

CV Sander Nieuwenhuis

Personal data:

Name: Sander Tjalling Nieuwenhuis
Current office: Cognitive Psychology Unit, Leiden University, FSW
Wassenaarseweg 52, 2333 AK Leiden, the Netherlands
Phone: +31 6 28070875
Email: snieuwenhuis@fsw.leidenuniv.nl

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- Associate Professor, Leiden University
Cognitive Psychology Unit

Publications (*h-index* = 31):

Van Steenbergen, H., Band, G.P., Hommel, B., Rombouts, S.A., & **Nieuwenhuis**, S. (in preparation). Keep smiling! Humor reduces neurocognitive adjustments to conflict.

Harsay, H.A., Cohen, M.X., Spaan, M., Weeda, W., **Nieuwenhuis**, S., & Ridderinkhof, K.R. (submitted). Pupil dilation predicts opposing brain network dynamics during error awareness.

Nieuwenhuis, S., Elzinga, B.M., Ras, P., Berends, F., & Duijs, P, Samara, Z., & Slagter, H.A. (submitted). Bilateral saccadic eye movements and tactile stimulation, but not auditory stimulation, enhance memory retrieval.

Brown, S., van Steenbergen, H., Band, G.P., de Rover, M., & **Nieuwenhuis**, S. (in revision). Functional significance of the emotion-related late positive potential.

Dutilh, G., van Ravenzwaaij, D., **Nieuwenhuis**, S., van der Maas, H.L., Forstmann, B.U., & Wagenmakers, E.-J. (in revision). How to measure post-error slowing: A confound and a simple solution. *Journal of Mathematical Psychology*.

Jepma, M., Verdonschot, R.G., van Steenbergen, H., Rombouts, S.A., & **Nieuwenhuis**, S. (in revision). Neural mechanisms underlying the induction and relief of perceptual curiosity. *Frontiers in Behavioral Neuroscience*.

