Danique Jeurissen, PhD

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Position:

07/2017 - present	Columbia University, Postdoctoral fellow Department of Neuroscience New York, NY, USA Advisor: Prof. Michael N. Shadlen Co-advisor: Prof. Doris Y. Tsao (Caltech) Fellowship: Simons Foundation
08/2015 - 06/2016	Columbia University, Research associate

Education:

12/2010 - 07/2015	Netherlands Institute for Neuroscience (NIN), PhD degree Royal Netherlands Academy of Arts and Sciences Department of Vision and Cognition Amsterdam, the Netherlands Thesis: Perceptual grouping of complex objects in the primate visual system Degree: March 10, 2016; VU University, Amsterdam, the Netherlands Advisor: Prof. Pieter R. Roelfsema Co-advisor: Dr. Matthew W. Self
08/2010 - 11/2010	University of California San Diego (UCSD), Research internship Center for Brain and Cognition, San Diego, CA, USA
01/2010 - 07/2010	Harvard Medical School (HMS), Research internship B.-A. Center for Noninvasive Brain Stimulation, Boston, MA, USA GPA: 9.5 (1-10 scale), equivalent to A+
09/2008 - 08/2010	Maastricht University, MSc degree, Graduated *Cum Laude* Department of Psychology and Neuroscience, Maastricht, the Netherlands GPA: 8.7 (1-10 scale), equivalent to A+
01/2008 - 06/2008	University of California, Los Angeles (UCLA), Graduate and undergraduate courses Department of Psychology, Los Angeles, CA, USA GPA: 3.9 (0-4 scale), equivalent to A
09/2005 - 08/2008	Maastricht University, BSc degree Department of Psychology and Neuroscience, Maastricht, the Netherlands GPA: 7.6 (1-10 scale), equivalent to A

Research grants:

06/2018 - 05/2019: Research Grant
Title: Using chemogenetics to model cognitive deficits of Alzheimer's disease in primates
Funding program: Alzheimer's Disease Research Center (ADRC), Taub Institute
PI: Michael N. Shadlen
Co-PIs: Danique Jeurissen and S. Shushruth
Amount: 50k$

07/2016 - 06/2019: Postdoctoral Fellowship
Title: Flexible routing of information through specialized networks in the brain
Funding agency: Simons Foundation
Program: Simons Collaboration on the Global Brain
PI: Danique Jeurissen
Co-PIs: Michael N. Shadlen and Doris Y. Tsao
Amount: 234k$

Awards & scholarships:

2016: Award for Scientific Excellence, Royal Netherlands Academy of Arts and Sciences, NIN (1k€).
2014: Best oral presentation award, 21st annual meeting ONWAR graduate school.
2013: Stipend, vision summer school at the Cold Spring Harbor Laboratory (.5k$).
2013: Best short oral presentation award, 20th annual meeting ONWAR graduate school.
2012: Student travel award, Vision Science Society Conference (.5k$).
2011: Student poster award, 34th European Conference on Visual Perception (.5k€).
2010: Cum Laude Master of Science degree.
2010: Scholarship, internship at UCSD: VSBfonds (6k€).
2010: Scholarship, internship at UCSD: Prins Bernhard Cultuurfonds (1k€).
2010: Scholarship, internship at HMS: Stichting Dr Hendrik Mullers Vaderlandsch Fonds (2.5k€).
2010: Scholarship, internship at HMS: Schuurman Schimmel- van Outeren Stichting (2k€).
2010: Scholarship, internship at HMS: Maastricht University, Fac. Psych. & Neurosc. (1.1k€).
2010: Scholarship, internship at HMS: Fundatie van de Vrijvrouwe van Renswoude te Delft (2k€).
2008: Scholarship, elective courses at UCLA: Maastricht University, Fac. Psych. & Neurosc. (€1.2k).

