

## CURRICULUM VITAE

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### **BIOSKETCH**

Dr. Reneman is Professor of Translational Neuroradiology and a Neuroradiologist at the Academic Medical Center (AMC) in Amsterdam. She obtained her PhD degree in 2001 *cum laude* on neuroimaging of the potential neurotoxic effects of ecstasy and worked as a postdoctoral research fellow for more than 3 years at several top universities and laboratories abroad (e.g., UCLA, Johns Hopkins University, Imperial College, Hammersmith Hospital). She was trained as a Radiologist from 2001 to 2006 and subsequently did a European Fellowship in Neuroradiology. Dr. Reneman is an AMC Principle Investigator since 2012, and obtained her University Teaching Qualification (BKO) in 2013 from the University of Amsterdam (UvA).

Her PhD research resulted in publications in journals such as the Lancet and Archives of General Psychiatry. Personalized funding obtained in 2008 (Veni and AMC Fellowship) enabled her to start a self-initiated innovative line of research at the AMC entitled 'Translational Neuroradiology'. Investigating the effects of drugs of abuse and medications (such as ecstasy, amphetamine, chemotherapy, methylphenidate and antidepressants) on brain and behavior using a highly multidisciplinary and translational approach is at the heart of their work. Current lines of research involve application of innovative molecular imaging methodologies to study the effects of drugs on the developing human brain non-invasively. This unique line of research provides insight into benefit and harm (evidence based medicine) of frequently prescribed psychotropic medications and its application in personalized medicine.

Dr. Reneman is the co-founder of the Brain Imaging Center (BIC). The BIC aims to structure and combine all the available knowledge in the field of neuroimaging at the AMC into one center of expertise. She is the AMC Brain Imaging research program leader of the new research organization of the AMC-UvA-VUmc-VU 'Neuroscience Amsterdam'. With her research group Dr. Reneman also participates in the Amsterdam Brain and Cognition (ABC) priority programme of the UvA, an interdisciplinary institute for cognition research. She was co-promotor of 10 successfully completed PhD theses, and is currently supervising 5 PhD students and one Post-doc. Dr. Reneman spends 0.6 fte of her time on research, teaching and mentoring of PhD students, and 0.4 fte on clinical work.

## EDUCATION, TRAINING AND EMPLOYMENT

### Education

1987-1989	BA	Istituto per L'arte e il Restauro, Firenze, Italy (Graphic Design)
1989-1995	BSc	UvA, Amsterdam (Medicine)
1996-1998	MD	UvA, Amsterdam (Medicine)
1998-2001	PhD <i>cum laude</i>	UvA, Amsterdam (Nuclear Medicine and Radiology, December 6, 2001). 'Investigating the potential neurotoxicity of Ecstasy: an imaging approach' Promotor: Prof. G.J. den Heeten, co-promotores: Prof. J. Booij, Prof. W. van den Brink and Prof. J.W.B. Gunning.
2001-2006	Medical specialization	AMC, Amsterdam (Radiology)
2006-2008	Sub-specialization	Neuroradiology, European Society of Neuroradiology (ESNR)
2010	Principle Investigator	AMC, Amsterdam (Radiology)

### Training and teaching

1994-1995	Graduate student	Exchange program. University of California at Santa Barbara and Los Angeles (Biological Sciences and School of Public Health)
1997	Intern	Kaoma District Hospital, Zambia (Tropical Pediatrics)
2000-2001	Research fellow	Post doctoral research fellow. Johns Hopkins University, Baltimore, USA (Neurology)
2006-2007	Research fellow	Hammersmith Hospital, Imperial College, London, UK (Perinatal Neuroimaging)
2013	BKO	University Teaching Qualification, UvA, Amsterdam

### Employment

2016-present	Professor	Translational Neuroradiology, University of Amsterdam
2007-present	Neuroradiologist	Department of Radiology, AMC, Amsterdam
2011-present	Co-founder and daily management	Brain Imaging Center (BIC) at the AMC
2016-present	Programme leader	Brain Imaging Neuroscience Amsterdam
2008-2016	Group leader	'Translational Neuroradiology' group

## SUPERVISION OF PHD STUDENTS

PhD student	Project Title	Supervisors	Start-and end date	PhD defence
1. Maartje de Win	Neurotoxicity of XTC: causality, course and clinical relevance (the NeXT study)	Prof. W. Van den Brink Prof. G.J. den Heeten Dr. J. Booij Dr. L. Reneman*	9/2001-3/2007	March 2007 <i>With honors</i>
2. Anne Klomp	Antidepressants and the adolescent brain: changing the course of neurodevelopment?	Prof. D. Denys Dr. L. Reneman*	11/2008-11/2012	May 2013
3. Marieke Schouw	Pharmacological MRI in the assessment of monoaminergic function	Prof. F. Boer Dr. L. Reneman* Prof. C.B.L.M Majoie Dr. A. Nederveen	1/2009-1/2013	July 2013
4. Kajo van der Marel	Structural and functional MRI of normal and compromised rat brain development	Prof. M. Viergever (ISI, UMCU) Dr. R.M. Dijkhuizen (ISI, UMCU) Dr. L. Reneman*	9/2008-7/2013	June 2013 (UMCU)
5. Anne Marije Kaag	Serotonin transporter gene variation and sensitivity to conditioned cues: cause and cure in cocaine dependence	Prof. W. vd Brink Dr. L. Reneman* Dr. J. Homberg Dr. G. van Wingen	1/2012-1/2016	May 2016

6. Hyke Tamminga	Cognitie als predictor voor medicatie effect bij kinderen met ADHD/stemmingsstoornissen	Prof. H. Geurts Prof. L. Reneman*	6/2011-3/2015	June 2016
7. Anouk Schrantee	Validating non invasive imaging of the serotonergic- and dopaminergic system	Prof. L. Reneman* Prof. S.A.R.B. Rombouts Prof. P.J. Lucassen	8/2011-11/2015	November 2016
8. Marco Bottelier	Effects of fluoxetine and methylphenidate on brain development: an fMRI study	Prof. L. Reneman* Prof. R. Lindauer Dr. M.B. de Ruiter	1/2010-1/2016	September 2017
9. Sanne Menning	Structural, biochemical and functional indices of chemotherapy-induced cognitive deficits in cancer patients	Prof. D. Veltman Prof. L. Reneman* Dr. S. Schagen (NKI/AVL) Dr. M. de Ruiter	1/2010-3/2015	December 2017
10. Michelle Solleveld	The effects of methylphenidate on sleep and GABA	Prof. P.J. Lucassen Prof. L. Reneman* Dr. A.G. Schrantee	3/2014-6-2017	January 2018
11. Peter Karel	The role of the serotonin transporter genetic variation in the cause and cure of cocaine addiction	Dr. J. Homberg Prof. L. Reneman*	1/2012-1/2019	October 2019
12. Myrle Kemperman	Imaging of cognitive dysfunction in breast and testicular cancer survivors	Prof. L. Reneman* Prof. S. Schagen (NKI/AVL) Dr. M. de Ruiter	7/2010-1/2015	Mid 2020
13. Cheima Bouziane	Non invasive imaging of the serotonergic- and dopaminergic system	Prof. L. Reneman* Dr. S. Kooij Dr. M.W.A. Caan	1/2012-11/2015	Mid 2020
14. Maik Derksen	Effects of Deep Brain Stimulation on functional connectivity in the corticostriatal thalamic circuits. Validating non invasive imaging of the serotonergic- and dopaminergic system in rat brain.	Prof. D. Denys Prof. L. Reneman* Dr. I. Wilhun	4/2012-4/2017	2020
15. Martine van Doorn	Structural and functional fetal brain imaging with MRI	Prof. C.B.L Majoie Prof. L. Reneman*	1/2012-1/2019	2020
16. Antonia Kaiser	Neurobiological signatures of emotion-regulation and stress resilience	Prof. L. Reneman* Prof. P.J. Lucassen Dr. A.G. Schrantee Dr. M. Bottelier	1/9/2017-1/9/2021	2022

\* indicates co-promotor or promotor

## RESEARCH SUPPORT

### ONGOING AND COMPLETED RESEARCH SUPPORT

Source	Project Title	Budget granted (€)		Position
Suffugium	Long-term effects of MPH on brain development	55.200	6/2017-5-2019	Applicant and projectleader
Hartstichting Nederland, i.c. H. Tan	Control of heart rhythm by the brain: the impact of stress-induced reductions in amygdala GABA activity on cardiac electrophysiology	50.000	1/2018-1/2020	Co-applicant
Amsterdam Neuroscience i.c.w. VUmc	The multimodal brain (MuMoBrain): exploring the cognitive correlates of connectomics across modalities?	50.000	6/2018-5/2020	Co-applicant
AMC Innovation Grant	'Implementation of a neurovascular MRI coil for clinical 7T MRI'	175.000	2017-2020	Co-applicant
Amsterdam	Interfering with emotions: targeting	50.000	11/2017-	Co-applicant

