsterdam)

- 11.30 **Amelia Eisch** (Dallas, TX, USA)  
Adult neurogenesis and neuropsychiatry
- 11.45 **Vivi Heine** (Amsterdam)  
Changes in neurogenesis in relation to aging and chronic stress
- 12.00 **Karin van der Borght** (Groningen)  
Effects of associative learning on hippocampal neurogenesis
- 12.15 **Gerd Kempermann** (Berlin, Germany)  
Environmental enrichment and adult neurogenesis

*Session 25 (Gelderland)*

**COGNITIVE DYSFUNCTIONS IN PARKINSON'S DISEASE**

Moderators: Eric Wolters and Henk Groenewegen (Amsterdam)

- 11.30 **Moussa Youdim** (Haifa, Israel)  
Novel bifunctional neuroprotective drug development for treatment of Parkinson's disease comorbid with dementia and depression or vice versa
- 12.00 **Diederik Stoffers** (Amsterdam)  
Neuropsychological aspects of Parkinson's disease; implications for an early diagnosis I
- 12.15 **Henk Berendse** (Amsterdam)  
Olfactory deficits in Parkinson's disease; implications for an early diagnosis II
- 12.30 **Jan Booij** (Amsterdam)  
Dopamine imaging and cognition in Parkinson's disease
- 12.45 **Jos Prickaerts** (Maastricht)  
Effects of 5-HT<sub>2A</sub> receptor ligands on cognitive and motor behavior in rats with bilateral striatal 6-OHDA lesions

*Session 26 (Patio)*

**ANIMAL MODELS OF NEUROPSYCHIATRIC DISORDERS**

Moderators: Berend Olivier and Anneloes Dirks (Utrecht)

- 11.30 **Richard Paylor** (Houston, TX, USA)  
Mutant mouse models for neuropsychiatric traits
- 12.00 **Tommy Pattij** (Utrecht)  
5-HT<sub>1A</sub> receptor knockout mice and anxiety
- 12.15 **Martien Kas** (Utrecht)  
Activity-based anorexia, an animal model for anorexia nervosa
- 12.30 **Matthijs Feenstra** (Amsterdam)  
D4 dopamine receptors and prefrontal cortical function
- 12.45 **Anneloes Dirks** (Utrecht)  
CRH-overexpressing mice: animal model for depression?
- 13.00 Lunch



**'HERSENSTICHTING' LECTURE**

(Branding)

(sponsored by Dutch Brain Foundation)

Chairperson: Benjamin Drukarch (Amsterdam)

- 14.00 **Moussa Youdim** (Haifa, Israel)  
cDNA microarray gene expression for studying the processes of neurodegeneration and neuroprotection in neurodegenerative diseases

followed by **Poster Award Ceremony Neuroscience 1 and 2**

- 14.45 Break

- 14.45 Board meeting Dutch Neurofederation (*Sub 1*)

**Parallel sessions 27-30**

*Session 27 (Branding)*

**SOMATIC DISEASES AND EMOTIONS: PSYCHOGENIC AND PATHOPHYSIOLOGICAL ASPECTS**

(sponsored by BCN, Groningen)

Moderators: Jaap Korf and Gieta van der Pompe (Groningen)

- 15.00 **Robbert Sanderma** (Groningen)  
Long-term adaptation of the chronically ill persons
- 15.15 **Mattie Tops** (Groningen)  
Cortisol and emotions: effects of acute cortisol administration on alpha EEG asymmetry
- 15.30 **Cobi Heijnen** (Utrecht)  
Disturbed neuroendocrine-immune interactions in chronic fatigue syndrome
- 15.45 **Sacha Russo** (Groningen)  
Psychopathology and tryptophan: linking somatic and mood states
- 16.00 **Gieta van der Pompe** (Groningen)  
Cytokines, major depression and chronic somatic disease
- 16.15 **Annemieke Kavelaars** (Utrecht)  
Reduced angiogenesis, tumor growth and experimental metastasis formation in rats with a hyperactive dopaminergic system

*Session 28 (Doorwerth)*

**BRAIN PLASTICITY - THE EPILEPSY EXPERIENCE**

Moderator: Frans Leijten (Utrecht)