Selected invited talks:

09/2016: Simons Foundation Annual Meeting, New York, NY, USA
05/2015: New York University, New York, NY, USA
04/2015: Rutgers University, Newark, NJ, USA
08/2014: Salk Institute for Biological Studies, San Diego, CA, USA
08/2014: Stanford University, Stanford, CA, USA
08/2014: California Institute of Technology, Pasadena, CA, USA
08/2014: Columbia University, New York, NY, USA
08/2014: The Nathan S. Kline Institute for Psychiatric Research, Orangeburg, NY, USA
07/2014: New York University, New York, NY, USA
07/2014: Columbia University, New York, NY, USA
07/2014: Rockefeller University, New York, NY, USA
07/2014: Massachusetts Institute of Technology, Cambridge, MA, USA
07/2013: Harvard Medical School, Boston, MA, USA
10/2012: Amsterdam Vision Meeting, Amsterdam, the Netherlands

Additional courses:

2013: Summer School – Vision, at Cold Spring Harbor Laboratory, NY, USA
2010: Graduate Course – Electroencephalography, at ERP Laboratory, UCSD, CA, USA
2010: Course – TMS, at the Center for Noninvasive Brain Stimulation, Boston, MA, USA
2009: Summer School – Attention, Perception, and Motor Cognition, at University College London, UK

Peer reviewing:

Acta Psychologica; Attention, Perception, and Psychophysics; Cerebral Cortex; Cognitive, Affective, and Behavioral Neuroscience; Current Biology; Journal of Cognitive Neuroscience; Journal of Neurophysiology; Journal of Neuroscience; Nature Neuroscience; Psychonomic Bulletin and Review; Social Cognitive and Affective Neuroscience; Visual Cognition; Visual Neuroscience.

Selected Teaching / Lectures:

2017 - *present*: Columbia University
Supervising students during their research internship;
Mentoring for the HHMI Exceptional Research Opportunities Program (EXROP);
Guest-lecture for Biomedical Research Awareness Day.

2014 - 2014: Royal Netherlands Academy of Arts and Sciences
Guest-lecture for researchers (graduate students to PI) on working with non-human primates in biomedical research in the course 'Laboratory Animal Science'.

2011 - 2011: VU University
Guest-lecture for students (MSc) in the course 'Clinical Neuroscience'.

2011 - 2015: Netherlands Institute for Neuroscience
Supervising students (BSc and MSc) for research internship and practicals.

2007 - 2008: Maastricht University
Teaching assistant for courses 'Body & Behavior' and 'Programming' (BSc).

Selected Women in STEM Outreach:

2016 - *present*: High-School Program Director *ChickTech New York*
ChickTech is a nonprofit dedicated to retaining women in the technology workforce and increasing the number of women and girls pursuing technology-based careers. I have been a member and teacher since 06/2016. I lead the High School Program since 11/2017. My team organizes a yearlong program with hands-on technical workshops, mentorship, and other events for ~100 high-school girls to learn about science, technology, engineering, and math.

Selected Other Activities & Outreach:

2016 - present: Member *Columbia University Neuroscience Outreach (CUNO)*
CUNO organizes events to teach New York City school students about science and the brain.

2012 - 2015: Organizer and teacher at the *Weekendschool*
Elementary school students from underprivileged neighborhoods in the Netherlands can participate in the supplementary education program 'Weekendschool'. In their course on medical and biological sciences, students visit the Netherlands Institute for Neuroscience to learn about the brain.

2011 - 2011: Researcher at the 'Science-fair' at the Academic Medical Centre, Amsterdam
Explaining neuroscientific research to the general public.

2011 - 2015: Organizer weekly Neuroscience Symposium social at Netherlands Institute for Neuroscience

2011 - 2014: Member Teaching Committee, *ONWAR* graduate school

2008 - 2009: Member Student Council and Teaching Committee Maastricht University

2008 - 2009: Member *Maa*stricht *R*esearch *B*ased *L*earning (MARBLE) program committee.

2008 - 2008: Member *Interaxon*, University of California Los Angeles
Interaxon organizes events to teach elementary school students about the brain through presentations and games.