Neuroscience i.c.w. VUmc	dysregulation in adult attention-deficit hyperactivity disorder?		1/2020	
Amsterdam Neuroscience i.c.w. VUmc	Functional magnetic resonance spectroscopy in impulsive-compulsive spectrum disorders	100.00	11/2016- 11/2018	Co-applicant and projectleader
Amsterdam Brain and Cognition (UvA) i.c.w. SILS	Detecting changes in adult neurogenesis in the live human brain using magnetic Resonance spectroscopy; effects of exercise on cognition'	250.000	11/2015- 11/2017	Co-applicant and projectleader
KWF (i.c.w NKI/AvL)	Prospective predictors of late cognitive decline after anthracycline-based adjuvant chemotherapy for breast cancer: the role of brain white matter	431.200	9/2013- 9/2017	Co-applicant and projectleader
TOP (i.c.w. Donders Instituut Nijmegen)	Serotonin transporter gene variation and sensitivity to conditioned cues: cause and cure in cocaine dependence.	675.000	1/2012- 1/2016	Co-applicant and projectleader
AMC (Stimulerings OiO)	Non invasive imaging of the serotonergic- and dopaminergic system	205.160	1/2012- 11/2015	Projectleader
ERA-NET PRIOMED CHILD	Validating non invasive imaging of the serotonergic- and dopaminergic system and adult neurogenesis with MRI: towards a better insight in the neurobiological mechanisms underlying psychiatric disorders in the pediatric population	801.164	2/2011- 9/2015	Applicant and EU project leader/coordin ator
Fonds Nuts Ohra (i.c.w Prof. H. Geurts, CSCA)	Cognition as a predictor for medication effects in children suffering from ADHD/depression	100.000	6/2011- 6/2015	Co-applicant and projectleader
KWF (i.c.w NKI/AVL)	Structural, biochemical and functional indices of chemotherapy-induced cognitive deficits in cancer patients	497.500	1/2010- 3/2015	Co-applicant and projectleader
AMC (Stimulerings OiO bij KWF Fellowship M. De Ruiter) (i.c.w. NKI/AVL)	Application of neuroimaging techniques in the investigation of cognitive deficits following chemotherapy	205.160	7/2010- 1/2015	Projectleader
ZoNMW (Implementatiepr oject, i.s.m. Donders Institute Nijmegen)	De rol van serotonine in cocaine verslaving: Identificatie van een nieuwe diagnostische marker voor cocaine verslaafden die reageren op 'reversal' gedragstherapie.	50.000	12/2010- 3/2013	Co-applicant and projectleader
AMC Fellowship	Long term effects of (prescribed) psychotropic drugs on the developing brain and behavior	600.000	4/2008- 4/2013	Applicant and projectleader
ZoNMW (VENI)	SSRIs and the developing brain	165.608	6/2008- 12/2013	Applicant and projectleader
AMC (Stimulerings OiO)	SSRIs and the developing brain	205.160	11/2008- 11/2012	Projectleader
ZoNMW	Neurotoxicity of XTC: causality, course and clinical relevance (the NeXT study)	1.005.900	9/2001- 1/2007	Co-applicant
Fulbright AIO/OIO	The Value of <sup>1</sup> H Magnetic Resonance	118.532	5/2000-	Applicant and

Grant	Spectroscopy in the detection of MDMA neurotoxicity : combined PET/ <sup>1</sup> H MRS brain study		6/2001	projectleader
TOTAL		€5.790.484		

#### HONORS AND AWARDS

- 2018 Nomination for Peter Moleman Award, biannual award for the best Dutch publication in the field of psychopharmacology.
- 2018 ZoNMW Veni grant to A. Schranter in my group.
- 2017 2<sup>nd</sup> prize best AMC PhD thesis, awarded to Dr. Schranter from my group.
- 2017 ISMRM; lecture award in the category 'Psychiatry' awarded to Dr. Schranter
- 2016 ISMRM; lecture award in the category 'Psychiatry' awarded to Drs. Schranter
- 2014 ISMRM; lecture award in the category 'Psychiatry' awarded to Drs. Schranter
- 2012 Top reviewer, Drug and Alcohol Dependence
- 2011 ISMRM; poster nomination in the category 'Drug Research' awarded to Drs. Klomp
- 2008 ISMRM; poster award (second prize) in category 'Drug Research' awarded to Dr. Gsell
- 2007 Veni Grant
- 2007 AMC Fellowship
- 2006 Fellowship in the European Exchange Program in Neuroradiology from the European Society of Neuroradiology
- 2002 Science Trophy 2002, Hersenstichting Nederland
- 2001 PhD *Cum laude*
- 2000 NIDA Junior Investigator Travel Award from College on Problems on Drug Dependence (CPDD)
- 2000 Fulbright AIO/OIO Grant for research as postdoctoral research fellow with Dr. G.A. Ricaurte, Department of Neurology, Johns Hopkins Medical Institutions, Baltimore, USA
- 2000 Marie-Curie Award from the European Society of Nuclear Medicine
- 1994 Education Abroad Program (EAP). Scholarship for master's program at University of California: Graduate Student in Biological Sciences, University of California at Santa Barbara (UCSB).

#### MANAGEMENT

- Group leader 'Translational Neuroradiology' currently containing 6 members (5 PhD students, 1 post doc).
- Coordinator of several high impact grants including an EU FP6 project from ERA-NET PrioMedChild, and a TOP grant.
- Co-founder and daily manager of the Brain Imaging Center (BIC) AMC, founded October 2011 ([www.lebic-amc.nl](http://www.lebic-amc.nl)).
- Research Programme leader 'Brain Imaging' together with Prof. D.J. Veltman (VUmc) of the AMC-UvA-VUmc-VU 'Neuroscience Amsterdam' research organization.

#### CONFERENCE ORGANIZATION

- Organizer and chair of 1<sup>st</sup> ABC Neuroimaging Symposium 'What does Amsterdam know about the brain' (2015) together with BIC and ABC members, Amsterdam.
- Organizer and chair of ECNP Symposium 'Pharmacological fMRI for neuropharmacological assessment' (2015) together with K. Knutsen. Amsterdam.
- Organizer and chair of the minisymposium 'Effects of psychotropic drugs on the developing brain' (2013). Invited speaker: Prof. S.L. Andersen, Director of the Laboratory of Developmental Neuropharmacology, Harvard Medical School, Boston, USA.
- Co-organizer Dutch Endo-Neuro meeting session (2011): Serotonin and the interaction with the environment: age-dependent effects. Invited speaker: Prof. G.A. Gingrich. Columbia Univ. Medical Center, NYS Psychiatric Institute, New York, NY, USA
- Co-organizer Dutch Endo-Neuro meeting (2007): Neurotoxicity of recreational ecstasy consumption: Fact or fiction? at the Endo-Neuro-Psycho (ENP) meeting in Doorwerth 2007 together with Dr. B. Buwalda.
- Organizer of the annual BIC meeting (2012-present), including annual BIC PhD paper award.

#### COMMITTEES

- Member of the Editorial Board of Scientifica, Molecular Imaging area (2012-present)
- Active member of the Priority Program Amsterdam Brain and Cognition (ABC) of the University of Amsterdam (2012-present).

- Participation in expert panels on Drug Abuse and Pediatric Medication for Netherlands, UK and USA government (2001-present), such as motion kst-33000-XVI-153 on Demedicalisation of Children.
- Member of the Teaching committee, Graduate School Neuroscience Amsterdam Rotterdam ONWAR (as PhD student in 1998-2000, and as PI from 2013-present).

#### **PHD THESIS DEFENCE COMMITTEE**

2008-2018 Member of 19 thesis review committees (University of Amsterdam [13], Radboud University Nijmegen [1], Delft University [1], Erasmus University Rotterdam [1], RijksUniversiteit Groningen [1], Vrije University [2], Monash University, Australia [1]).

#### **REVIEWER**

Ad hoc reviewer for: (selected) the Lancet, American Journal of Psychiatry, Archives of General Psychiatry, Psychopharmacology, Biological Psychiatry, Neuroimage, Drug and Alcohol Dependence, and many others. Reviewer for the following funding agencies: Referee for UK's Medical Research Council (MRC) for research grants on Experimental Medicine for Mental Health (2011), Hersenstichting and NWO (2008-present).