- Jepma, M., Wagenmakers, E.-J., & **Nieuwenhuis**, S. (in press). Temporal expectation and information processing: A model-based decomposition. *Cognition*.
- De Rover, M., Brown, S.B., Boot, N., Hajcak, G., van Noorden, M.S., van der Wee, N.J., & **Nieuwenhuis**, S. (in press). Beta receptor-mediated modulation of the late positive potential in humans. *Psychopharmacology*.
- Nieuwenhuis**, S., Forstmann, B.U., & Wagenmakers, E.-J. (2011). Erroneous analyses of interactions in neuroscience: A problem of significance. *Nature Neuroscience*, *14*, 1105-1107.
- Nieuwenhuis**, S., & Donner, T.H. (2011). The visual attention network untangled. *Nature Neuroscience*, *14*, 542-543.
- Nieuwenhuis**, S. (2011). Learning, the P3, and the locus coeruleus-norepinephrine system. In: R. Mars, J. Sallet, M. Rushworth, and N. Yeung (Eds.) *Neural Basis of Motivational and Cognitive Control*. Oxford University Press, pp. 209-222.
- Jepma, M., Deinum, J., Asplund, C.L., Rombouts, S.A., Tamsma, J.T., Spape, M.M., Garland, E.M., Robertson, D., Lenders, J.W., & **Nieuwenhuis**, S. (2011). Neurocognitive function in dopamine-beta-hydroxylase deficiency. *Neuropsychopharmacology*, *36*, 1608-1619.
- Jepma, M., & **Nieuwenhuis**, S. (2011). Pupil diameter predicts changes in the exploration-exploitation trade-off: Evidence for the adaptive gain theory. *Journal of Cognitive Neuroscience*, *23*, 1587-1596.
- Samara, Z., Elzinga, B.M., Slagter, H.A., & **Nieuwenhuis**, S. (2011). Do horizontal saccadic eye movements increase interhemispheric coherence? Investigation of a hypothesized neural mechanism underlying EMDR. *Frontiers in Psychiatry*, *2*:4.
- Nieuwenhuis**, S., & de Kleijn, R. (2011). Consciousness of targets during the attentional blink: A gradual or all-or-none dimension? *Attention, Perception, & Psychophysics*, *73*, 364-373.
- Nieuwenhuis**, S., de Geus, E.J., & Aston-Jones, G. (2011). The anatomical and functional relationship between the P3 and autonomic components of the orienting response. *Psychophysiology*, *48*, 162-175.
- Nieuwenhuis**, S., & de Rover, M. (2010). Event-related potentials. In *Encyclopedia of Psychopharmacology*. Springer Verlag, pp. 367-385.
- De Rover, M., van Noorden, M.S., **Nieuwenhuis**, S., & van der Wee, N.J. (2010). Severe side effects of a single dose of the beta-blocker propranolol: a case report. *Neurobiology of Learning and Memory*, *94*, 576-577.
- Jepma, M., Te Beek, E.T., Wagenmakers, E.-J., Van Gerven, J.M., & **Nieuwenhuis**, S. (2010). The role of the noradrenergic system in the exploration-exploitation trade-off: A psychopharmacological study. *Frontiers in Human Neuroscience*, *4*: 170.
- Colzato, L., Waszak, F., **Nieuwenhuis**, S., Posthuma, D., & Hommel, B. (2010). The flexible mind is associated with the catechol-O-methyltransferase (COMT) Val158Met polymorphism: Evidence for a role of dopamine in the control of task switching. *Neuropsychologia*, *48*, 2764-2768.
- Gilzenrat, M.S., **Nieuwenhuis** S., Jepma, M., & Cohen, J.D. (2010). Pupil diameter tracks changes in control state predicted by the adaptive gain theory of locus coeruleus function. *Cognitive, Affective, & Behavioral Neuroscience*, *10*, 252-269.
- (selected by the Psychonomic Society as "Best Article published in CABN in 2010")**
- Bogacz, R., Wagenmakers, E.-J., Forstmann, B.U., & **Nieuwenhuis**, S. (2010). The neural basis of the speed-accuracy tradeoff. *Trends in Neurosciences*, *33*, 10-16.
- Nieuwenhuis**, S., & Jepma, M. (2011). Investigating the role of the noradrenergic system in human cognition. In T. Robbins, M. Delgado, & E. Phelps (Eds.), *Decision making. Attention & Performance, Vol. XXIII*. Oxford: Oxford University Press.
- Yeung, N. & **Nieuwenhuis**, S. (2009). Dissociating response conflict and error likelihood in anterior cingulate cortex. *Journal of Neuroscience*, *29*, 14506-14510.