- 15.00 **Robert Sloviter** (Tucson, AZ, USA)  
Cell loss and synaptic reorganization in temporal lobe epilepsy, a critical appraisal and future directions
- 15.30 **Jan Gorter** (Amsterdam)  
Hippocampal sclerosis: cause or consequence of repeated spontaneous seizures?
- 15.45 **Robbert Notenboom** (Utrecht)  
Altered glutamatergic transmission in the hippocampus of patients with temporal lobe epilepsy
- 16.00 **Pauly Ossenblok** (Heeze)  
Presurgical localisation of somatosensory cortex using MEG and 3D MRI, with electrocortical validation
- 16.15 **Willem Alpherts** (Heemstede)  
Dynamic effects of epilepsy surgery on verbal memory

*Session 29 (Gelderland)*

**DRUG ADDICTION**

Moderator: Ton Schoffelmeer (Amsterdam)

- 15.00 **Gaetano Di Chiara** (Cagliari, Italy)  
Addiction: an associative learning process
- 15.30 **Liesbeth Reneman** (Amsterdam)  
XTC abuse: neuroimaging in humans
- 15.45 **August Smit** (Amsterdam)  
Addiction behavior: molecular neuroplasticity
- 16.00 **Taco de Vries** (Amsterdam)  
Towards a pharmacotherapy of relapse behavior
- 16.15 **Ton Schoffelmeer** (Amsterdam)  
Drug addiction and brain-behavior relationships

*Session 30 (Patio)*

**FUNCTIONAL PARAMETERS IN FOCAL ISCHEMIA**

Moderator: Erik Hoff (Maastricht)

- 15.00 **Courtney DeVries** (Columbus, OH, USA)  
Cognitive and behavioral assessment in experimental stroke research
- 15.30 **Robin Roof** (Ann Arbor, MI, USA)  
A comparison of chronic functional outcome following two MCAO models in rat
- 15.45 **Wouter Veldhuis** (Utrecht)  
NMR-based assessment of pharmacological interventions in acute neurodegeneration
- 16.00 **Börje Bjelke** (Stockholm, Sweden)  
Functional recovery after brain lesions: behaviour analysis and fMRI

- 16.30 Break



**Parallel sessions 31-33**

*Session 31 (Gelderland)*

**UNDERSTANDING EPISODIC MEMORY:  
CONTRIBUTIONS FROM ANIMAL AND  
HUMAN RESEARCH**

Moderator: Lucia Talamini (Amsterdam)

- 17.00 **Malcolm Brown** (Bristol, UK)  
Different roles for the hippocampus and perirhinal cortex in recognition memory
- 17.30 **Eddy van der Zee** (Groningen)  
Time-place association in mice: a learning task suitable for studying episodic memory?
- 17.45 **Roy Kessels** (Utrecht)  
Selective impairments and lateralization in object location memory
- 18.00 **Willem Machielsen** (Amsterdam)  
Differentiating MTL regions involved in memory for objects and object configurations using fMRI
- 18.15 **Martijn Meeter** (Amsterdam)  
A model of parahippocampal-hippocampal interactions in memory

*Session 32 (Branding)*

**NEUROCOGNITIVE DYSFUNCTION IN  
SCHIZOPHRENIA**

*(sponsored by BCN, Groningen)*

Moderator: Hans den Boer (Groningen)

- 17.00 **Fritz Henn** (Mannheim, Germany)  
Sensory information processing in schizophrenia: a fMRI study
- 17.30 **André Aleman** (Utrecht)  
Neurocognitive dysfunction and auditory hallucinations
- 17.45 **Annelies Broerse** (Groningen)  
Antisaccades as a sensitive measure for detection of cognitive dysfunction in schizophrenia
- 18.00 **Richard Bruggeman** (Groningen)  
Cognitive symptoms and antipsychotics: an electrophysiological model

*Session 33 (Doorwerth)*

**NEUROPSYCHOLOGY OF EMOTION**

Moderator: Edward de Haan (Utrecht)