#### **PROFESSIONAL MEMBERSHIP**

- Nederlandse Vereniging voor Radiologie (NvVR), section Neuroradiology (2001-present)
- European College of Neuropsychopharmacology (2013-present)
- European Society of Neuroradiology (2006-present)

#### **(INTER)NATIONAL COLLABORATIONS**

- Amsterdam Brain and Cognition (ABC) University of Amsterdam: Prof. H. Geurts\*,
- UMC Utrecht, Imaging Sciences Institute: Dr. R. Dijkhuizen\*
- Radboud Universiteit Nijmegen, Donders Centre for Neuroscience, Dept. of Cognitive Neuroscience, Div. Molecular Neurobiology: Dr. J. Homberg\*
- NKI/AVL, Psychosocial Research: Dr. S. Schagen/Dr. M.B. de Rooter\*
- Delft University of Technology, Image Sciences and Technology, Dr. F. Vos
- Slaapcentrum MC Haaglanden, Dr. L. Rijsman\*
- Swammerdam Institute for Life Sciences (SILS): Prof. Dr. P.J. Lucassen\*
- Leiden University Medical Center, dept. Radiology, Prof. S.A.R.B. Rombouts\*
- Johns Hopkins University School of Medicine, Dept Radiology, Prof. S. Mori and Prof. GA Ricaurte at the dept. of Neurology, Baltimore, USA
- Harvard Medical School/McLean Hospital, Dept. of Psychiatry, Prof. S.L. Andersen, laboratory of Developmental Neuropharmacology, Boston, USA
- MRC Clinical Sciences Centre, Biological Imaging Centre, Imperial College London, Hammersmith Campus, London UK: Dr. W. Gsell\*
- GMPC (Groupe Mémoire & Plasticité comportementale) –University of Caen, France: Prof. F. Dauphin and Dr. Bouet.
- Istituto Superiore di Sanità, Dept. of Behavioral Neuroscience and of Molecular & Cellular Imaging, Department Cell Biology & Neurosciences, Roma, Italy: Dr. W. Adriani and R. Canese.
- Baylor College of Medicine, Developmental Biology, Houston, Texas, USA: Dr. Maletic-Savatic.
- Center for Lifespan Changes in Brain and Cognition of the Department of Psychology, University of Oslo: Prof. K. Walhovd.
- NordicNeuroLab (NNL) and Diagnostic Physics, Oslo University Hospital, Dr. I. Groote and Prof. A. Bjørnerud, Oslo, Norway.

\*shared PhD students

#### **MEETINGS WITH THE PRESS (SELECTED)**

For full listing see and samples, follow this [link](#)

#### Effects of Psychotropic drugs On Developing brain (ePOD; 2011-present)

- Radio: Nieuws & co
- Television: TV max, and requests from various TV programs: Zembra, Brandpunt, NOS, Nieuwsuur, RTL News
- (Patient)networks: ADHD-network, ADHD patient organizations (Impulsief, Balans), pharmaceutical reports (Pharmaceutisch Weekblad,
- Societies: ECNP conference, Dutch society of Psychiatry, and ZoNMW: Effective, efficient, Safer use of Medicines (GGG).

- Newspapers/magazines: such as het Parool, de Volkskrant, NRC Handelsblad, de Telegraaf. iBN/de Stem, de Stentor, Libelle.
- Internet: Nu.nl, AD.nl, NOS.nl, pharماسite.nl, RTL.nl, ADHDnetwerk.nl [and other sites]

#### XTC research (2001-present)

- Newspaper/magazine: various publications, such as NRC Handelsblad, ANP, Volkskrant, AMC Magazine, Psychology Magazine, SPITS, Scientific American, Medisch Contact, Folia, Wikipedia. Bloomberg Businessweek, The Guardian, TopNews.us etc.
- Internet: NRC.nl, NU.nl, NOS.nl, Medisch Contact, artsennet.nl, libelle.nl, National Drug Prevention Alliance [and other sites]
- Radio: Dutch news, BNN, BNR, Amsterdam local radio
- TV: NOS op 3 News, Channel 4.

#### Aerotoxic syndrome (2013-present)

- Newspaper/magazine: Sick from flying? Telegraaf (2013).
- Deadly poison in the airplane. Telegraaf (2015), with comments in various press including het Parool, BNR News radio, Powned, RTLnieuws, NOS, and others.

#### Chemobrain (2010)

- Newspaper/magazine: AMC Magazine (2010).
- PrioMedChild project (2011)
- Newspaper/magazine: Mediator

### **TEACHING**

- University Teaching Qualification (BKO) UvA (2013).
- Co-founder (2011) and daily manager of the BIC at the AMC, involving guidance to and exchange between the educational activities of PhD students and post docs in the disciplines of Psychiatry, Radiology, Nuclear Medicine and Neurology.
- Supervision of Bachelor and Master students at the department of Radiology AMC (on average 5 per year).
- Neuroradiological lecturer for Residents in Radiology AMC (2007-present).
- Monthly teaching meeting NeuroWerkOverleg (NWO) for Master and PhD students at the department of Radiology AMC (2008-present).

### **PEER REVIEWED PUBLICATIONS (in reversed chronological order)**

109 Pubmed papers, for full listing see this [link](#)

- 109 original peer reviewed articles (34 senior/last author; 8 penultimate, 20 1<sup>st</sup>, 11 2<sup>nd</sup>)
- In >70% of my output I played a substantial role (senior/last/penultimate or 2<sup>nd</sup> author).

Citations = 2354 (on average 17 cites/article); 3831 (Google Scholar)

HI = 26 (Web of Science); 31 (Google Scholar)

#### Published or in Press

109. Kaag AM, Schulte MHJ, Jansen JM, van Wingen G, Homberg J, van den Brink W, Wiers RW, Schmaal L, Goudriaan AE, **Reneman L**. The relation between gray matter volume and the use of alcohol, tobacco, cocaine and cannabis in male polysubstance users. *Drug Alcohol Depend.* 2018 187:186-194.

108. Stouten-Kemperman MM, de Ruiter MB, Boogerd W, Kerst JM, Kirschbaum C, **Reneman L**, Schagen SB. Brain Hyperconnectivity >10 Years After Cisplatin-Based Chemotherapy for Testicular Cancer. *Brain Connect.* 2018 (in press).

107. Schrantee A, Lucassen PJ, Booij J, **Reneman L**. Serotonin transporter occupancy by the SSRI citalopram predicts default-mode network connectivity. *Eur Neuropsychopharmacol* (in press).

106. Kaag AM, **Reneman L**, Homberg J, van den Brink W, van Wingen GA. 2018. Enhanced Amygdala - Striatal Functional Connectivity during the Processing of Cocaine Cues in Male Cocaine Users with a History of Childhood Trauma. *Front Psychiatry.* 12: 9:70.

105. Karel P, Almacellas-Barbanoj A, Prijn J, Kaag AM, **Reneman L**, Verheij MMM, Homberg JR. 2018. Appetitive to aversive counter-conditioning as intervention to reduce reinstatement of reward-seeking behavior: the role of the serotonin transporter. *Addict Biol* (in press).

104. van Iersel L, Meijneke RWH, Schouten-van Meeteren AYN, **Reneman L**, de Win MM, van Trotsenburg

ASP, Bisschop PH, Finken MJJ, Vandertop WP, van Furth WR, van Santen HM. 2018. The development of hypothalamic obesity in craniopharyngioma patients: A risk factor analysis in a well-defined cohort. *Pediatr Blood Cancer* 65:e26911.

103. Mugie SM, Koppen IJN, van den Berg MM, Groot PFC, **Reneman L**, de Ruiter MB, Benninga MA. 2018. Brain processing of rectal sensation in adolescents with functional defecation disorders and healthy controls. *Neurogastroenterol Motil* (in press).

102. Karel P, Calabrese F, Riva M, Brivio P, Van der Veen B, **Reneman L**, Verheij M, Homberg J. 2018. d-Cycloserine enhanced extinction of cocaine-induced conditioned place preference is attenuated in serotonin transporter knockout rats. *Addict Biol.* 23:120-129.

101. Bouziane C, Caan MWA, Tamminga HGH, Schrantee A, Bottelier MA, de Ruiter MB, Kooij SJJ, **Reneman L**. 2017. ADHD and maturation of brain white matter: A DTI study in medication naive children and adults. *Neuroimage Clin.* 29: 53-59.

100. Bottelier MA, Schrantee A, Ferguson B, Tamminga HGH, Bouziane C, Kooij JJS, de Ruiter MB, **Reneman L**. 2017. Age-dependent effects of acute methylphenidate on amygdala reactivity in stimulant treatment-naive patients with Attention Deficit/Hyperactivity Disorder. *Psychiatry Res.* 269: 36-42.

