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Education/Professional History:

1997 M.S. in Experimental Psychology, Rijksuniversiteit Groningen
Thesis Title: The temporal dynamics of task switching
Thesis Advisor: Ritske de Jong

1992-1996 Classical guitar studies at the Groningen Conservatory

01-06/1997 Visiting researcher, University of Cambridge,
Department of Experimental Psychology (Stephen Monsell)

1997-2001 Ph.D. in Cognitive Neuroscience, University of Amsterdam
Dissertation Title: Control failures, error processing, and cognitive aging
Thesis Advisors: Richard Ridderinkhof, Maurits van der Molen & Albert Kok

2001-2002 Lecturer, University of Amsterdam

2002-2003 Postdoctoral Fellow, Princeton University
Neuroscience of Cognitive Control Lab (Jonathan Cohen)

2003-2006 Postdoctoral Fellow, Vrije Universiteit Amsterdam
Department of Cognitive Psychology

2006-2008 Assistant Professor, Leiden University
Cognitive Psychology Unit

2009-2012 Associate Professor, Leiden University
Cognitive Psychology Unit

2012- Full Professor, Leiden University
Cognitive Psychology Unit

2017- Chair of the Cognitive Psychology Unit

Publications (*h*-index = 50):

- van den Brink, R.L., Murphy, P.R., Desender, K., de Ru, N., & **Nieuwenhuis, S.** (2021). Temporal expectation hastens sensory encoding but does not affect evidence quality. *Journal of Neuroscience*, *41*, 130-143.
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- Jepma, M., Brown, S.B., Murphy, P.R., Koelewijn, S.C., de Vries, B., van den Maagdenberg, A.M., & **Nieuwenhuis**, S. (2018). Noradrenergic and cholinergic modulation of belief updating. *Journal of Cognitive Neuroscience*, *30*, 1803-1820.
- van den Brink, R.L., **Nieuwenhuis**, S., & Donner, T.H. (2018). Amplification and suppression of distinct brain-wide functional networks by catecholamines. *Journal of Neuroscience*, *38*, 7476-7491.
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- van den Brink, R.L., **Nieuwenhuis**, S., van Boxtel, G.J.M., van Luijtelaar, G., Eilander, H.J., & Wijnen, V.J.M. (2018). Task-free spectral EEG dynamics track and predict patient recovery from severe acquired brain injury. *NeuroImage: Clinical*, *17*, 43-52.
- Ásgeirsson, Á.G. & **Nieuwenhuis**, S. (2017). No arousal-biased competition in focused visuospatial attention. *Cognition*, *168*, 191-204.
- Tona, K.D., Keuken, M.C., de Rover, M., Lakke, E., Forstmann, B.U., **Nieuwenhuis**, S., & van Osch, M.J.P. (2017). In vivo visualization of the locus coeruleus in humans: Quantifying the test-retest reliability. *Brain Structure and Function*, *222*, 4203-4217.
- Warren, C.M., Wilson, R.C., van der Wee, N.J., Giltay, E.J., van Noorden, M.S., Cohen, J.D., & **Nieuwenhuis**, S. (2017). The effect of atomoxetine on random and directed exploration in humans. *PLoS ONE*, *12*: e0176034.
- de Gee, J.W., Colizoli, O., Kloosterman, N., Knapen, T., **Nieuwenhuis**, S., & Donner, T.H. (2017). Dynamic modulation of decision biases by brainstem arousal systems. *eLife*, *6*: e23232.
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(Introduction to Special Issue of CABN)
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- Nieuwenhuis**, S., & Monsell, S. (2002). Residual costs in task-switching: Testing the failure-to-engage hypothesis. *Psychonomic Bulletin & Review*, *9*, 86-92.
- Nieuwenhuis**, S., Ridderinkhof, K.R., Blom, J., Band, G.P.H., & Kok (2001). Error-related brain potentials are differentially related to awareness of response errors: Evidence from an antisaccade task. *Psychophysiology*, *38*, 752-760.
- Nieuwenhuis**, S., Ridderinkhof, K.R., De Jong, R., Kok, A., & Van der Molen, M.W. (2000). Inhibitory inefficiency and failures of intention activation: Age-related decline in the control of saccadic eye movements. *Psychology and Aging*, *15*, 635-647.
- Lorist, M.M., Klein, M., **Nieuwenhuis**, S., De Jong, R., Mulder, G., & Meijman, T.F. (2000). Mental fatigue and task control: Planning and preparation. *Psychophysiology*, *37*, 614-625.