- 17.00 **Richard Davidson** (Madison, USA)  
New substrates of affective style
- 17.30 **Edward de Haan** (Utrecht)  
Impairments of facial expression perception
- 18.00 **Jack van Honk** (Utrecht)  
Transcranial magnetic stimulation in affective neuroscience
- 18.15 **Beatrice de Gelder** (Tilburg)  
Fear recognition in the voice is modulated by unconsciously recognized facial expressions but not by unconsciously recognized affective pictures
- 19.00 Dinner
- BEHAVIOR KEYNOTE LECTURE**  
*(Branding)*  
Chairperson: Herman Kolk (Nijmegen)
- 21.15 **Dorret Boomsma** (Amsterdam)  
Genes, cognition and behavior

1

**H.D. Mansvelder**

Action potential propagation in neocortical dendrites: do dendritic spines play a critical role?

2

**Z. El Filali**

Coreleased messengers from neurons underlie the complex physiological responses in target cells: a combined nano-technological and electrophysiological study at the single neuron level

3

**C.J.G.M. Smulders**

The effects of organophosphate insecticides on rat neuronal alpha4beta2 nicotinic acetylcholine receptors

4

**R.H.S. Westerink**

Signaling pathways involved in Ca<sup>2+</sup>- and Pb<sup>2+</sup>-induced vesicular catecholamine release from rat PC12 cells

5

**D.N. Alfarez**

Corticosterone and acute stress reduce synaptic potentiation in mouse hippocampal slices with mild stimulation

6

**M.T. Schmolesky**

The physiological significance of long term depression at the climbing fiber-Purkinje neuron synapse

7

**J.E. Olijslagers**

Serotonin potentiates dopamine inhibition of dopamine neurons

8

**J.C. Glennon**

Activation of mesolimbic dopamine transmission by serotonin 5-HT<sub>4</sub> receptors in the nucleus accumbens as studied using microdialysis in intact conscious rat brain

9

**L. de Groote**

Role of 5-HT<sub>1B</sub> receptors in striatal dopamine outflow: a microdialysis study in knockout mice

10

**B. Scholtissen**

Effects of 5-HT<sub>2A</sub> receptor ligands on motor behavior in rats with bilateral striatal 6-OHDA lesions

11

**J. van de Kieft**

The role of 5-HT<sub>1A</sub> receptors in rotational behavior in hemiparkinsonian rats

12

**M.C.J. van der Elst**

Novelty-induced changes in TH-positive innervation of the nucleus accumbens of apomorphine-susceptible and apomorphine-unsusceptible rats

13

**H.M.B. Lesscher**

Behavioural effects of cocaine and quantitative autoradiography for dopamine receptors in μ-opioid receptor knockout mice

14

**J.R. Homberg**

Neurochemical analysis of rats displaying individual differences in motivation to self-administer cocaine

15

**E.D. Schmidt**

Neuroanatomy of cue-induced relapse to heroin seeking behaviour

16

**M.M. van Gaalen**

Long-term effects of repeated administration of amphetamine and cocaine on 5-choice serial reaction time task performance in rats

17

**B.M. Bouwman**

Effects of vigabatrin on spontaneous locomotor activity of rats

18

**M.C. Janssen**

Identification and changed expression of high voltage-operated Ca<sup>2+</sup> channels in the rostral reticular thalamic nucleus of WAG/Rij rats, with particular reference to absence epileptogenesis

19

**I.W.M. Bos**

Characterization of glial glutamate transporters in blood platelets of epilepsy and ALS patients

20

**U. Schridde**

Gene-environment interactions in the WAG/Rij rat animal model of absence epilepsy

21

**J.G. de Jong**

Individual variation in behavior determines the long-term effects of social defeat

22

**L. Diergaarde**

Effects of neonatal amygdala damage on open field behavior, spontaneous alternation and food hoarding in the rat

23

**M. Gerrits**

Prefrontal cortex dysfunction and chronic footshock stress in female rats

24

**S.D. Kuipers**

Reduced calcineuron mRNA and protein levels in the prefrontal cortex of chronically stressed female rats: a cDNA microarray/immunocytochemical study

25

**C. Westenbroek**

Gender-specific effects of ‘social support’ in rats after chronic stress

26

**A. Trentani**

Gender-related sensitivity to the effects of chronic stress in rats

27

**C.M. van Rijn**

Rational polytherapy: combining drugs acting via the GABAA receptor complex

28.