99. Bottelier MA, Schrantee A, Ferguson B, Tamminga HGH, Bouziane C, Kooij JJS, de Ruiter MB, **Reneman L**. 2017. Age-dependent effects of acute methylphenidate on amygdala reactivity in stimulant treatment-naive patients with Attention Deficit/Hyperactivity Disorder. *Psychiatry Res.* 269: 36-42.

98. Staphorst MS, Benninga MA, Bisschop M, Bon I, Busschbach JJV, Diederik K, van Goudoever JB, Haarman EG, Hunfeld JAM, Jaddoe VVW, de Jong KJM, de Jongste JC, Kindermann A, Königs M, Oosterlaan J, Passchier J, Pijnenburg MW, **Reneman L**, Ridder L, Tamminga HG, Tiemeier HW, Timman R, van de Vathorst S. 2017. The child's perspective on discomfort during medical research procedures: a descriptive study. *BMJ Open.* 7: e016077.

97. Schulte MHJ, Kaag AM, Wiers RW, Schmaal L, van den Brink W, **Reneman L**, Homberg JR, van Wingen GA, Goudriaan AE. 2017. Prefrontal Glx and GABA concentrations and impulsivity in cigarette smokers and smoking polysubstance users. *Drug Alcohol Depend.* 179:117-123.

96. Huffnagel IC, Redeker EJW, **Reneman L**, Vaz FM, Ferdinandusse S, Poll-The BT. 2017. Mitochondrial Encephalopathy and Transient 3-Methylglutaconic Aciduria in ECHS1 Deficiency: Long-Term Follow-Up. *JIMD Rep* (in press).

95. Solleveld MM, Schrantee A, Puts NAJ, Lucassen PJ\*, **Reneman L**\*. 2017. Age-dependent, lasting effects of methylphenidate on the GABAergic system of ADHD patients. *Neuroimage Clin.* 5: 812-818.

\*These authors contributed equally

94. Schrantee A, Václavů L, **Reneman L**, Verberne HJ, Booij J, Tan HL. 2017. QT prolongation by dexamphetamine: Does experience matter? *J Cardiovasc Electrophysiol.* 28: 912-916.

93. Schrantee A, Bouziane C, Bron EE, Klein S, Bottelier MA, Kooij JJ, Rombouts SA, **Reneman L**. 2017. Long-term effects of stimulant exposure on cerebral blood flow response to methylphenidate and behavior in attention-deficit hyperactivity disorder. *Brain Imaging Behav* (in press).

92. Versteeg RI, Schrantee A, Adriaanse SM, Unmehopa UA, Booij J, **Reneman L**, Fliers E, la Fleur SE, Serlie MJ. 2017. Timing of caloric intake during weight loss differentially affects striatal dopamine transporter and thalamic serotonin transporter binding. *FASEB J* 31: 4545-4554.

91. Menning S, de Ruiter MB, Veltman DJ, Boogerd W, Oldenburg HS, **Reneman L**, Schagen SB. 2017. Changes in brain white matter integrity after systemic treatment for breast cancer: a prospective longitudinal study. *Brain Imaging Behav* (in press).

90. Menning S, de Ruiter MB, Veltman DJ, Boogerd W, Oldenburg HS, **Reneman L**, Schagen SB. 2017. Changes in brain activation in breast cancer patients depend on cognitive domain and treatment type. *PLoS One.*



12: e0171724.

89. Schrantee A, Tremoleda JL, Wylezinska-Arridge M, Bouet V, Hesselting P, Meerhoff GF, de Bruin KM, Koeleman J, Freret T, Boulouard M, Desfosses E, Galineau L, Gozzi A, Dauphin F, Gsell W, Booij J, Lucassen PJ, **Reneman L**. 2017. Repeated dexamphetamine treatment alters the dopaminergic system and increases the phMRI response to methylphenidate. *PLoS One* 12: e0172776. 89.

88. van Dijk T, Barth P, **Reneman L**, Appelhof B, Baas F, Poll-The BT. 2017. A de novo missense mutation in the inositol 1,4,5-triphosphate receptor type 1 gene causing severe pontine and cerebellar hypoplasia: Expanding the phenotype of ITPR1-related spinocerebellar ataxia's. *Am J Med Genet A*. 173: 207-212.

87. Kaag AM, van Wingen GA, Caan MW, Homberg JR, van den Brink W, **Reneman L**. 2017. White matter alterations in cocaine users are negatively related to the number of additionally (ab)used substances. *Addict Biol* 22: 1048-1056.

86. Vegting Y, **Reneman L**, Booij J. 2016. The effects of ecstasy on neurotransmitter systems: a review on the findings of molecular imaging studies. *Psychopharmacology* 233: 3473-3501.

85. Kaag AM, Schluter RS, Karel P, Homberg J, van den Brink W, **Reneman L**, van Wingen GA. 2016. Aversive Counterconditioning Attenuates Reward Signaling in the Ventral Striatum. *Front Hum Neurosci* 19: 418.

84. Menning S, de Ruiter MB, Kieffer JM, Agelink van Rentergem J, Veltman DJ, Fruijtier A, Oldenburg HS, Boven E, van der Meij S, Lustig V, Bos ME, Boogerd W, **Reneman L**, Schagen SB. 2016. Cognitive Impairment in a Subset of Breast Cancer Patients After Systemic Therapy-Results From a Longitudinal Study. *J Pain Symptom Manage*. 52:560-569.e1

83. Schrantee A, Mutsaerts H, Bouziane C, Tamminga H, Bottelier MA, **Reneman L**. 2016. The age-dependent effects of a single-dose methylphenidate challenge on cerebral perfusion in patients with attention-deficit/hyperactivity disorder. *Neuroimage Clin*. 13:123-129.

82. Schrantee A, Tamminga, HGH, Bouziane C, Bottelier MA, Bron EE, Mutsaerts HJMM, Zwinderman AH, Groote IR, Rombouts SAR, Lindauer RJL, Klein S, Niessen WJ, Opmeer BC, Boer F, Lucassen PJ, Andersen SL, Geurts HM, **Reneman L**. 2016. Age-Dependent Effects of Methylphenidate on the Human Dopaminergic System in Young vs Adult Patients With Attention-Deficit/Hyperactivity Disorder. *JAMA Psychiatry* 73: 955-962..

81. van de Vijver I, Ridderinkhof KR, Harsay H, **Reneman L**, Cavanagh JF, Buitengeweg JIV, Cohen MX. 2016. Frontostriatal anatomical connections predict reinforcement learning success with increasing task difficulty and age. *Neurobiol Aging* 46: 1-12.

80. Bottelier MA, Schrantee A, van Wingen G, Ruhé HG, de Ruiter MB, **Reneman L**. 2016. A power analysis for future clinical trials on the potential adverse effects of SSRIs on amygdala reactivity. *Front Biol*. 11: 256–259.

79. van Doorn M, Oude Rengerink K, Newsum EA, **Reneman L**, Majoie CB, Pajkrt E. 2016. Added value of fetal MRI in fetuses with suspected brain abnormalities on neurosonography: a systematic review and meta-analysis. *J Matern Fetal Neonatal Med* 29:2949-61.

78. Tamminga HG, **Reneman L**, Huizenga HM, Geurts HM. 2016. Effects of methylphenidate on executive functioning in attention-deficit/hyperactivity disorder across the lifespan: a meta-regression analysis. *Psychol Med* 46:1791-807.

77. Su T, Wit FW, Caan MW, Schouten J, Prins M, Geurtsen GJ, Cole JH, Sharp DJ, Richard E, **Reneman L**, Portegies P, Reiss P, Majoie CB; AGEhIV Cohort Study. 2016. White matter hyperintensities in relation to cognition in HIV-infected men with sustained suppressed viral load on cART. *AIDS* 30: 2329-2339.

