

Current affiliation and contact information

Center for Social and Affective Neuroscience
Dept. of Clinical and Experimental Medicine
Linköping University (Sweden)

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Education

- 2007–2013* **Ph.D. in Neuroscience**, VU University Amsterdam, The Netherlands. Ph.D. advisors: Prof. Anton N.M. Schoffelmeer & Dr. Tommy Pattij.
- 2004–2007* **M.Sc. in Neuroscience, with Exchange Program**, VU University Amsterdam, The Netherlands. (This is an internationally oriented honors program for the top 5–10% students of the Master Neurosciences program). Major: Neurogenomics.
- 2001–2004* **B.Sc. in Biomedical Sciences**, VU University Amsterdam, The Netherlands.

Research experience (paid positions only)

- 2018–present* **Postdoctoral research fellow**, Center for Social and Affective Neuroscience & dept. of Clinical and Experimental Medicine, Linköping University (Sweden). Supervisors: Prof. Markus Heilig and Dr. David Engblom. Will use mouse and rat models to study the role of pro-inflammatory signaling in depressive behaviors.
- 2015–2017* **Postdoctoral research associate (2 years, 11 months)**, Brain Health Institute & dept. of Cell Biology and Neuroscience, Rutgers University (USA). Supervisors: Prof. Gary Aston-Jones (until April 2017) and Dr. David J. Margolis (from May 2017). Developed a Stop Signal Task for rats as well as a Go/NoGo task for head-fixed mice and used them to study the neural mechanisms of response inhibition using optogenetics, DREADDs, behavioral pharmacology and electrophysiology.
- 2012–2014* **Senior Research Associate (4 months) & Postdoctoral research associate (1 year, 9 months)**, Dept. of Psychology/Princeton Neuroscience Institute, Princeton University (USA). Supervisor: Dr. Ilana B. Witten. Set up a delayed non-match to position task for rats and studied the role of frontostriatal circuits in working memory using optogenetics and electrophysiology.
- 2008* **Visiting scientist (6 months)**, Committee on the Neurobiology of Addictive Disorders, The Scripps Research Institute California (USA). Collaboration with Prof. Loren H. Parsons as part of my Ph.D. research project. I taught people in Prof. Parsons' lab to use several operant models of impulsive behaviors, they taught me *in vivo* microdialysis for endocannabinoids.
- 2007–2011* **PhD student (4 years, 6 months)**, Dept. of Anatomy & Neurosciences, VU university medical center Amsterdam (The Netherlands). Supervisors: Prof. Anton N.M. Schoffelmeer & Dr. Tommy Pattij. Studied cannabinoid and opioid modulation of impulsive behavior and drug addiction using behavioral pharmacology and microdialysis in rats.

2006–2007 **Visiting student (7.5 months) & Research Assistant (5 months)**, Dept. of Physiology and Pharmacology, University of Western Ontario (Canada). Supervisor: Prof. Lique M. Coolen. Studied sex and drug reward circuitries in rats using a combination of behavioral, molecular and histological techniques.

Awards and Scholarships

2018 Postdoctoral fellowship for 2 years (1 of 3 awarded), Dept. of Clinical and Experimental Medicine at Linköping University (Highest-scored application in the funding cycle)

2012 Best Poster Award, Dutch Neuroscience Meeting

2012 Boehringer Ingelheim Foundation Travel Grant, for a 6-week research project in the lab of Prof. Vincenzo Di Marzo at the Institute of Biomolecular Chemistry in Italy

2011 Best Poster Award, Dutch Neuroscience Meeting

2010 NIDA/ICRS SfN Travel Award (1 of 3 awarded) to present a poster during the 2010 NIDA satellite mini-convention "Frontiers in Addiction Research"

2005 Scholarship for the Exchange Honours program Master of Neurosciences of the VU University Amsterdam and Erasmus University Rotterdam (awarded to top 4 students)

Selection of other professional activities

- Training and day-to-day supervision of fifteen undergraduate students and four graduate students during research projects in the lab
- Core collaborator on "*The Extraordinary Brains Project*" (www.extraordinarybrains.com), a research/outreach project focussed on strengths and challenges in people with autism spectrum conditions and attention deficit hyperactivity disorder
- Co-organizer of the Amsterdam Addiction Platform, a series of meetings (between 2009 and 2011) on translational addiction research in the Amsterdam area
- Treasurer in the organizing committee of the social program during the 2010 FENS forum of European Neuroscience in Amsterdam

Bibliography

Peer reviewed research articles

1. H. Akhlaghpour, **J. Wiskerke**, Y.J. Choi, J.P. Taliaferro, J. Au, I.B. Witten, 2016: Dissociated sequential activity and stimulus encoding in the dorsomedial striatum during spatial working memory, *eLife* 5: e19507.
2. **J. Wiskerke**, A.N.M. Schoffelmeer, T.J. De Vries, 2016: Response contingency directs long-term cocaine-induced neuroplasticity in prefrontal and striatal dopamine terminals, *European Neuropsychopharmacology* 26(10): 1667-1672.

