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### Detecting dopamine dysfunction with pharmacological MRI

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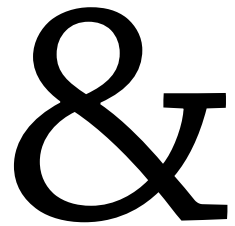
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# Appendices



List of publications

PhD portfolio

Acknowledgements | Dankwoord

Curriculum Vitae

### LIST OF PUBLICATIONS

1. **Schrantee, A.**, Tamminga, H.G.H., Bouziane, C., Bottelier, M.A., Bron E.E., Mutsaerts, H.J.M.M., Zwinderman, A.H., Groote, I.R., Rombouts, S.A.R.B., Lindauer, R.J.L., Klein, S., Niessen, W., Opmeer, B.C., Boer, F., Lucassen, P.J., Andersen, S.L., Geurts, H.M., Reneman, L. (2016) Age-dependent effects of methylphenidate on the human dopaminergic system: a randomized clinical trial. *JAMA Psychiatry*, 73(9); 955-962.
2. Bottelier, M., **Schrantee, A.**, van Wingen, G., Ruhé, H.G., de Ruiter, M.B., Reneman, L. (2016) A power analysis for future clinical trials on the potential adverse effects of SSRIs on amygdala reactivity. *Frontiers in Biology*, in press.
3. **Schrantee A.**, Ferguson B., Stoffers D., Booij J., Rombouts S.A.R.B., Reneman L. (2015) Effects of dexamphetamine-induced dopamine release on resting-state network connectivity in recreational amphetamine users and healthy controls. *Brain Imaging and Behavior*, in press.
4. **Schrantee A.**, Vaclavu L., Heijtel D.F.R., Caan M.W.A., Gsell W., Lucassen P.J., Nederveen A.J., Booij J., Reneman L. (2014). Dopaminergic system dysfunction in recreational dexamphetamine users. *Neuropsychopharmacology*, 40.
5. Bottelier, M., Schouw, M., Klomp, A., Tamminga, H.G.H., **Schrantee A.**, Bouziane, C., de Ruiter, M.B., Boer, F., Ruhé, H.G., Denys, D., Rijsman, R., Lindauer, R.J.L., Reitsma, H.B., Geurts, H.M. , Reneman, L. (2014). The effects of psychotropic drugs on developing brain (ePOD) study: methods and design. *BMC Psychiatry*, 14(48).
6. **Schrantee A.**, Reneman L. (2013). Pharmacological imaging as a tool to visualise dopaminergic neurotoxicity. *Neuropharmacology, special issue: Neuroimaging*, 84.
7. Perkins A.M., Ettinger U., Weaver K., Schmechtig A., **Schrantee A.**, Morrison P.D., Sapara A., Kumari V., Williams S.C., Corr P.J. (2013). Advancing the defensive explanation for anxiety disorders: lorazepam effects on human defense are systematically modulated by personality and threat-type. *Translational Psychiatry*, 3(e246).
8. Klomp, A., Tremoleda, J., **Schrantee, A.**, Gsell, W., Reneman, L. (2012). The use of pharmacological-challenge fMRI in pre-clinical research: application to the 5HT system. *Journal of Visualized Experiments*, e3956.

**SUBMITTED**

- **Schrantee, A.**, Bouziane, C., Bron, E.E., Klein, S., Bottelier, M.A., Kooij, J.J.S., Rombouts, S.A.R.B., Reneman, L. (submitted). Long-term effects of stimulant exposure on cerebral blood flow response to MPH in attention-deficit/hyperactivity disorder patients: does age-of-onset matter?
- **Schrantee, A.**, Mutsaerts, H.J.M.M., Bouziane, C., Tamminga, H.G.H., Bottelier, M.A., Reneman, L. (submitted). The age-dependent effects of a single-dose methylphenidate challenge on cerebral perfusion in patients with attention-deficit/hyperactivity disorder.
- **Schrantee, A.**, Tremoleda, J.L., Wylezinska-Arridge, M., Bouet, V., Hesseling, P., Meerhoff, G.F., de Bruik, C.M., Koeleman, J., Freret, T., Boulouard, M., Desfosses, E., Galineau, L., Gozzi, A., Dauphin, F., Gsell, W., Booij, J., Lucassen, P.J., Reneman, L. (submitted). Repeated dexamphetamine treatment alters the dopaminergic system and increases the phMRI response to methylphenidate.
- **Schrantee, A.**, Václavů, L., Reneman, L., Verberne, H.J., Booij J., Tan, H.L. (submitted). QT prolongation by dexamphetamine: does experience matter?
- Bottelier, M.A., **Schrantee, A.**, Ferguson, B., Tamminga, H.G.H., Bouziane, C., Kooij, J.J.S., de Ruiter, M.B., Reneman, L. (submitted). Age-dependent effects of acute MPH on amygdala reactivity in stimulant treatment-naive patients with ADHD.