76. Kaag AM, Levar N, Woutersen K, Homberg J, van den Brink W, **Reneman L**, vanWingen G. 2016. Hyperresponsiveness of the Neural Fear Network During Fear Conditioning and Extinction Learning in Male Cocaine Users. *Am J Psychiatry* 173: 1033-1042.
75. **Reneman L**, Schagen SB, Mulder M, Mutsaerts HJ, Hageman G, de Ruiter MB. 2016. Cognitive impairment and associated loss in brain white microstructure in aircrew members exposed to engine oil fumes. *Brain Imaging and Behavior* 10:437-44.
74. Schrantee AGM, Ferguson B, Stoffers D, Booij J, Rombouts SERB, **Reneman L**. 2016. Effects of dexamphetamine-induced dopamine release on resting-state network connectivity in chronic dexamphetamine users and controls. *Brain Imaging and Behavior* 10:548-58.
73. Stouten-Kemperman MM, de Ruiter MB, Caan MW, Boogerd W, Kerst MJ, **Reneman L**, Schagen SB. 2015. Lower cognitive performance and white matter changes in testicular cancer survivors 10 years after chemotherapy. *Hum Brain Mapp.*36:4638-47.
72. Van der Marel, Bouet V, Meerhoff G, Freret T, Boulouard M, Dauphin F, Klomp A, Lucassen PJ, Homberg JR, Dijkhuizen RM\*, **Reneman L**\*. 2015. Effects of long-term methylphenidate treatment in adolescent and adult rats on hippocampal shape, functional connectivity and adult neurogenesis. *Neuroscience* 19:243-58.  
\*These authors contributed equally
71. Crunelle CL, Kaag AM, van den Munkhof HE, Reneman L, Homberg JR, Sabbe B, van den Brink W, van Wingen G. 2015. Dysfunctional amygdala activation and connectivity with the prefrontal cortex in current cocaine users. *Hum Brain Mapp.* 36:4222-30.
70. Menning S, de Ruiter MB, Veltman DJ, Kirschbaum C, Boogerd W, **Reneman L**, Schagen S. 2015. Multimodal MRI and cognitive function in patients with breast cancer prior to adjuvant treatment - The role of fatigue. *Neuroimage Clinical* 7:547-54.
69. Bottelier MA, Schouw MLJ, de Ruiter MB, Ruhe HG, Lindauer RJL, **Reneman L**. 2015. Effects of methylphenidate during emotional processing in amphetamine users: preliminary findings. *Brain Imaging and Behavior* 9:878-86.
68. Stouten-Kemperman MM, de Ruiter MB, Boogerd W, Veltman DJ, **Reneman L**, Schagen SB. 2015. Very late treatment-related alterations in brain function of breast cancer survivors. *Journal of the International Neuropsychological Society* 21:50-61.
67. Van Schaik SM, **Reneman L**, Engelen M, Roos YB, Poll-The BT. 2015. Strokeliike Episodes and Cutis Marmorata Telangiectatica Congenita. *J Child Neurol* 30:129-32.
66. Schrantee A, Vaclavu L, Heijtel DFR, Caan MWA, Gsell W, Lucassen PJ, Nederveen AJ, Booij J, **Reneman L**. 2015. Dopaminergic system dysfunction in recreational dexamphetamine users. *Neuropsychopharmacology* 13: 1172-80.
65. Stouten-Kemperman MM, de Ruiter MB, Koppelmans V, Boogerd W, **Reneman L**, Schagen SB. 2015. Neurotoxicity in breast cancer survivors > 10 years post-treatment is dependent on treatment type. *Brain Imaging and Behavior* 9:275-84.
64. Kaag AM, Crunelle CL, van Wingen G, Homberg J, van den Brink W, **Reneman L**. 2014. Relationship between trait impulsivity and cortical volume, thickness and surface area in male cocaine users and non-drug using controls. *Drug and Alcohol Dependence* 144: 210-7.
63. Klomp A, Hamelink R, Feenstra M, Denys D, **Reneman L**. 2014. Increased Response to a 5-HT Challenge After Discontinuation of Chronic Serotonin Uptake Inhibition in the Adult and Adolescent Rat Brain. *PLoS One* 17;9(6):e99873.
62. Klomp A, Václavů L, Meerhoff GF, **Reneman L**\*, Lucassen PJ\*. 2014. Effects of chronic fluoxetine treatment on neurogenesis and tryptophan hydroxylase expression in adolescent and adult rats. *PLoS One* 14;9:e97603.  
\*These authors contributed equally

61. Schiering IA, de Haan TR, Niermeijer JM, Koelman JH, Majoie CB, **Reneman L**, Aronica E. 2014. Correlation between clinical and histologic findings in the human neonatal hippocampus after perinatal asphyxia. *J Neuropathol Exp Neurol* 73:324-34.
60. Bottelier MA, Schouw ML, Klomp A, Tamminga HG, Schrantee AG, Bouziane C, de Ruiter MB, Boer F, Ruhé HG, Denys D, Rijsman R, Lindauer RJ, Reitsma HB, Geurts HM, **Reneman L**. 2014. The effects of Psychotropic drugs On Developing brain (ePOD) study: methods and design. *BMC Psychiatry* 19;14:48.
59. Crunelle CL, Kaag AM, van Wingen G, van den Munkhof HE, Homberg JR, **Reneman L**, van den Brink W. 2014. Reduced frontal brain volume in non-treatment-seeking cocaine-dependent individuals: exploring the role of impulsivity, depression, and smoking. *Front Hum Neurosci* 17; 8:7
58. van der Marel K, Klomp A, Meerhoff GF, Schipper P, Lucassen PJ, Homberg JR, Dijkhuizen RM, **Reneman L**. 2014. Long-term oral methylphenidate treatment in adolescent and adult rats: differential effects on brain morphology and function. *Neuropsychopharmacology* 39:263-73.
57. Schrantee A, **Reneman L**. 2014. Pharmacological imaging as a tool to visualize dopaminergic neurotoxicity. *Neuropharmacology* 84C:159-169.
56. van Arnhem LA, Bunders MJ, Scherpbier HJ, Majoie CB, **Reneman L**, Frinking O, Poll-The BT, Kuijpers TW, Pajkrt D. 2013. Neurologic abnormalities in HIV-1 infected children in the era of combination antiretroviral therapy. *PLoS One* 8:e64398.
55. Klomp A, van Wingen GA, de Ruiter MB, Caan MW, Denys D, **Reneman L**. 2013. Test-retest reliability of task-related pharmacological MRI with a single-dose oral citalopram challenge. *Neuroimage*. 75:108-16.
54. Schouw ML, Caan MWA, Geurts HM, Schmand B, Booij J, Nederveen AJ, **Reneman L**. 2013. Monoaminergic dysfunction in recreational users of dexamphetamine. *European Neuropsychopharmacology* 3:1491-502.
53. Schouw ML, de Ruiter MB, Kaag AM, van den Brink W, Lindauer RJ, **Reneman L**. 2013. Dopaminergic dysfunction in abstinent dexamphetamine users: results from a pharmacological fMRI study using a reward anticipation task and a methylphenidate challenge. *Drug Alcohol Depend* 130:52-60.
52. Schouw ML, Kaag AM, Caan MW, Heijtel DF, Majoie CB, Nederveen AJ, Booij J, **Reneman L**. 2013. Mapping the hemodynamic response in human subjects to a dopaminergic challenge with dextroamphetamine using ASL-based pharmacological MRI. *Neuroimage* 72:1-9.
51. van Wezel EM, van Santen HM, van Furth WR, **Reneman L**, Bisschop PH, van Trotsenburg AS. 2012. [Children with obesity and declining linear growth curve: Cushing's disease. *Ned Tijdschr Geneesk* 156:A4677.
50. Booij, J, **Reneman L**, Alders M, Kuijpers TW. 2013. Increase in central striatal dopamine transporters in patients with Shwachman-Diamond syndrome: additional evidence of a brain phenotype. *Am J Med Genet A* 2013;161:102-7.
49. Klomp A, Caan MW, Denys D, Nederveen AJ, **Reneman L**. 2012. Feasibility of ASL-based phMRI with a single dose of oral citalopram for repeated assessment of serotonin function. *Neuroimage* 63:1695-700.
48. Klomp A, den Hollander B, de Bruin CM, Booij J, **Reneman L**. 2012. The effects of ecstasy (MDMA) on brain serotonin transporters are dependent on age-of-first exposure in recreational users and animals. *Plos One* 7:e47524.
47. den Hollander B, Schouw M, Groot P, Huisman H, Caan M, Barkhof F, **Reneman L**. 2012. Preliminary evidence of hippocampal damage in chronic users of ecstasy. *J Neurol Neurosurg Psychiatry* 83:83-5.
46. Klomp A, Tremoleda JL, Wylezinska M, Nederveen AJ, Feenstra M, Gsell W, **Reneman L**. 2012. Lasting effects of chronic fluoxetine treatment on the late developing rat brain: age-dependent changes in the serotonergic neurotransmitter system assessed by pharmacological MRI. *Neuroimage* 59:218-26.