Dutch publications:

- van Nunspeet, F., Derks, B., Ellemers, N., & **Nieuwenhuis, S.** (2012). Willen, denken, doen: Een ERP-onderzoek naar de invloed van morele motieven op sociale categorisatie in een impliciete associatietest. In M. Stick, M. Baas, L. van Dillen, R. Dotsch, D. Lakens, & M. de Vries (Eds.) *Jaarboek Sociale Psychologie 2012*. Groningen: ASPO Pers.
- Wagenmakers, E.J., & **Nieuwenhuis, S.** (2005). Damasio's error? De somatic marker hypothese onder vuur. *Neuropraxis, nr. 6*, 165-169.
- Nieuwenhuis, S.** (2005). Foutendetectie in de menselijke hersenen. *Neuropraxis, nr. 3*, 59-63.
- Nieuwenhuis, S.** & Olsthoorn, N. (1999). *Stamboom van de Nederlandse Psychonomie* (poster).

Invited presentations (selection)

- 01/2003 Invited presentation at Brock University, St Catherine's, Canada.
- 04/2003 International workshop "Performance Monitoring & Interference Control: Basic Issues & Individual Differences" in Amsterdam.
- 07/2003 Workshop "Errors, Conflicts and the Brain. Current Opinions on Performance Monitoring" in Dortmund, Germany.
- 05/2004 International workshop "Unique and shared processing limitations in dual-task performance" in Leiden, the Netherlands.
- 12/2004 Invited presentation at the University of Ghent, Belgium.
- 01/2005 Invited presentation at the 2005 Carmel Meeting "Forty Years of P300" in St Petersburg, Florida.
- 03/2005 International workshop "Control in Attention and Action" in Amsterdam, the Netherlands.
- 09/2005 Annual Meeting of the Society for Psychophysiological Research (SPR) in Lisbon, Portugal.
- 06/2006 Young Scientist Award lecture at the 6th European Conference of the Federation of European Psychophysiology Societies (FEPS) in Budapest, Hungary.
- 05/2008 Annual Cognition Lecture Wolfram Schultz at the KNAW in Amsterdam. How to investigate the role of neuromodulatory systems in human cognition? (supporting act)
- 07/2008 International symposium "Attention and Performance XXIII: Decision making" in Stowe, VT, USA.
- 05/2009 Invited presentation at the University of Magdeburg, Germany.
- 10/2009 Early Career Award lecture at the 49th annual meeting of the Society for Psychophysiological Research (SPR) in Berlin, Germany.
- 12/2009 Invited presentation at the University of Trier, Germany.
- 06/2010 International workshop "Motivational & Cognitive Control" in Oxford.
- 01/2013 Invited presentation at the University of Exeter, U.K.

Teaching:

- 1997-2001 Several practical courses in research- and writing skills, University of Amsterdam
- 2004-2006 Bachelor course "Attention" (lecturing)
- 2005-2006 Bachelor course "Cognitive Neuroscience & Neuropsychology" (development, coordination, lecturing)
- 2008-2011 Bachelor course "Cognitieve Neurowetenschap" (coordination, lecturing)
- 2009- Research master course "Scientific Writing" (coordination, lecturing)

2011	Basiskwalificatie Onderwijs (BKO)
2013-2019	Bachelor course “Attention: Theory and Practice” (coordination, lecturing)
2017-2020	Designing an Empirical Study (coordination, lecturing)

Supervision / postdocs

Research assistants

Nisan Mol (2003-2004)
 Niels Alting von Geusau (2004-2006)
 Sabrina La Fors (2006-2007)
 Saskia Heijnen (2015-2016)
 Iliana Samara (2016-2017)
 Myrthe Vel Tromp (2020)

Graduate students

Marieke Jepma (2006-2010)(cum laude)
 Stephen Brown (2009-2014)
 Rudy van den Brink (2012-2017)
 Klodiana Daphne Tona (2013-2018)
 Martin Kolnes (visiting, 2019)
 Beth Lloyd (2019-2023)
 Jeshua Tromp 2019-2023)

Postdocs

Mischa de Rover (2008-2011)
 Marieke Jepma (2010-2011)
 Christopher Warren (2012-2016)
 Peter Murphy (2012-2015)
 Árni Ásgeirsson (2015-2016)
 Szymon Wichary (2018-2020)
 Verónica Mäki-Marttunen (2020-2022)
 Franz Wurm (2020-2023)