Publications:

** = Equal contribution / co-first author*

Journal publications - published

1. P.C. Klink, D. Jeurissen, J. Theeuwes, D. Denys, and P.R. Roelfsema (2017). Working memory accuracy for multiple targets is driven by reward expectation and stimulus contrast with different time-courses. *Scientific Reports*, 7(9082), 1-13.

2. D. Vartak, D. Jeurissen, M.W. Self, and P.R. Roelfsema (2017). The influence of attention and reward on the learning of new stimulus-response associations. *Scientific Reports*, 7(9036), 1-12.

3. D. Jeurissen, M.W. Self, and P.R. Roelfsema (2016). Serial grouping of 2D-image regions with object-based attention in humans. *eLife*, 5, e14320.

4. M.W. Self*, J.C. Peters*, J.K. Possel*, J. Reithler, R. Goebel, P. Ris, D. Jeurissen, L. Reddy, S. Claus, J.C. Baayen, and P.R. Roelfsema (2016). The effects of context and attention on spiking activity in human early visual cortex. *PLoS Biology*, 14(3), e1002420.

5. B. Rubio*, A.D. Boes*, S. Laganiere, A. Rotenberg, D. Jeurissen, and A. Pascual-Leone (2016). Noninvasive brain stimulation in pediatric attention-deficit hyperactivity disorder (ADHD): A review. *Journal of Child Neurology*, 31(6), 784-796.

6. D. Jeurissen, A.F. Van Ham, and M.W. Self (2015). The neural representation of multiple objects in the primate visual system. *Journal of Neuroscience*, 35(37), 12612-12614.

7. D. Jeurissen, A.T. Sack, A. Roebroeck, B.E. Russ, and A. Pascual-Leone (2014). TMS affects moral judgment, showing the role of DLPFC and TPJ in cognitive and emotional processing. *Frontiers in Neuroscience*, 8, 1-9.

8. D. Jeurissen, M.W. Self, and P.R. Roelfsema (2013). Surface reconstruction, figure-ground modulation, and border-ownership. *Cognitive Neuroscience*, 4(1), 50-52.

9. I. Korjoukov, D. Jeurissen, N.A. Kloosterman, J.E. Verhoeven, H.S. Scholte, and P.R. Roelfsema (2012). The time-course of perceptual grouping in natural scenes. *Psychological Science*, 23(12), 1-8.

Journal publications - submitted / under review / in revision

10. M.W. Self*, D. Jeurissen*, A.F. Van Ham, B. Van Vugt, J. Poort, and P.R. Roelfsema. The segmentation of proto-objects in monkey primary visual cortex (in revision)

Publications - Preprint

11. Fetsch, C.R., Odean, N.N., Jeurissen, D., El-Shamayleh, Y., Horwitz, G.D., Shadlen, M.N. (2018). Focal optogentic suppression in macaque area MT biases direction discrimination and choice confidence, but only transiently. *BioRxiv*, DOI: https://doi.org/10.1101/277251 (+ in revision at journal).

Posters, talks, and abstracts

- P.C. Klink, D. Jeurissen, J. Theeuwes, D. Denys, and P.R. Roelfsema (2016). Reward and salience determine the precision of working memory encoding with different time-courses. Poster at the Society for Neuroscience, November 12 - 16, 2016, San Diego, CA, USA.

- D. Jeurissen, A.F. Van Ham, M.W. Self, and P.R. Roelfsema (2015). The development of figure-ground segregation across time and space in the visual cortex of the macaque monkey. Poster at the Society for Neuroscience, October 17 - 21, 2015, Chicago, IL, USA.

- M.W. Self, D. Jeurissen, A.F. Van Ham, M. Senden, and P.R. Roelfsema (2015). Border-ownership tuning predicts effective connectivity between V4 and V1 in macaque visual cortex. Poster at the Society for Neuroscience, October 17 - 21, 2015, Chicago, IL, USA.