- Slagter, H.A., Lutz A., Greischar, L.L., **Nieuwenhuis**, S., & Davidson R.J. (2009). Theta phase synchrony and conscious target perception: Impact of intensive mental training. *Journal of Cognitive Neuroscience*, *21*, 1536-1549.
- Jepma, M., Wagenmakers, E.-J., Band, G.P.H., & **Nieuwenhuis**, S. (2009). The effects of accessory stimuli on information processing: Evidence from electrophysiology and a diffusion-model analysis. *Journal of Cognitive Neuroscience*, *21*, 847-864.
- Keizer, A.W. , **Nieuwenhuis**, S., Colzato, L.S., Teeuwisse, W., Rombouts, S.A.R.B., & Hommel, B. (2008). When moving faces activate the house area: an fMRI study of object file retrieval. *Behavioral and Brain Functions*, *4*:50.
- Nieuwenhuis**, S., Jepma, M., La Fors, S., & Olivers, C.N.L. (2008). The role of the magnocellular and parvocellular pathways in the attentional blink. *Brain and Cognition*, *68*, 42-48.
- Colzato, L.S., Bajo, M.T., Van den Wildenberg, W., Paolieri, D., **Nieuwenhuis**, S., La Heij, W., & Hommel, B. (2008). How does bilingualism improve executive control? A comparison of active and reactive inhibition mechanisms. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *34*, 302-312.
- Ridderinkhof, K.R., **Nieuwenhuis**, S., & Braver, T.S. (2007). Medial frontal cortex function: An introduction and overview. *Cognitive, Affective, & Behavioral Neuroscience*, *7*, 261-265. (Introduction to Special Issue of *CABN*)
- Yeung, N., Ralph, J., & **Nieuwenhuis**, S. (2007). Drink alcohol and dim the lights: The impact of cognitive deficits on medial frontal cortex function. *Cognitive, Affective & Behavioral Neuroscience*, *7*, 347-355.
- Nieuwenhuis**, S., Van Nieuwpoort, C., Veltman, D.J., & Drent, M.L. (2007). Effects of the noradrenergic agonist clonidine on temporal and spatial attention. *Psychopharmacology*, *193*, 261-269.
- Nieuwenhuis**, S., Schweizer, T.S., Mars, R.B., Botvinick, M.M., & Hajcak, G. (2007). Error-likelihood prediction in the medial frontal cortex: A critical evaluation. *Cerebral Cortex*, *17*, 1570-1581.
- Slagter, H.A., Lutz, A., Greischar, L.L., Francis, A.D., **Nieuwenhuis**, S., Davis, J., & Davidson, R.J. (2007). Mental training affects distribution of limited brain resources. *PLoS Biology*, *5*, e138.
- Yeung, N., Bogacz, R., Holroyd, C.B., **Nieuwenhuis**, S., & Cohen, J.D. (2007). Theta phase-resetting and the error-related negativity. *Psychophysiology*, *44*, 39-49.
- Hajcak, G., & **Nieuwenhuis**, S. (2006). Reappraisal modulates the electrocortical response to unpleasant pictures. *Cognitive, Affective & Behavioral Neuroscience*, *6*, 291-297.
- Nieuwenhuis**, S., Stins, J.F., Posthuma, D., Polderman, T.J.C., Boomsma, D.I., & De Geus, E.J. (2006). Accounting for sequential trial effects in the flanker task: Conflict adaptation or associative priming? *Memory & Cognition*, *34*, 1260-1272.
- Olivers, C.N.L., & **Nieuwenhuis**, S. (2006). The beneficial effects of additional task load and positive affect on the attentional blink. *Journal of Experimental Psychology: Human Perception and Performance*, *32*, 364-379.
- Donkers, F.C.L., **Nieuwenhuis**, S., & Van Boxtel, G.J.M. (2005). Medial frontal negativities to averted gains and losses in the absence of responding. *Cognitive Brain Research*, *25*, 777-787.
- Nieuwenhuis**, S., & Yeung, N. (2005). Neural mechanisms of attention and control: Losing our inhibitions? *Nature Neuroscience*, *8*, 1631-1633.
- Overbeek, T.J.M., **Nieuwenhuis**, S., & Ridderinkhof, K.R. (2005). Dissociable components of error processing: On the functional significance of the P_E vis-à-vis the ERN/N_E. *Journal of Psychophysiology*, *19*, 319-329.
- Mars, R.B., Coles, M.G.H., Grol, M.J., Holroyd, C.B., **Nieuwenhuis**, S., Hulstijn, W., & Toni, I. (2005). Neural dynamics of error processing in medial frontal cortex. *NeuroImage*, *28*, 1007-1013.