Honors, Awards, and Grants

2002	NWO TALENT-stipendium (\$32,000)
2002	Winner A.F. Sanders Award for best research paper by EPOS graduate student
2003	NWO-VENI grant (€200,000)
2005	NWO-Cognitie netwerksubsidie (€10,000) and NWO-Fonds Internationalisering Sociale Wetenschappen (€7,500)
2006	Young Scientist Award from the Federation of European Psychophysiology Societies
2006	Beurs voor KNAW Akademie-Colloquium (€19,500)
2006	A.N.T. Young Scientist Award (international award for “exceptional advances in EEG/MEG research”)
2006	NWO-VIDI grant (€600,000)
2009	NWO-MaGW “Vrije Competitie” PhD grant (€218,000)
2009	Award for Distinguished Early Career Contributions to Psychophysiology from the Society for Psychophysiological Research (SPR)

- 2010 Co-applicant of NWO-ALW "Open Competitie" PhD grant (€208,193; main applicant Eric-Jan Wagenmakers)
- 2011 ERC Starting Grant (consolidator group; €1,500,000)
- 2018 Marie Curie Intra-European Fellowship, Szymon Wichary (role: scientist in charge; €200.000)
- 2018 Leiden University Profile Area Grant €120,000; co-applicants Else Tolner and Gisela Terwindt)
- 2019 NWO-VICI grant (€1,500,000)

Reviewing and Editorships

- 1998-1999 Associate editor of quarterly journal of the Nederlandse Vereniging voor Psychonomie: "De Psychonoom"
- 1999 Editor of the "Stamboom van de Nederlandse Psychonomie" (PhD family tree of Dutch Experimental Psychology; with Nomi Olsthoorn)
- 2000 - Reviewer for various professional journals:
Psychology: Acta Psychologica, Attention, Perception & Psychophysics; Cognition; Cognition and Emotion; Cognitive Psychology; Current Directions in Psychological Science; Emotion; Experimental Psychology; Journal of Experimental Psychology: General; Journal of Experimental Psychology: Human Perception and Performance; Journal of Experimental Psychology: Learning, Memory, and Cognition; Memory & Cognition; Psychological Bulletin; Psychological Science; Psychological Research; Psychology and Aging; Psychonomic Bulletin & Review; Quarterly Journal of Experimental Psychology; Trends in Cognitive Sciences; Vision Research
Psychophysiology: Biological Psychology; International Journal of Psychophysiology; Journal of Psychophysiology; Psychophysiology
Cognitive Neuroscience: Behavioral and Brain Functions; Behavioural Brain Research; Brain and Cognition; Cognitive, Affective & Behavioral Neuroscience; Cognitive Brain Research; Experimental Brain Research; Journal of Cognitive Neuroscience; Social Cognitive and Affective Neuroscience; Social Neuroscience
Neuroscience: Cerebral Cortex; Cortex; European Journal of Neuroscience; Frontiers in Neuroscience; Human Brain Mapping; Journal of Neurophysiology; Journal of Neuroscience; Nature Neuroscience; Neural Computation; NeuroImage; Neuron; Neuroreport; Neuroscience & Biobehavioral Reviews; Neuroscience Letters
Psychiatry, neurology and neuropsychology: Archives of General Psychiatry; Biological Psychiatry; Brain; Journal of Psychiatric Research; Psychiatry Research; Neuropsychologia; Schizophrenia Research
Psychopharmacology: International Journal of Neuropsychopharmacology; Journal of Psychopharmacology; Progress in Neuro-Psychopharmacology & Biological Psychiatry; Psychopharmacology
Other: Current Biology; eLife; IEEE:Systems, Man, & Cybernetics; JoVE; Nature Communications; Nature Human Behaviour; PLoS Biology; PLoS Computational Biology (guest editor); PLoS ONE; PNAS; Science Advances.
- 2004 - 2007 Action editor for *Brain and Cognition*