**CONFERENCE ABSTRACTS (ONLY FIRST AUTHOR)**

- Schrantee, A. (2016). Assessing the effects of methylphenidate on human brain development using pharmacological magnetic resonance imaging: a randomized controlled trial. *Abstract ISMRM 2016, oral presentation* | *Abstract ISMRM Benelux 2016, oral presentation* | *Abstract SOBP, oral presentation*
- Schrantee, A. (2015). The effects of methylphenidate on striatal dopamine system are dependent on age: a pharmacological magnetic resonance imaging study. *Abstract European College of Neuropsychopharmacology 2015, blitz and poster presentation*
- Schrantee, A. (2014) Effects of dexamphetamine on fronto-striatal network connectivity in recreational users. *Abstract European College of Neuropsychopharmacology 2014, poster presentation*
- Schrantee, A. (2013) Amphetamine pretreatment alters the response to a methylphenidate challenge: a pharmacological magnetic resonance imaging study. *Abstract European College of Neuropsychopharmacology 2013, poster presentation*
- Schrantee A. (2014) A blunted response to dextro-amphetamine in recreational dextro-amphetamine users assessed using [<sup>123</sup>I]IBZM SPECT and pCASL based phMRI. *Abstract ISMRM 2014, oral presentation*
- Schrantee, A. (2013) J-difference edited GABA-MRS in regular amphetamine users in the basal ganglia. *2nd Cardiff International Symposium on MRS of GABA, oral presentation*
- Schrantee, A. (2013) Chronic exposure of neurotoxic doses of d-amphetamine potentiates the central effect of an acute challenge with methylphenidate. *Abstract ISMRM 2013, poster presentation* | *Abstract ISMRM Benelux 2013, poster presentation*
- Schrantee, A. (2012) Investigating the nature of the 1H-MRS profile of multipotent astrocytic stem cells. *Abstract ISMRM Postgraduate Symposium, oral presentation*

<b>PHD TRAINING</b>	<b>YEAR</b>	<b>WORKLOAD</b>
<b>General Courses</b>		
Basic Legislation in Science (BROK)	2013	0.9
Advanced Topics in Biostatistics	2013	2.1
Laboratory Animals (Article 9)	2013	3.9
Computing in R	2013	0.4
UNIX	2015	0.6
Radiation Protection (5B)	2015	1.7
Crash Course	2015	0.2
<b>Specific courses</b>		
European Graduate School of Neuroscience (EURON)	2012	1.5
Drugs and the brain: an update in psychopharmacology, Braga, Portugal		
Neuroimaging summer school (BIC)	2012	1
Introductory course (ONWAR)	2012	0.9
Current Issues in Clinical Neuroscience (Stroke) (ONWAR)	2013	1.5
Resting state fMRI course (ESMRMB)	2013	1
Grant writing (ONWAR)	2014	1.8
Functional neuroanatomy (ONWAR)	2014	1.4
Winter School on pattern analysis & classification (ABC)	2015	1
<b>Seminars, Workshops and master-classes</b>		
Animal minds: from evolution to computation, Royal Society, London	2012	0.3
Weekly meetings of the Brain Imaging Center	2012-2015	1.5
Monthly meetings neuroradiology	2012-2015	1.5
<b>Presentations at (inter)national conferences</b>		
ONWAR annual PhD meeting (poster 2x, oral 1x)	2012, 2013, 2014	
GABA symposium, Cardiff, UK (oral)	2013	
International Society for Magnetic Resonance in Medicine (ISMRM)		
<i>*British Chapter, Bristol, UK (oral)</i>	2012	
<i>*Benelux Chapter, Rotterdam, the Netherlands (poster)</i>	2013	
<i>*Annual Meeting, Salt Lake City, USA (poster)</i>	2013	
<i>*Annual Meeting, Milan, Italy (oral)</i>	2014	
<i>*Benelux Chapter, Eindhoven, the Netherlands (oral)</i>	2016	
<i>*Annual Meeting, Singapore, Singapore (oral)</i>	2016	
European College of Neuropsychopharmacology (ECNP)		
<i>*Congress, Barcelona, Spain (poster)</i>	2013	
<i>*Congress, Berlin, Germany (poster)</i>	2014	
<i>*Congress, Amsterdam, the Netherlands (poster)</i>	2015	
Society of Biological Psychiatry (SOBP)		
<i>*Annual Meeting of 2016, Atlanta, USA (oral)</i>	2016	
<b>Other</b>		
Neuroscience Career Event (organizing committee)	2014	

**TEACHING****Lecturing**

“Effect of Ritalin and Prozac on the developing brain”	2013
<i>Themadag Biotechnische Vereniging ‘Hersenspingsels’</i>	
“Pharmacological treatment in ADHD”	2014, 2015
<i>Guest lecture Child Neuropsychopharmacology, Bachelor of Psychology</i>	
“phMRI”	2015
<i>Guest lecture Physics of Imaging, Bachelor of Psychobiology</i>	

**Supervising**

School research project (1x)	2013
Literature thesis (1x)	2014
Bachelor theses (2x)	2013, 2014
Master thesis (8x)	2013 - 2016
Work experience (2x)	2014, 2015

**PARAMETERS OF ESTEEM****Grants**

AMC Young Talent Fund	2014
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**Awards and Prizes**

ISMRRM Educational Stipend	2013, 2014, 2016
ONWAR Poster Prize	2014
ISMRRM Psychiatric MR Study Group	2014
Presentation award 3 <sup>rd</sup> place	
ISMRRM Psychiatric MR Study Group	2016
Presentation award 1 <sup>st</sup> place	