**J.I. Udo de Haes**

Effect of increased serotonin release on [<sup>18</sup>F]MPPF binding in rats: fenfluramine vs. the combination of citalopram and ketanserine

29

**B.J. van der Vegt**

Trait versus state aggression: differential involvement of serotonergic neurotransmission

30

**R. de Jongh**

The light-enhanced startle paradigm as a putative animal model for anxiety, a pharmacological validation

31

**G.C. Koopmans**

Cognition and neurogenesis: survival with or without proliferation?

32

**D. Alfarez**

Corticosteroid modulation of synaptic plasticity and neurogenesis in the rat dentate gyrus

33

**B. Tiesjema**

Neonatal dexamethasone (DEX) treatment affects neurogenesis in the adult rat hippocampus

34

**K.M. Horvath**

Interactive effects of 17 $\beta$ -estradiol and corticosterone on cognitive performance and vulnerability of the cholinergic system

35

**I. Otte-Höller**

Visualisation of amyloid  $\beta$ -peptide fibril formation with electron and confocal microscopy

36

**M.M. Verbeek**

ApoE genotype determines vulnerability of human brain pericytes and smooth muscle cells for A $\beta$

37

**A.A.M. Rensink**

Expression of the cytokine leukemia inhibitory factor and pro-apoptotic insulin-like growth factor binding protein-3 in Alzheimer’s disease

38

**B.P.F. Rutten**

Might a controlled neuronal death during aging be a therapeutic target for preventing Alzheimer’s disease?

39

**K. Boekhoorn**

Cell proliferation in the Alzheimer hippocampus

40

**A. Sik**

Performance of Fischer344xBrown Norway (F1) rats in a delayed non-matching-to-position task during aging

41

**J. Bouwman**

Characterization of genes involved in synapse maturation

42

**M.T. van Diepen**

Specific transcription factors for neurite outgrowth and synapse formation

43

**E.H.P. Franssen**

Effect of secreted semaphorins on meningeal cell migration

44

**W. Hendriks**

Towards improved regeneration of spinal ventral roots following avulsion, by using viral vector-mediated expression of neurotrophins

45

**W. Hendriks**

Comparison of functional recovery after specific spinal tract lesions using various test methods

46

**M.C. Wittendorp**

The mouse adenosine A1 receptor and neuroprotection

47

**N. Brouwer**

Chloride channels and microglia activation

48

**M.W. Zuurman**

Identification and characterization of a novel CC chemokine-receptor in human astrocytes

49

**A. Wierinckx**

Transcriptional analysis of inflammatory mediators in the spinal cord chronic-relapsing EAE rats

50

**D. Mercier**

Production of viruses expressing IL-1ra and IL-10: a way to accomplish anti-inflammatory cytokine gene transfer to the rat brain?