45. **Reneman L**, de Win MM, Booij J, van den Brink W, den Heeten GJ, C.B.L.M. Majoie. 2012. Incidental brain findings on MRI in young healthy volunteers: prevalence and clinical implications. *AJNR Am J Neuroradiol.* 33:1971-4.
44. de Ruiter MB, **Reneman L**, Boogerd W, Veltman DJ, Caan M, Douaud G, Lavini C, Linn SC, Boven E, van Dam FS, Schagen SB. 2012. Late effects of high-dose adjuvant chemotherapy on white and gray matter in breast cancer survivors: Converging results from multimodal magnetic resonance imaging. *Hum Brain Mapp* 33:2971-83.
43. Schouw M, Schagen S, Caan M, Majoie CBLM, Booij J, Nederveen AJ, **Reneman L**. 2012. Mapping serotonergic dysfunction in MDMA (ecstasy) users using Pharmacological Magnetic Resonance Imaging. *Eur Neuropsychopharmacol* 22:537-45.
42. Bouet V, Klomp A, Freret T, Wylezinska M, Tremoleda J, Dauphin F, Boulouard M, Jan Booij J, Gsell W, **Reneman L**. 2012. Chronic fluoxetine treatment affects outgrowth and functionality of the serotonergic system, but not behavior, in an age-dependent manner. *Psychopharmacology* 221:329-39.
41. Klomp A, Tremoleda JL, Schrantee A, Gsell W, **Reneman L**. 2012. The use of pharmacological-challenge fMRI in pre-clinical research: application to the 5-HT system. *J Vis Exp.* 25.
40. Harsay HA, Cohen MX, **Reneman L**, Ridderinkhof KR. 2011. How the aging brain translates motivational incentive into action: the role of individual differences in striato-cortical white matter pathways. *Dev Cogn Neurosci* 1:530-9.
39. Homberg JR, Olivier JD, Blom T, Arentsen T, van Brunschot C, Schipper P, Korte-Bouws G, van Luijelaar G, **Reneman L**. 2011. Fluoxetine exerts age-dependent effects on behavior and amygdala neuroplasticity in the rat. *PLoS One* 31: 6, e16646.
38. de Ruiter MB, **Reneman L**, Boogerd W, Veltman DJ, van Dam FSAM, Nederveen AJ, Boven E, Schagen S. 2011. Cerebral hyporesponsiveness and cognitive impairment ten years after chemotherapy for breast cancer. *Human Brain Mapping* 32: 1206-1219.
37. Aukema EJ, Caan MW, Oudhuis N, Majoie CB, Vos FM, **Reneman L**, Last BF, Grootenhuis MA, Schouten-van Meeteren AY. 2009. White Matter Fractional Anisotropy Correlates With Speed of Processing and Motor Speed in Young Childhood Cancer Survivors. *Int J Radiat Oncol Biol Phys* 74:837-43.
36. de Win MM, Jager G, Booij J, **Reneman L**, Schilt T, Lavini C, Olabariaga SD, den Heeten GJ, van den Brink W. 2008. Sustained effects of ecstasy on the human brain: a prospective neuroimaging study in novel users. *Brain* 131: 2936-2945.
35. de Win MM, Jager G, Booij J, **Reneman L**, Schilt T, Lavini C, Olabariaga SD, Ramsey NF, Heeten GJ, van den Brink W. 2008. Neurotoxic effects of ecstasy on the thalamus. *Br J Psychiatry* 193: 289-296.
34. Visser I, Lavini C, Booij J, **Reneman L**, Majoie CBLM, de Boer A, Wekking EM, de Joode EA, van der Laan G, van Dijk FJH, Schene AH, den Heeten GJ. 2008. Frontostriatothalamic impairment in chronic solvent-induced encephalopathy. *Ann Neurology* 63:572-580.
33. de Win MML, **Reneman L**, Jager G, Vlieger EJP, Olabariaga SD, Lavini C, Bisschops I, Majoie CBLM, Booij J, van den Brink W, den Heeten GJ. 2007. A prospective cohort study on non-acute effects of low dose ecstasy use on the brain in new ecstasy users. *Neuropsychopharmacology* 32: 458-470.
32. **Reneman L**, de Win MM, van den Brink W, Booij J, den Heeten GJ. 2006. Neuroimaging findings with MDMA/ecstasy: technical aspects, conceptual issues and future prospects. *J Psychopharmacol* 20: 164-175.
31. **Reneman L**, Schilt T, de Win MM, Booij J, van den Brink W, Bakker O. 2006. Memory function and serotonin transporter promoter gene polymorphism in ecstasy (MDMA) users. *J Psychopharmacology* 20: 389-399.

30. de Win MM, Schilt T, **Reneman L**, Vervaeke HK, Jager G, Dijkink S, Booij, J, van den Brink W. 2006. Ecstasy use and self-reported depression, impulsivity and sensation-seeking: a prospective cohort study. *J Psychopharmacology* 20: 226-235.
29. de Win MM, Jager G, Vervaeke HK, Schilt T, **Reneman L**, Booij J, Verhulst FC, Den Heeten GJ, Ramsey NF, Korf DJ, Van den Brink W. 2005. The Netherlands XTC Toxicity (NeXT) study: objectives and methods of a study investigating causality, course, and clinical relevance. *Int J Methods Psychiatr Res* 14: 167-185.
28. de Win MM, Habraken JB, **Reneman L**, van den Brink W, den Heeten GJ, Booij J. 2005. Validation of [<sup>123</sup>I]beta-CIT SPECT to Assess Serotonin Transporters In Vivo in Humans: a Double-Blind, Placebo-Controlled, Crossover Study with the Selective Serotonin Reuptake Inhibitor Citalopram. *Neuropsychopharmacology* 30: 996-1005.
27. de Win MM, de Jeu RA, de Bruin K, Habraken JB, **Reneman L**, Booij J, den Heeten GJ. 2004. Validity of in vivo [<sup>123</sup>I]beta-CIT SPECT in detecting MDMA-induced neurotoxicity in rats. *Eur Neuropsychopharmacol* 14: 185-189.
26. de Win MM, **Reneman L**, Reitsma JB, den Heeten GJ, Booij J, van den Brink W. 2004. Mood disorders and serotonin transporter density in ecstasy users--the influence of long-term abstinence, dose, and gender. *Psychopharmacology* 173: 376-82.
25. **Reneman L**. 2003. Designer drugs: How safe are they? *J Neural Transm (S)*; 66: 61-83.
24. Van den Brink W, **Reneman L**, Booij J, Majoie CBLM, den Heeten GJ. 2003. Ecstasy will it contribute to co-morbidity. *Addiction Biology* 8: 233-250.
23. **Reneman L**, Booij J, Heeten, GJ, and van Den Brink W. 2002. Effects of MDMA (ecstasy) use and abstinence on serotonin neurons (letter). *Lancet* 359: 1617-1618.
22. **Reneman L**, Booij J, Habraken JB, De Bruin K, Hatzidimitriou G, Den Heeten GJ, Ricaurte GA. 2002. Validity of [<sup>123</sup>I]beta-CIT SPECT in detecting MDMA-induced serotonergic neurotoxicity. *Synapse* 46:199-205.
21. Hurley A, **Reneman L**, Ricaurte GA, Taber K. 2002. Ecstasy in the Brain: A Model for Imaging the Serotonin System. *J Neuropsychiatry Clin Neurosci* 14: 125-129.
20. **Reneman L**, Endert E, de Bruin K, Lavalaye J, Feenstra MG, de Wolff FA, Booij J. 2002. The acute and chronic effects of MDMA ("Ecstasy") on cortical 5-HT<sub>2A</sub> receptors in rat and human brain. *Neuropsychopharmacology* 26: 387-396.
19. **Reneman L**, Booij J, Lavalaye J, de Bruin K, Reitsma JB, Gunning WB, den Heeten GJ, van den Brink W. 2002. Use of amphetamine by recreational users of ecstasy is associated with reduced striatal dopamine transporter densities: a [<sup>123</sup>I]β-CIT SPECT study. *Psychopharmacology* 159: 335-340.
18. **Reneman L**, Majoie CBLM, Flick H, den Heeten GJ. 2002. Reduced N-acetylaspartate levels in the frontal cortex of 3,4-methylenedioxymethamphetamine ("Ecstasy") users - Preliminary results. *AJNR Am J Neuroradiol* 23: 231-237.
17. **Reneman L**, Booij J, de Bruin K, de Wolff FA, Gunning WB, den Heeten GJ, vd Brink W. 2001. Effects of dose, sex, and long-term abstinence from use on toxic effects of MDMA (ecstasy) on brain serotonin neurons. *Lancet* 358: 1864-1869.
16. **Reneman L**, Booij J, Majoie CBLM, van den Brink W, den Heeten GJ. 2001. The potential neurotoxicity of MDMA: an imaging approach. *Hum Psychopharmacol Clin Exp* 16: 579-588.
15. **Reneman L**, Lavalaye J, Booij J, Schmand B, de Wolff FA, vd Brink W, den Heeten GJ, Booij J. 2001. Cortical serotonin transporter density and verbal memory in individuals who stopped using 3,4-methylenedioxymethamphetamine (MDMA or "Ecstasy") – Preliminary findings. *Arch Gen Psychiatry* 58: 901-906.