3. C. Irimia, **J. Wiskerke**, L.A. Natividad, I.Y. Polis, T.J. De Vries, T. Pattij, L.H. Parsons, 2015: Increased impulsivity in rats as a result of repeated cycles of alcohol intoxication and abstinence, *Addiction Biology* 20: 263-274.
4. **J. Wiskerke**, Y. van Mourik, D. Schetters, A.N.M. Schoffelmeer, T. Pattij, 2012: On the role of cannabinoid CB1- and μ -opioid receptors in motor impulsivity, *Frontiers in Pharmacology* 3: 108.
5. N. Broos, L. Schmaal, **J. Wiskerke**, L. Kostelijk, T. Lam, N. Stoop, L. Weierink, J. Ham, E.J.C. de Geus, A.N.M. Schoffelmeer, W. van de Brink, D.J. Veltman, T.J. de Vries, Tommy Pattij, A.E. Goudriaan, 2012: The relationship between impulsive choice and impulsive action: a cross-species translational study, *PLoS ONE* 7(5): e36781.
6. **J. Wiskerke***, C. Irimia*, T.J. De Vries, A.N.M. Schoffelmeer, T. Pattij, L.H. Parsons, 2012: Characterization of the effects of re-uptake and hydrolysis inhibition on interstitial endocannabinoid levels in the brain: an in vivo microdialysis study, *ACS Chemical Neuroscience* 3: 407-417. *Contributed equally.
7. J. Kleijn*, **J. Wiskerke***, T.I.F.H. Cremers, A.N.M. Schoffelmeer, B.H.C. Westerink, T. Pattij, 2012: Effects of amphetamine on dopamine release in the rat nucleus accumbens shell region depend on cannabinoid CB1 receptor activation, *Neurochemistry International* 60: 791-798. *Contributed equally.
8. **J. Wiskerke**, N. Stoop, D. Schetters, A.N.M. Schoffelmeer, T. Pattij, 2011: Cannabinoid CB1 receptor activation mediates the opposing effects of amphetamine on impulsive action and impulsive choice, *PLoS ONE* 6(10): e25856.
9. **J. Wiskerke**, D. Schetters, I.E. van Es, Y. van Mourik, B.R.O. den Hollander, A.N.M. Schoffelmeer, T. Pattij, 2011: μ -Opioid receptors in the nucleus accumbens shell region mediate the effects of amphetamine on inhibitory control but not impulsive choice. *Journal of Neuroscience* 31(1): 262-272.
10. M.C. Van den Oever, B.R. Lubbers, N.A. Goriounova, K.W. Li, R.C. Van der Schors, M. Loos, D. Riga, **J. Wiskerke**, R. Binnekade, M. Stegeman, A.N. Schoffelmeer, H.D. Mansvelde, A.B. Smit, T.J. De Vries, S. Spijker, 2010: Extracellular matrix plasticity and GABAergic inhibition of prefrontal cortex pyramidal cells facilitates relapse to heroin seeking. *Neuropsychopharmacology* 35(10): 2120-2133.
11. K.S. Frohmader, **J. Wiskerke**, R.A. Wise, M.N. Lehman, L.M. Coolen, 2010: Methamphetamine acts on subpopulations of neurons regulating sexual behavior in male rats. *Neuroscience* 166: 771-784.
12. T. Pattij, D. Schetters, M.C.W. Janssen, **J. Wiskerke**, A.N.M. Schoffelmeer, 2009: Morphine increases distinct forms of impulsive behaviour in rats. *Psychopharmacology* 205(3): 489-502.

Peer reviewed book chapters and reviews

1. **J. Wiskerke**, T. Pattij, 2015: The cannabinoid system and impulsive behavior, in L. Fattore (Ed), "Cannabinoids in Neurologic and Mental Disease", Academic Press, San Diego (CA).
2. T. Pattij, **J. Wiskerke**, and A.N.M. Schoffelmeer, 2008: Cannabinoid modulation of executive functions. *European Journal of Pharmacology* 585: 458-463.
3. **J. Wiskerke**, T. Pattij, A.N.M. Schoffelmeer, T.J. De Vries, 2008: The role of CB1 receptors in psychostimulant addiction. *Addiction Biology* 13(2): 225-238.

Appearances in popular media

1. Lundblad, M. (2018, January). Fördelen med autism. *Modern Psykologi*, 1, pp. 46–51. [in Swedish] Shortened online version: <https://modernpsykologi.se/2018/03/16/fordelen-med-autism/>