51

**J. Verheul**

Reactivation of neuronal ensembles in the nucleus accumbens during sleep

08.00	<b>Registration</b> (until 12.00 h)		<i>Session 36</i>
08.30	Posters Cognitive and Behavioral Neuroscience session to be mounted	11.30	<b>PLENARY SESSION</b> ( <i>Branding</i> ) Chairperson: Edward de Haan (Utrecht) <b>Jelle Jolles</b> (Maastricht) Cognitive aging: the influence of biological and environmental factors
	<b>Parallel sessions 34-35</b>	12.00	<b>Peter Hagoort</b> (Nijmegen) How the brain solves the binding problem for language
	<i>Session 34 (Doorwerth)</i> <b>INTERSENSORY INTEGRATION BETWEEN VISION AND AUDITION</b> Moderator: Beatrice de Gelder (Tilburg)		followed by <b>Cognition and Behavior Poster Award Ceremony</b>
08.30	<b>Beatrice de Gelder</b> (Tilburg) Introduction (15)	12.30	Lunch
08.45	<b>Jyrki Tuomainen</b> (Helsinki, Finland) Motor and auditory interactions: silent articulation affects vowel categorization		<b>Parallel sessions 37-38</b>
09.00	<b>Gilles Pourtois</b> (Tilburg) Convergence of affective information in heteromodal region of the human brain		<i>Session 37 (Doorwerth)</i> <b>GENETIC INFLUENCES ON BRAIN MORPHOLOGY</b> Moderator: Hilleke Hulshoff Pol (Utrecht)
09.15	<b>Sjakko de Jong</b> (Tilburg) Deficits of audiovisual integration in schizophrenia	13.30	<b>Wim Baaré</b> (Copenhagen, Denmark) Genetic variation in human brain morphology in healthy subjects and schizophrenia
09.30	<b>Nouchine Hadjikhani</b> (Boston, MA, USA) Temporal and spatial determinants of audiovisual integration	14.00	<b>Danielle Posthuma</b> (Amsterdam) The relation between brain volume and IQ is of genetic origin
	<i>Session 35 (Branding)</i> <b>BRAIN MECHANISMS IN ALZHEIMER'S DISEASE AND RELATED CONDITIONS</b> Moderator: Frans Verhey (Maastricht)	14.15	<b>Sarah Durston</b> (Utrecht) Genetic susceptibility for ADHD, a MRI study
08.30	<b>Philip Scheltens</b> (Amsterdam) Neuroimaging in dementia: beyond exclusion	14.30	<b>Xavier Chitnis</b> (London, UK) Mapping the effects of genetic changes with neuroimaging
09.00	<b>Serge Rombouts</b> (Amsterdam) fMRI in Alzheimer's disease		<i>Session 38 (Branding)</i> <b>BRAIN AGING AND COGNITIVE PERFORMANCE</b> Moderator: Jelle Jolles (Maastricht)
09.15	<b>Pieter Jelle Visser</b> (Maastricht) White matter lesions and behavioral disorders in dementia	13.30	<b>Naftali Raz</b> (Detroit, MI, USA) Selectivity of age-related differences and age-related changes in regional brain volumes: evidence from <i>in vivo</i> MRI
09.30	<b>Pauline Aalten</b> (Maastricht) Behavioral problems in dementia and the relationship with prefrontal structures	14.00	<b>Rutger Goekoop</b> (Amsterdam) Brain activation measured with fMRI in mild cognitive impairment
09.45	<b>Jan Cees de Groot</b> (Rotterdam/Groningen) Cerebral white matter lesions, old age depression and cognitive decline in the elderly	14.15	<b>Miranda Dik</b> (Amsterdam) Insulin-like growth factor 1 and cognitive decline in elderly: a prospective study
10.00	<b>POSTER SESSION COGNITIVE AND BEHAVIORAL NEUROSCIENCE</b> ( <i>Branding</i> ) (including break)	14.30	<b>Niels Prins</b> (Rotterdam) Homocysteine, MRI findings and cognitive function in community dwelling elderly
		14.45	<b>Danielle Tisserand</b> (Maastricht) Brain imaging, the frontal cortex and cognitive aging
		15.00	Break

**Parallel sessions 39-41**

*Session 39 (Doorwerth)*

**FRONTO-TEMPORAL DYSFUNCTION IN NEURODEGENERATIVE DISEASE**

Moderator: Berry Kremer (Nijmegen)

- 15.30 **Julie Snowden** (Manchester, UK)  
Neuropsychological characteristics of fronto-temporal dementia
- 16.00 **John van Swieten** (Rotterdam)  
New molecular defects in families with frontotemporal dementia
- 16.30 **Berry Kremer** (Nijmegen)  
*title pending*

*Session 40 (Branding)*

**IMAGING THE DYNAMICS OF NEUROCOGNITION**

Moderator: Peter Hagoort (Nijmegen)

- 15.30 **Pascal Fries** (Nijmegen)  
Attention modulates oscillatory neuronal synchronization in Macaque area V4
- 16.00 **Marcel Bastiaansen** (Nijmegen)  
EEG theta power is sensitive to different aspects of language processing
- 16.15 **Bas Bloem** (Nijmegen)  
Repetitive transcranial magnetic stimulation: an exciting technique to excite the brain
- 16.30 **David Norris** (Nijmegen)  
Diffusion tensor imaging and cognitive neuroscience