- A.F. Van Ham, M.W. Self, D. Jeurissen, and P.R. Roelfsema (2015). Global scene interpretation affects figure-ground modulation and contrast perception. Poster at the Society for Neuroscience, October 17 - 21, 2015, Chicago, IL, USA.

- D. Jeurissen, M.W. Self, and P.R. Roelfsema (2015). Object-based attention spreads at multiple spatial scales to achieve perceptual grouping. Poster at the Federation of European Neuroscience Societies Brain Conference Meeting on Bridging Neural Mechanisms and Cognition, April 19 - 22, 2015, Rungstedgaard, Denmark.

- D. Jeurissen, M.W. Self, and P.R. Roelfsema (2014). Perceptual organization and object-based attention in the human visual system. Talk at the 21st ONWAR annual meeting, November 27 - 28, 2014, The Netherlands.

- D. Jeurissen, M.W. Self, A.F. van Ham, and P.R. Roelfsema (2014). Figure-ground modulation of Gestalt objects in the visual cortex of the macaque monkey. Poster at the Society for Neuroscience Meeting, November 15 - 19, 2014, Washington, DC, USA.

- D. Jeurissen, M.W. Self, J. Poort, B. van Vugt, and P.R. Roelfsema (2014). Figure-ground modulation for complex shapes in macaque V1. Poster at the Gordon Research Conference on the Neurobiology of Cognition, July 20 - 25, 2014, Newry, ME, USA.

- D. Jeurissen, M.W. Self, and P.R. Roelfsema (2013). Object-based attention spreads at multiple spatial scales. Poster and short talk at the 20th ONWAR annual meeting, November 28 - 29, 2013, The Netherlands.

- D. Jeurissen, M.W. Self, and P.R. Roelfsema (2013). Object based attention spreads at multiple spatial scales. Poster at the Donders Discussions Meeting, October 31 - November 1, 2013, Nijmegen, The Netherlands.

- D. Jeurissen*, M.W. Self*, J. Poort, B. van Vugt, and P.R. Roelfsema (2012). Figure-ground modulation in the primary visual cortex of the macaque monkey. Poster at the 19th ONWAR annual meeting, November 22 - 23, 2012, The Netherlands.

- D. Jeurissen*, M.W. Self*, J. Poort, B. van Vugt, and P.R. Roelfsema (2012). Figure-ground modulation for complex shapes in the primary visual cortex of the macaque monkey. Poster at the Society for Neuroscience, October 13 - 17, 2012, New Orleans, LA, USA.

- D. Jeurissen and P.R. Roelfsema (2012). Image Parsing, From Curves to Natural Images. Talk at the Vision Science Society Conference, May 11-16, 2012, Naples, FL, USA.

- D. Jeurissen, I. Korjoukov, N.A. Kloosterman, H.S. Scholte, and P.R. Roelfsema (2011). Object Recognition and Image Parsing. Poster at the 18th ONWAR annual meeting, November 24 - November 25, 2011, The Netherlands.

- D. Jeurissen, I. Korjoukov, N.A. Kloosterman, H.S. Scholte, and P.R. Roelfsema (2011). Object Recognition and Image Parsing of Natural Images. Poster at the 34th European Conference on Visual Perception, August 28 - September 1, 2011, Toulouse, France.

- D. Jeurissen, A.T. Sack, A. Roebroeck, and A. Pascual-Leone (2010). The brain connectivity network underlying moral judgment. Poster at the Federation of European Neuroscience Societies 7th Forum of European Neuroscience, July 3 - 7, 2010, Amsterdam, The Netherlands.

- M. Capalbo, A. Roebroeck, D. Jeurissen, and R. Goebel (2009). Assessing Fiber-Tracking Reliability in Diffusion Imaging by Combining Inter- and Intra-Subject Variability. Poster at the 15th Annual Meeting of the Organization for Human Brain Mapping, June 18 - 23, 2009, San Francisco, CA, USA.