14. **Reneman L**, Majoie CBLM, Schmand B, vd Brink W, den Heeten GJ. 2001. Prefrontal N-acetylaspartate is strongly associated with memory performance in (abstinent) Ecstasy users: Preliminary report. *Biol Psychiatry* 50: 550-554.
13. **Reneman L**, Majoie CBLM, Habraken JBA, den Heeten GJ. 2001. Effects of Ecstasy (MDMA) on the brain in abstinent users: Initial observations with diffusion and perfusion MR imaging. *Radiology* 220: 611-617.
12. **Reneman L**, de Bruin K, Lavalaye J, Gunning WB, Booij J. 2001. Addition of a 5-HT receptor agonist to methylphenidate potentiates the reduction of [<sup>123</sup>I]FP-CIT binding to dopamine transporters in rat frontal cortex and hippocampus. *Synapse* 39: 193-200.
11. **Reneman L**, Habraken J, Majoie CBL, Booij J, den Heeten GJ. 2000. MDMA (“Ecstasy”) and its predisposition to cerebrovascular accidents – Preliminary findings. *AJNR Am J Neuroradiol* 21:1001-7.
10. **Reneman L**, Booij J, Schmand B, vd Brink W, Gunning WB. 2000. Memory disturbances in “Ecstasy” (MDMA) users are correlated with an altered brain serotonin neurotransmission. *Psychopharmacology* 148: 322-324.
9. Lavalaye J, Booij J, Linszen DH, **Reneman L**, van Royen EA. 2001. Higher occupancy of muscarinic receptors by olanzapine than risperidone in patients with schizophrenia. A [<sup>123</sup>I]-IDEX SPECT study. *Psychopharmacology* 156:53-7.
8. Lavalaye J, Sarlet A, Booij J, Linszen DH, **Reneman L**, Gersons BP, van Royen EA. 2001. Dopamine transporter density in patients with tardive dyskinesia: a single photon emission computed tomography study. *Psychopharmacology* 155:107-109.
7. Lavalaye J, Linszen DH, Booij J, Dingemans PM, **Reneman L**, Habraken JB, Gersons BP, van Royen EA. 2001. Dopamine transporter density in young patients with schizophrenia assessed with [<sup>123</sup>I]FP-CIT SPECT. *Schizophr Res* 47:59-67.
6. Lavalaye J, Booij J, **Reneman L**, Habraken JB, van Royen EA. 2000. Effect of age and gender on dopamine transporter imaging with [<sup>123</sup>I]FP-CIT SPET in healthy volunteers. *Eur J Nucl Med* 27:867-869.
5. Lavalaye J, Knol RJ, de Bruin K, **Reneman L**, Janssen AG, Booij J. 2000. [<sup>123</sup>I]FP-CIT binding in rat brain after acute and sub-chronic administration of dopaminergic medication. *Eur J Nucl Med* 27: 346-349.
4. **Reneman L**, Booij J, Lavalaye J, de Bruin K, Stoof JC, de Wolff FA, Koopmans RP, den Heeten GJ. 1999. A comparative in vivo study of iodine-123 labelled  $\beta$ -CIT and iodine 123 labelled nor- $\beta$ -CIT to serotonin transporters in rat brain. *Synapse* 34: 77-80.
3. Lavalaye J, Linszen DH, Booij J, **Reneman L**, Gersons BP, van Royen EA. 1999. Dopamine D2 receptor occupancy by olanzapine or risperidone in young patients with schizophrenia. *Psychiatry Res* 92: 33-44.
2. Booij J, Knol RCC, **Reneman L**, de Bruin K, van Royen EA. 1998. Iodine –123 labelled nor- $\beta$ -CIT binds to the serotonin transporter in vivo as assessed by biodistribution studies in rats. *Eur J Nucl Med* 25: 1666-1669.
1. **Reneman L**, Derwig J. 1997. Long-term prospects of malnourished children after rehabilitation at the Nutrition Rehabilitation Centre of St Mary's Hospital, Mumias, Kenya. *J Trop Pediatr* 43: 293-296.

#### INVITED REVIEW PAPERS

Reneman L, de Win MM, van den Brink W, Booij J, den Heeten GJ. Neuroimaging findings with MDMA/ecstasy: technical aspects, conceptual issues and future prospects. *J Psychopharmacol* 2006; 20: 164-175.

Reneman L. Designer drugs: How safe are they ? *J Neural Transm* 2003 (S); 66: 61-83.

Reneman L, Booij J, Majoie CBLM, van den Brink W, den Heeten GJ. The potential neurotoxicity of MDMA: an imaging approach. *Hum Psychopharmacol Clin Exp* 2001; 16: 579-588.

### **NATIONAL (REVIEWED) JOURNALS**

Reneman L. Beeldvormend onderzoek naar de neurotoxiciteit van ecstasy. *Neuropraxis*. Jaargang 6 nr. 2. 2002, p57-58.

Reneman L. Beeldvormend onderzoek naar de neurotoxiciteit van ecstasy. *Nederlands Tijdschrift voor Neurologie*. Jaargang 5, nr.2 april-mei 2002, p-163-164

Reneman L. Beeldvormend onderzoek naar de neurotoxiciteit van Ecstasy. *MemoRad*, Jaargang 7, nr.2 2002, p41-42.

Reneman L. Beeldvormend onderzoek naar de neurotoxiciteit van Ecstasy. *Jellinek Journaal*. Jaargang 16, nr. 1, 2002 p-21t/m 25.

Reneman, L., Booij, J., Schmand, B., Reitsma, J. B., de Wolff, F. A., Gunning, B., Den Heeten, G. J., and van Den Brink, W. Korte- en langetermijneffecten van ecstasy op serotonineproducerende hersencellen en het geheugen. *Ned Tijdschr Geneesk* 2002; 147: 2240-2246.

### **CONTRIBUTIONS TO BOOKS**

Hurley RA, Reneman L, Taber KH. Ecstasy in the Brain: A Model for Neuroimaging. Chapter 3 in: *Windows to the Brain: Insights from Neuroimaging*. Robin A. Hurley, Katherine H. Taber, editors. American Psychiatric Pub, 2008. ISBN 1585623024, 9781585623020. Pages 19-26.

Reneman L, Booij J, den Heeten GJ, van den Brink W. Beeldvormend onderzoek naar de mogelijke neurotoxiciteit van ecstasy (MDMA). *Jaarboek voor psychiatrie en psychotherapie 2003-2004*. Eds: Schene AH et al. Bohn Stafleu Van Loghem, Houten/Mechelem 2003, p 86-102.

### **NATIONAL AND INTERNATIONAL INVITED LECTURES**

2019

International Society for Magnetic Resonance in Medicine (ISMRM), Montreal. Plenary-lecture. Standardization of Clinical Interpretations: Psychoradiology Perspective.

2018

Science café Leiden: Ritalin en de hersenen. Lectures for the general public, to promote science

2017

Inaugural lecture, University of Amsterdam, Amsterdam.

2016

- European Association of Nuclear Medicine (EANM), Barcelona: Effects of Psychotropic Medications on the Developing Brain (ePOD) - A Case for Pharmacological MRI
- Center for Lifespan Changes in Brain and Cognition (LCBC), Oslo, Norway: Effects of Psychotropic Medications on the Developing Brain (ePOD) - A Case for Pharmacological MRI
- Sectie Neuroradiologie NVvR. Translationele Neuroradiologie European Congress of Radiology (ECR), Vienna, Austria. RC 111 - Toxic brain disorders. Recreational drugs and occupational hazards.