*Session 41 (Patio)*

**COGNITIVE CONTROL**

Moderator: Leon Kenemans (Utrecht)

- 15.30 **Maurits van der Molen** (Amsterdam)  
Development of executive functions
- 16.00 **Evelijne Bekker** (Utrecht)  
Anticipatory selective motor preparation in a conditional choice-response task
- 16.15 **Franc Donkers** (Tilburg)  
Is the N200 specifically related to response inhibition?
- 16.30 **Daniëlle Posthuma** (Amsterdam)  
A twin study on selective response activation and frontal inhibition during the Eriksen Flanker task
- 16.45 **Leon Kenemans** (Utrecht)  
Isolating attentional control
- 17.00 **Closure** (*Branding*)  
**Jelle Jolles** (Maastricht)

1

**K.R. Ridderinkhof**

Performance errors are foreshadowed in brain electrical activity associated with action monitoring in anterior cingulate cortex

2

**L. Hald**

The integration of semantic versus world-knowledge information during on-line sentence processing

3

**O. Müller**

Access to lexical information in comprehension - semantics before syntax

4

**A.S. Smit**

Vigilance decline after mental effort does not cause an apparent memory impairment

5

**J.J.A. van Berkum**

Do listeners use discourse level information to predict upcoming words in an unfolding sentence? An ERP study

6

**M. Meeter**

The Daily News Memory Test: using the internet to investigate forgetting and retrograde amnesia

7

**J.C. Polderman**

The influence of working memory on distractor interference

8

**E.M. van der Meulen**

Social deficits and language problems in Dutch sibpairs with ADHD

9

**B.M. Gutteling**

The effects of prenatal stress on infant temperament: a follow up study

10

**S.J.M.C. Palmén**

Volumetric brain abnormalities in medication naive high functioning autistic adolescents and young adults

11

**H.C. Comijs**

Does severity and duration of depressive symptoms predict memory decline in older persons?

12

**S.M.C. Rasquin**

Influence of pre-existing ischemic lesions on cognitive functioning in stroke patients

13

**S.M. Daselaar**

Neuroanatomical correlates of episodic encoding and retrieval in young and elderly subjects

14

**J. Durga**

Folate and cognitive performance in hyperhomocysteinemic elderly

15

**M. van Asselen**

The influence of aging on spatial and temporal order memory

16

**I.E.C. Sommer**

Language lateralization in handedness concordant and handedness discordant monozygotic twins

17

**K.J. Bemelmans**

Recall performance and plasma cortisol and plasma norepinephrine in normal human subjects

18

**E.A. de Bruin**

Structural and functional changes in the brain of social drinkers: an MRI/ERP/EEG study

19

**A. Sambeth**

Habituation as reflected in auditory event related potentials

20

**J.W.J. Beulens**

Alpha-lactalbumin combined with a regular diet increases plasma ratio of tryptophan to other large neutral amino acids (Trp-LNAA) in healthy male subjects

21

**J. Grootendorst**

Development of a behavioral battery for characterization of spatial learning and memory in apolipoprotein E knockout mice

22

**B.J. Oosterink**

Post-lesion administration of 8-OH-DPAT protects cholinergic neurons against N-methyl-D-aspartate excitotoxicity

23

**A.B. Mulder**

The involvement of the prefrontal cortex to accumbens pathway in goal-directed behavior, a behavioral electrophysiological study in rats

24

**I. Spaan**

The involvement of the prefrontal to accumbens pathway in goal-directed behavior, a lesion study in rats

25

**F.H.C.E. van der Graaf**

Functional contributions of cerebral cortex and striatum in visuomotor skill learning

26

**S. Raz**

The effects of hypertensive disorder of pregnancy and suboptimal intrauterine growth on intellectual and motor function in the preschool years

*Satellite (Renkum)*

**Leiden/Amsterdam/Groningen biological rhythm group**

***CIRCADIAN RHYTHMS 1***

Moderator: Dries Kalsbeek (Amsterdam)