- Talsma, D., Slagter, H.A., **Nieuwenhuis**, S., Hage, J., & Kok, A. (2005). The orienting of visuospatial attention: An event-related brain potential study. *Cognitive Brain Research*, *25*, 117-129.
- Hajcak, G., **Nieuwenhuis**, S., Ridderinkhof, K.R., & Simons, R.F. (2005). Error-preceding brain activity: Robustness, temporal dynamics, and boundary conditions. *Biological Psychology*, *70*, 67-78.
- Nieuwenhuis**, S., Gilzenrat, M.S., Holmes, B.D., & Cohen, J.D. (2005). The role of the locus coeruleus in mediating the attentional blink: A neurocomputational theory. *Journal of Experimental Psychology: General*, *134*, 291-307.
- Nieuwenhuis**, S., Aston-Jones, G., & Cohen, J.D. (2005). Decision making, the P3, and the locus coeruleus-norepinephrine system. *Psychological Bulletin*, *131*, 510-532.
- Nieuwenhuis**, S., Slagter, H., Alting von Geusau, N., Heslenfeld, D.J., & Holroyd, C.B. (2005). Knowing good from bad: Differential activation of human cortical areas by positive and negative outcomes. *European Journal of Neuroscience*, *21*, 3161-3168.
- Nieuwenhuis**, S., Nielen, M., Mol, N., Hajcak, G., & Veltman, D. (2005). Performance monitoring in obsessive-compulsive disorder. *Psychiatry Research*, *134*, 111-122.
- Nieuwenhuis**, S., Heslenfeld, D.J., Alting von Geusau, N.J., Mars, R.B., Holroyd, C.B., & Yeung, N. (2005). Activity in human reward-sensitive brain areas is strongly context dependent. *NeuroImage*, *25*, 1302-1309.
- Olivers, C.N.L., & **Nieuwenhuis**, S. (2005). The beneficial effect of concurrent task-irrelevant mental activity on temporal attention. *Psychological Science*, *16*, 265-269.
- Nieuwenhuis**, S., Broerse, A., Nielen, M.M.A., & De Jong, R. (2004). A goal activation approach to the study of executive function: An application to antisaccade tasks. *Brain and Cognition*, *56*, 198-214.
- Ridderinkhof, K.R., Ullsperger, M., Crone, E.A., & **Nieuwenhuis**, S. (2004). The role of medial frontal cortex in cognitive control. *Science*, *306*, 443-447.
- Nieuwenhuis**, S., Holroyd C.B., Mol, N., & Coles, M.G.H. (2004). Reinforcement-related brain potentials from medial frontal cortex: Origins and functional significance. *Neuroscience & Biobehavioral Reviews*, *28*, 441-448.
- Holroyd, C.B., **Nieuwenhuis**, S., Mars, R.B., & Coles, M.G.H. (2004). Anterior cingulate cortex, selection for action, and error processing. In: *Cognitive Neuroscience of Attention* (ed. M.I. Posner), pp. 219-231. New York: Guilford Press.
- Nieuwenhuis**, S., Yeung, N., Holroyd, C.B., Schurger, A., & Cohen, J.D. (2004). Sensitivity of electrophysiological activity from medial frontal cortex to utilitarian and performance feedback. *Cerebral Cortex*, *14*, 741-747.
- Holroyd C.B. *, **Nieuwenhuis**, S. *, Yeung, N., Nystrom, L.E., Mars, R.B., Coles, M.G.H., & Cohen, J.D. (2004). Dorsal anterior cingulate cortex shows fMRI response to internal and external error signals. *Nature Neuroscience*, *7*, 497-498. (* = shared first authors)
- Van der Veen, F.M., **Nieuwenhuis**, S., Crone, E.A., & Van der Molen, M.W. (2004). Cardiac and electro-cortical responses to performance feedback reflect different aspects of feedback processing. In: *Errors, Conflicts and the Brain. Current Opinions on Performance Monitoring* (eds. M. Ullsperger & M. Falkenstein), pp. 63-70. Leipzig: MPI of Cognitive Neuroscience.
- Nieuwenhuis**, S., Yeung, N., & Cohen, J.D. (2004). Stimulus modality, perceptual overlap, and the Go/NoGo N2. *Psychophysiology*, *41*, 157-160.
- Holroyd, C.B., **Nieuwenhuis**, S., Yeung, N., & Cohen, J.D. (2003). Errors in reward prediction are reflected in the event-related brain potential. *Neuroreport*, *14*, 2481-2484.
- Ridderinkhof, K.R., **Nieuwenhuis**, S., & Bashore, T.R. (2003). Errors are foreshadowed in brain potentials associated with action monitoring in cingulate cortex. *Neuroscience Letters*, *348*, 1-4.