- 2007 Guest editor for special issue of *Cognitive, Affective & Behavioral Neuroscience* on medial frontal cortex function (with Richard Ridderinkhof and Todd Braver)
- 2005 - Reviewer for the National Science Foundation (USA); the Netherlands Organization of Scientific Research (NWO); Research into Ageing (UK); the Irish Research Council; the Research Foundation Flanders (Belgium, FWO); the Medical Research Council (UK, MRC); the Handbook of Emotion Regulation (2nd ed., Guilford Press); the Deutsche Forschungsgemeinschaft (Germany, DFG); the European Research Council (ERC); the French National Research Agency; the Volkswagen Foundation; the Wellcome Trust
- 2018 - Associate editor for *Psychophysiology*

Member of PhD committees:

Elkan Akyürek (2005, Leiden), Lorenza Colzato (2005, Leiden), Jennifer Ramautar (2005, University of Amsterdam), Zoe Tiegas (2007, University of Amsterdam), Edita Poljac (2009, Radboud University Nijmegen), Simon van Gaal (2009, University of Amsterdam), Nelleke van Wouwe (2009, University of Amsterdam), André Keizer (2010, Leiden), Shaozheng Qin (2010, Radboud University Nijmegen), Martijn Lamers (2011, Radboud University Nijmegen), Christopher Warren (2011, University of Victoria, Canada), Henk van Steenberg (2012, Leiden), Martine van Schouwenburg (2012, Radboud University Nijmegen), Alexander Logemann (2013, Utrecht University), Pascal Haazebroek (2014, Leiden), Anna Wilschut (2014, Vrije Universiteit Amsterdam), Félice van Nunspeet (2014, Leiden), Helga Harsay (2014, University of Amsterdam), Stephan Verschoor (2014, Leiden), Anouk van Loon (2014, University of Amsterdam), Judith Schomaker (2015, Vrije Universiteit Amsterdam), Margot Schel (2015, Leiden), Niels Kloosterman (2015, University of Amsterdam), Marret Noordewier (2016, Leiden), Ke Ma (2016, Leiden), Mirte Brom (2016, Leiden); Laura Steenberg (2016, Leiden, as promotor); Mikael Kowal (2016, Leiden); Willem Slegers (2017, Tilburg); Brett MacDonald (2017, University of Wollongong, Australia); Roy de Kleijn (2017, Leiden); Michele Colombo (2018, University of Amsterdam); Antonino Visalli (2018, University of Padova); Neeltje Blankenstein (2019, Leiden); Bryant Jongkees (2019, Leiden, as promotor); Andreas Burger (2019, Leiden); Iris Schutte (2019, Utrecht University);

Other Relevant Professional Experience:

- 2000-2001 Member of the onderwijscommissie of the Experimentele Psychologie Onderzoeksschool (EPOS)
- 2005 Co-organizer NVP Wintercongres in Egmond aan Zee
- 2006 Organizer International Workshop “Errors, Conflicts, and Rewards: The Role of Medial Frontal Cortex in Cognitive Control and Performance Monitoring” in Amsterdam
- 2007 Co-organizer International Symposium “Blinks of the mind: New insights in temporal attention and consciousness” in Amsterdam
- 2007-2012 Member of the Board of Examiners, Institute of Psychology, Leiden
- 2008- Coordinator of the Research Master programme at the Institute of Psychology, Leiden
- 2008-2009 Leergang Bestuurlijke Vaardigheden, Universiteit Leiden
- 2009 Member of the beoordelingscommissie NWO-Veni 2009
- 2009-2011 Executive Board, Leiden Institute for Brain and Cognition

- 2011 Member of the Scientific Committee for the 11th meeting of the International Conference on Cognitive Neuroscience (ICON XI) in Mallorca, Spain
- 2011 Jury member NVP dissertatieprijs 2011
- 2011- Member of the Attention & Performance Advisory Council
- 2012-2013 Member of the NWO-Rubiconcommissie 2012
- 2012 Organizer of LIBC Public Symposium “Drugs and the Brain: Biopsychologische effecten van geneesmiddelen en recreatieve drugs” (with Serge Rombouts)
- 2013- Implementation of data-management policy, Institute of Psychology, Leiden
- 2017 Member of the beoordelingscommissie NWO-SGW Veni 2017
- 2017 Member of the beoordelingscommissie NWO-SGW Vidi 2017 (preselection)
- 2018-2019 Member of the program committee for the annual meeting of the Society for Psychophysiological Research 2019 in Washington, DC
- 2019 Chair of the Midterm Review Committee of the master Developmental Psychopathology in Education and Child Studies (Research) of Leiden University
- 2019-2021 Chair of the Early Career Award committee of the (Dutch) Society for Brain and Cognition (NVP)