- 13.30 **Kamiel Spoelstra** (Groningen)  
Phase response curves of mice with clock genes deletions
- 13.50 **Marieke Ruiter** (Amsterdam)  
Daily modulation of energy metabolism by the SCN
- 14.10 **Marieke Pennings** (Leiden)  
Effects of excitatory amino acids on the phase of the circadian pacemaker of the hamster
- 14.30 **Barbara Biemans** (Groningen)  
SCN involvement in memory retention modulation: analysis at the level of vasopressin, cholinergic signal transduction and the effect of aging
- 14.50 **Stephanie Perreau** (Amsterdam)  
The melatonin rhythm: in vivo evidence for a GABAergic/glutamatergic clock control
- 15.10 **Mariska van Steensel** (Leiden)  
Opioids effects on the expression of Syrian hamster Per1 in the suprachiasmatic nuclei
- 15.30 Break and program main meeting

***CIRCADIAN RHYTHMS 2***

Moderator: Dries Kalsbeek (Amsterdam)

- 17.00 **Tiziane Adage** (Groningen)  
Heavy physical workloads disturb circadian rhythms in rats
- 17.20 **Joke Meijer** (Leiden)  
Phase differences between oscillating neurons determine neuronal network properties of the suprachiasmatic nuclei
- 17.40 **F. Tamanini** (Rotterdam)  
Nucleocytoplasmic shuttling and mCRY-dependent inhibition of ubiquitilation of the mPER2 clock protein nucleus



*Satellite (Renkum)*

Meeting

**'NWO PRIORITEITSPROGRAMMA  
GEHEUGENPROCESSEN EN DEMENTIE'**

Moderator: Rob Heinsbroek (Den Haag)  
*(this satellite meeting composes oral  
communications as well as poster  
presentations)*

- 10.00 Opening
- 10.15 **Fred van Leeuwen & David Fischer**  
(Amsterdam)  
Molecular misreading in neurodegenerative  
diseases, its evaluation in transgenic +1 mice  
and its contribution to dementia
- 10.40 **Monique Breteler** (Rotterdam)  
Hypertension, cerebral white matter lesions and  
dementia
- 11.05 **Marcel Verbeek** (Nijmegen)  
Inflammatory mechanisms in Alzheimer's disease  
brains
- 11.30 **Paul Luiten & Jaap Korf** (Groningen)  
Neuronal degeneration and impaired plasticity in  
aging and dementia, animal model-postmortem,  
and in vivo study
- 11.55 **Jeannette Grootendorst** (Leiden)  
Apo-E4 transgenic mouse: animal model for  
Alzheimer's disease
- 12.20 **Cock van Duijn** (Rotterdam)  
Genetic-epidemiologic study of early-onset  
Alzheimer's disease in a genetically isolated  
population
- 12.45 Closing words
- 13.00 **POSTER SESSION GpD** (*Branding Annex*)  
(including group lunch)

**POSTER SESSION GpD**

GpD1

**E.A. van der Zee**

SCN involvement in memory retention modulation I:  
Analysis at the level of vasopressin and cholinergic  
signal transduction

GpD2

**B.A.M. Biemans**

SCN involvement in memory retention modulation II:  
Impact of ageing of the circadian system

GpD3

**G.J.J. Stege**

Gliosis and the role of small heat-shock proteins in brains  
of dementia patients

GpD4

**M.M. Verbeek**

Inflammatory mechanisms in Alzheimer's disease brains

GpD5

**F.W. van Leeuwen**

Molecular misreading of the ubiquitin gene in various  
neurological disorders

GpD6

**M.B. de Ruiter**

Attention to affective words as a characteristic of non-  
pathological dissociation: an ERP study

GpD7

**B.M. Elzinga**

Directed forgetting between, but not within, dissociative  
personality states

GpD8

**D.J. Veltman**

Maintenance versus manipulation in verbal working  
memory revisited: an fMRI study

GpD9

**Marie-Noëlle Ané**

Three years follow-up of motor and cognitive functioning  
in carriers for Huntington's disease compared to non-  
carriers