2015

- Nederlandse Vereniging voor Klinische Arbeidsgeneeskunde (NVKA), Rotterdam: Mogelijkheden en beperkingen van nieuwe beeldvormende technieken op het gebied van functionele diagnostiek binnen de neurotoxicologie
- ECNP Meeting, Amsterdam: pHMRI brain imaging of monoaminergic systems.
- Universiteit Tilburg: Effecten van MDMA op de hersenen
- Key note lecture MIRA Institute for Biomedical Technology and Technical Medicine, University of Twente: The application of innovative neuroimaging methodologies to study non-invasively the effects of drugs on (developing) neurotransmitter systems

2014

- PSyQ Den Haag: Effects of psychotropic drugs, methylphenidate, on the developing brain – what are the consequences for adult life?
- Spinozacentrum Amsterdam: Imaging adult neurogenesis: effects of drugs (of abuse)

2013

- 26th European College of Neuropsychopharmacology (ECNP) Congress, Barcelona, Spain: Effects of psychotropic drugs (psychostimulants, antidepressants) on the immature brain – what are consequences for the adult life?
- Brain Café, AMC Amsterdam: Validating noninvasive imaging of the serotonergic- and

- dopaminergic system and adult neurogenesis with MRI.
- 2012
- GRiP & PRIOMEDCHILD joint meeting Bilbao, Spain: Validating non invasive imaging of the serotonergic- and dopaminergic system and adult neurogenesis with MRI; towards a better insight in the neurobiological mechanisms underlying psychiatric disorders in the paediatric population (NEUROCHEMRI).
  - Leiden Institute for Brain and Cognition (LIBC) Publieksdag, Leiden. Invloed van medicijnen op de hersenontwikkeling.
  - European College of Neuropsychopharmacology (ECNP lecture), Braga, Portugal: Behavioural toxicity of psychotropic drugs and how they are investigated.
  - Cognitive Science Center Amsterdam (CSCA) lecture.
  - Retraite METC AMC, Amsterdam: Toevalsbevindingen bij jonge vrijwilligers in MRI scans van de hersenen voor wetenschappelijke studies.
- 2011
- Cognitive Science Center Amsterdam (CSCA) lecture, Amsterdam. Effects of psychotropic drugs on the (developing) brain.
  - Radiologendagen Nederlandse Vereniging voor Radiologie, Maastricht. SSRIs in de MRI.
  - Aprove, AMC Amsterdam: Opening academic PhD year.
  - De Bascule, Amsterdam: Effects of psychotropic drugs on the developing brain (ePOD): Voorlopige Resultaten in proefdieren.
  - British Association for Psychopharmacology summer meeting. Harrogate, UK: Mechanism, risk and possible benefits of MDMA (ecstasy).
- 2010
- EAR-NET Priority Medicines Congress, Amsterdam. A better insight in the neurobiological mechanisms underlying psychiatric disorders in the paediatric population.
  - ADHD-netwerk, Utrecht: Methylfenidaat en de hersenontwikkeling.
- 2009
- De Bascule, Amsterdam: Effects of psychotropic drugs on the developing brain (ePOD); Rationale en achtergronden.
  - American College of Neuropsychopharmacology. Miami, USA: Prospective imaging studies and cognitive effects of incident use of Ecstasy.
  - Jellinek Amsterdam: Gevolgen van alcohol gebruik in volwassenen vs. adolescenten.
- 2008
- Advisory Council on the Misuse of Drugs – MDMA. London UK. Expert meeting.
  - Emma Kinderziekenhuis AMC, Amsterdam Effecten van psychofarmaca op het jeugdige brein. - Herhalingscursus Kindergeneeskunde “Brains a black box revisited”.
  - Scandinavian Society for Psychopharmacology, Juan-les-Pins. France: Effects of stimulant abuse on brain morphology in humans.
  - Maastricht Brain Imaging Center (M-BIC). University of Maastricht, Maastricht: Imaging the effects of ecstasy in the brain.
- 2007
- Nascholing Vereniging van Vrijgevestigde psychiaters, Amsterdam: Beeldvormend onderzoek binnen de psychiatrie.
- 2006
- Annual congress of the German Society of Psychiatry (DGPPN), Berlin, Germany: Multimodal neuroimaging in MDMA users and the challenge of prospective research designs.
  - European Seminar on Neuroimaging and Addiction. Barcelona, Spain: Neuroimaging findings with MDMA/ecstasy.
  - Landelijk Onderwijs Kinder en Jeugdpsychiatrie. Den Dolder: Effects of psychotropic medications on the developing brain.
  - Voorjaarscongres Psychiatrie, Groningen: Lange termijn effecten van (voorgeschreven) psychotrope middelen op het zich ontwikkelende brein.
  - Minisymposium Prof. D. Veltman, AMC Amsterdam: Effecten van psychofarmaca op het (zich ontwikkelende) brein.
- 2005
- Studiedag Drugsverslaving. Meervaart, Amsterdam: Risico's van xtc gebruik.
  - Instituut voor Sociaal Drugsonderzoek. Gent, Belgium: Neurotoxische effecten van MDMA. Studiedag Ecstasy in Vlaanderen.
  - Summerschool AMC/UvA. Amsterdam: Designers drugs how safe are they ?



- Minisymposium at the honor of Anne Lingford-Hughes AMC/UvA (host: Prof. W. vd Brink), Amsterdam: Long-term effects of (prescribed) psychotropic drugs on the developing brain.

2004

- Novartis Foundation Discussion meeting on MDMA/Ecstasy: the human and animal research interface. London, England.
- Amsterdam Institute for Addiction Research/AmCOGG. Amsterdam. Neurotoxiciteit van XTC. Symposium Verslavingsonderzoek.
- Serotonin Club Meeting, Porto, Portugal: Ecstasy: will it contribute to co-morbidity?. An update on the causes and consequences of MDMA neurotoxicity: An integrated view.
- Het Platform Verslavingszorg Katwijk: Proefproces XTC, getuigen platform.

2003

- Swedish Society for Addiction Medicine. Stockholm, Sweden: Neurotoxic effects of ecstasy in the brain.
- Nationaal Verslavingsdebat 10-jarig bestaan AIAR. Amsterdam Institute of Addiction Research (AIAR). Amsterdam : Neurotoxiciteit van XTC.
- Voorjaarscongres, Nederlandse Vereniging voor Psychiatrie, Amsterdam : XTC en depressie.
- Societe d'addictologie francophone. Addiction et Psychiatrie: Mieux connaitre les comorbidites pour ameliorer les prises en charge. Paris, France: L' ecstasy est-elle a l'origine ou aggrave-t-elle une morbidite psychiatrique ?
- CREA Studium Generale. Amsterdam: Is deze partydrug wel een feest ? Beeldvormend onderzoek naar de neurotoxiciteit van Ecstasy'.

2002

- European Institute of Healthcare. Continuing medical education, CNS symposium Barcelona, Spain: Addiction, Mechanisms, Phenomenology and Treatment. Designer drugs: How safe are they ?
- University of Maastricht, Maastricht: Keynote lecture: Cortical serotonin transporter density and verbal memory performance in individuals who stopped using MDMA.
- CINP meeting Montreal, Canada: Cortical Serotonin Transporter Density and Verbal Memory in Individuals who Stopped using 3,4-methylenedioxymethamphetamine (MDMA or "Ecstasy").
- Endoneurometing, Doorwerth: XTC abuse: neuroimaging in humans.
- Ministry of Justice the Netherlands. Unit Synthetische Drugs (USD). Utrecht. Investigating the potential neurotoxicity of Ecstasy (MDMA): An imaging approach.
- Graduate school of Neurosciences Amsterdam (ONWA). Lecture for Neuropsychopharmacology course VUMC, Amsterdam: Neurotoxicity of XTC: Imaging studies in humans.
- Workshop Bilgebungsworkshop Bildgebende Verfahren bei Abhängigkeitserkrankungen, Hamburg, Germany: Investigating the potential neurotoxicity of Ecstasy (MDMA): An imaging approach.
- 22<sup>nd</sup> European Winter Conference on Brain Research (EWCBR Les Arcs, France: Cortical Serotonin Transporter Density and Verbal Memory in Individuals who Stopped using 3,4-Methylenedioxymethamphetamine (MDMA or "Ecstasy").
- Nederlandse Vereniging voor Radiologie (NVvR), Section Neuroradiology, Utrecht: Investigating the potential neurotoxicity of ecstasy (MDMA): An imaging approach.

2001

- NIDA expertmeeting. Washington DC, USA: Investigating the potential neurotoxicity of Ecstasy (MDMA): An imaging approach.
- Amsterdam International Medical Summer School 2001: Bridging Neurology & Psychiatry: The potential neurotoxicity of MDMA: an imaging approach. Part 1: SPECT.
- Amsterdam International Medical Summer School 2001: Bridging Neurology & Psychiatry. The potential neurotoxicity of MDMA: an imaging approach. Part 2: MRI.
- 5<sup>th</sup> Endoneurometing, Doorwerth: Cortical Serotonin Transporter Density and Verbal Memory in Individuals who Stopped using 3,4-Methylenedioxymethamphetamine (MDMA or "Ecstasy").

2000

- RSNA Chicago, USA. Key-note lecture: Investigating the neurotoxicity of MDMA: an imaging approach.
- International Expertmeeting on Ecstasy. Netherlands Research Development Program on Substance Use and Addiction (NWO/ZON). The Hague.