- Nieuwenhuis, S., Yeung, N., Van den Wildenberg, W. & Ridderinkhof, K.R. (2003).**
Electrophysiological correlates of anterior cingulate function in a Go/NoGo task: Effects of response conflict and trial-type frequency. *Cognitive, Affective & Behavioral Neuroscience*, 3, 17-26.
- Nieuwenhuis, S., Yeung, N., & Cohen, J.D. (2003).** A computational simulation of electrophysiological markers of anterior cingulate activity in a Go/NoGo task. Technical Report 2003/1, Center for the Study of Brain, Mind, and Behavior, Princeton University.
- Holroyd, C.B., Coles, M.G.H., & **Nieuwenhuis, S.** (2002). Medial prefrontal cortex and error potentials. *Science*, 296, 1610-1611 (Letter).
- Nieuwenhuis, S., Ridderinkhof, K.R., Talsma, D., Coles, M.G.H., Holroyd, C.B., Kok, A., & Van der Molen (2002).** A computational account of altered error processing in older age: Dopamine and the error-related negativity. *Cognitive, Affective & Behavioral Neuroscience*, 2, 19-36.
- 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:

- Wagenmakers, E.J., & **Nieuwenhuis, S.** (2005). Damasio's error? De somatic marker hypothese onder vuur. *Neuropraxis*, nr. 6, 165-169.
- Nieuwenhuis, S.** (2005). Foutdetectie in de menselijke hersenen. *Neuropraxis*, nr. 3, 59-63.
- Nieuwenhuis, S. & Olsthoorn, N.** (1999). *Stamboom van de Nederlandse Psychonomie* (poster).

Invited presentations (selection)

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|---------|--|
| 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 6 th 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.

Teaching:

- 1997-2001 Several practical courses in research- and writing skills, University of Amsterdam
- 2004-2006 Course “Attention” at the Vrije Universiteit Amsterdam (lecturing)
- 2005-2006 Course “Cognitive Neuroscience & Neuropsychology” at the Vrije Universiteit Amsterdam (development, coordination, lecturing)
- 2008-2011 Course “Cognitive Neuroscience” at Leiden University (coordination, lecturing)
- 2009-2011 Course “Scientific Writing” at Leiden University (coordination, lecturing)
- 2011 Basiskwalificatie Onderwijs (BKO)

Supervision / postdocs

Research assistants

- Nisan Mol (2003-2004)
- Niels Alting von Geusau (2004-2006)
- Sabrina La Fors (2006-2007)

Graduate students

- Marieke Jepma (2006-2010)(cum laude)
- Stephen Brown (2009-current)

Postdocs

- Mischa de Rover (2008-2011)
- Marieke Jepma (2010-2011)

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-VIDI grant (€600,000)
- 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”)
- 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 Independent Researcher 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; Emotion; Journal of Experimental Psychology:General; Journal of Experimental Psychology:Human Perception and Performance; Memory & Cognition; 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; Brain and Cognition; Cognitive, Affective & Behavioral Neuroscience; Cognitive Brain Research; Experimental Brain Research; Frontiers in Human Neuroscience; Journal of Cognitive Neuroscience; Social Cognitive and Affective Neuroscience; Social Neuroscience
Neuroscience: Cerebral Cortex; Cortex; European Journal of Neuroscience; Human Brain Mapping; Journal of Neurophysiology; Journal of Neuroscience; Nature Neuroscience; Neural Computation; NeuroImage; 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; Progress in Neuro-Psychopharmacology & Biological Psychiatry; Psychopharmacology
Other: IEEE:Systems, Man, & Cybernetics; PLoS ONE; PNAS
- 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 Research Foundation Flanders (Belgium, FWO)
- 2010 - Member of Review Editorial Board of Frontiers in Decision Neuroscience

Member of PhD committees:

Elkan Akyürek (2005, Leiden University), Lorenza Colzato (2005, Leiden University), Jennifer Ramautar (2005, University of Amsterdam), Zoe Tiegas (2007, University of Amsterdam), Edita Poljac (2009, Radboud University), Simon van Gaal (2009, University of Amsterdam), Nelleke van Wouwe (2009, University of Amsterdam), André Keizer (2010, Leiden University), Shaozheng Qin (2010, Radboud University), Martijn Lamers (2011, Radboud University), Christopher Warren (2011, University of Victoria, Canada)

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-	Member of the Board of Examiners (examencie), Dept of Psychology, Leiden
2008-	Coordinator of the Research Master programme at the Dept of Psychology, Leiden
2008-2009	Leergang Bestuurlijke Vaardigheden, Universiteit Leiden
2009	Member of the beoordelingscommissie NWO-Veni 2009
2009-	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