

Wouter van den Bos

PERSONAL DATA

Date of Birth: May 23th, 1980
Place of Birth: Amsterdam, the Netherlands
Nationality: Dutch
Sex: Male

EDUCATION

2006 – present **Leiden University** Leiden, The Netherlands

- PhD Candidate, Department of Psychology
- Advisors: E. A. Crone, P. M. Westenberg & E. van Dijk
- Dissertation Topic: “The neural correlates of developmental change in competition and collaboration”

2004 - 2006 **University of Amsterdam** Amsterdam, The Netherlands

- Dec 2006: Master of Science in Cognitive Science (*cum laude*)
- Track: Brain and Behavior
- Title of M.Sc Thesis: “Dissociating affective evaluation and social cognitive processes in ventral medial prefrontal cortex”

2006 (jan-sept) **Princeton University** Princeton, United States of America

- Visiting Student Research Collaborator

1999 - 2004 **Amsterdam** Amsterdam, The Netherlands

- Nov 2004: Master of Arts in Philosophy (with Honors)
- Major: Philosophy of Mind and Cognition
- Minor: Cognitive Science
- Title of M.A. Thesis: “Interactionism, Cognition and Language”

RESEARCH INTERESTS

My main interest is the neurobiological mechanisms underlying decision making. A key concept for understanding decision making is value. An important question is how the brain integrates the available information to calculate the expected outcome of certain decisions; how the brain copes with unavoidable uncertainties and how cost-benefits analyses are made. This includes studying the representations of the PFC and its interaction with other, evolutionary more ancient, structures such as the striatum. Furthermore, because the natural environment of humans is a highly social it essential to understand how these mechanisms operate in social context, i.e. how social values are integrated in the decision making process.

- **Keywords:** Decision making, reward, social cognition, prefrontal cortex, reinforcement learning, functional MRI, Neuroeconomics, Game Theory.

PROFESSIONAL EXPERIENCE

2006 – present **Leiden University**, Leiden, the Netherlands

- PhD Fellow

2009 **Stanford University**, Palo Alto, USA

- Working Visit Decision Neuroscience Laboratory, prof. Sam McClure (August).

2006 **Princeton University**, Princeton, USA

- Visiting Graduate Student Research Collaborator Non-Degree
- Supervisor: prof. Jonathan D. Cohen
- Department of Psychology; Neuroscience of Cognitive Control Laboratory, Center for the Study of Brain, Mind, and Behavior (CSBMB)

2006 **Institute for Advanced Studies – the School of Social Science**, Princeton, USA

- Seminar Topic "Psychology and Economics" (seminar participant)

2005 – 2006 **Amsterdam center for the study of adaptive control in brain and behavior (Acacia)** University of Amsterdam

- Research Intern
- Supervisor: prof. Richard Ridderinkhof

TEACHING

Courses

fMRI Course: data analysis and statistics (FSL, practicals)

Introduction in Developmental Psychology (practicals)

Social Emotional Development (Lectures and practicals)

Emotion and Cognition (Guest Lecture)

Psychology of Judgment and Decision-Making (Webster University, guest lecture)

Supervision

Bachelor and Research Master student thesis supervision

Workshops & Public Activities

- NWO autumn school 2007 – Workshop on Social Decision Making. Doorwerth, The Netherlands. (with Eveline Crone)
- Finalist of the - [Academische Jaarprijs 2008](#) – with team Crone
- Pre-Conference Workshop "Developmental Socio-Cognitive Neuroscience" at the 20th Biennial ISSBD meeting 2008, Wurzburg, Germany (with Eveline Crone, Linda van Leijenhorst, Berna Guroglu and Jan Boom)

SUMMER PROGRAMS

2009 1st **SWR-Hendrik Muller Summer seminar "The Neurobiological Society" 22-26 June**, Leusden, the Netherlands.

- Interdisciplinary seminar organized by the Social Sciences Council ([SWR](#)) on the growing influence of biological explanations in the social sciences and society.

2009 **Summer Workshop on Decision Neuroscience** 2009, Ann Arbor, Michigan, USA

- How Neuroscience can Inform Behavioral Decision Making Research: Overview,

Methods & Applications

2007 **FSL & FreeSurfer Course: 3-7 September**, Cardiff, Wales, UK

2006 **Stanford Summerschool Neuroeconomics**, Stanford University, Palo Alto, USA

2005 **CSCA Summer School Cognitive Science**, Amsterdam, The Netherlands

- From Human Evolution to Language Acquisition

2004 **CSCA Summer School Cognitive Science**, Amsterdam, The Netherlands

- Memory: an interdisciplinary perspective

2003 **CSCA Summer School Cognitive Science**, Amsterdam, The Netherlands

- Human reasoning and cognitive science

AWARDS AND HONORS

- 2009: Leids Universitair Fonds (LUF) funding for Stanford working visit
- 2009: Stipend for the Summer Workshop on Decision Neuroscience
- 2007: Travel Award for the Neural Systems of Social Behavior Conference
- 2006: Travel Award for Stanford Summerschool Neuroeconomics

RESEARCH SCHOOLS

- EPOS (Experimental Psychology)
- ISED (Institute for the Study of Education and Human Development)

PROFESSIONAL MEMBERSHIP

- Society for Neuroeconomics
- Social & Affective Neuroscience Society
- Cognitive Neuroscience Society (CNS)
- Society for Judgment and Decision Making (SJDM)
- Federation of Netherlands Neuroscience Organizations (Dutch Neurofederation)
- Nederlandse Vereniging voor Psychonomie (NVP, Dutch Psychonomic Society)

RESEARCH TOOLS

- FSL, AFNI, SPM, SPSS, EXCEL, JAVA, Matlab, PDP++, Presentation, E-Prime, Authorware

PUBLICATIONS

In press

- McClure, S.M., **Van den Bos, W.** (in press) The psychology of common value auctions. In *Attention and Performance XXIII: Decision Making* (E. Phelps, T. Robbins, & M. Delgado, eds.)

2009

- **van den Bos, W.**, Westenberg, P. M., van Dijk, E. & Crone, E. A. (2009) Development of Trust and Reciprocity in Adolescence. *Cognitive Development*.

- Grođlu, B., **van den Bos, W.** & Crone, E. A. (2009) Fairness considerations: Increasing understanding of intentionality in adolescence. *Journal of Experimental Child Psychology*. 104, 398–409.
- **van den Bos, W.** & Grođlu, B. (2009) The Role of the Ventral Medial Prefrontal Cortex in Social Decision Making. *Journal of Neuroscience*. 29(24), 7631-7632
- **van den Bos, W.**, van Dijk, E., Westenberg, P. M., Rombouts, S. A. R. B. & Crone, E. A. (2009), What motivates repayment? Neural correlates of reciprocity in the Trust Game. *Social Cognitive and Affective Neuroscience*.
- Grođlu, B., **van den Bos, W.** & Crone, E. A. (2009). Neural correlates of social decision-making and relationships: A developmental perspective. *Annals of the New York Academy of Sciences*. 1167, 197-206.

2008

- **van den Bos, W.**, Li, J., Lau, T., Maskin, E., Montague, P.R., Cohen, J.D. McClure, S.M., (2008) The value of victory: Social influences on bidding in common value auctions. *Journal of Judgment and Decision Making* 7(3), 483-492.

2007

- **van den Bos, W.**, McClure, S.M., Harris, L.T., Fiske, S.T., Cohen, J.D. (2007) Dissociating affective evaluation and social cognitive processes in ventral medial prefrontal cortex. *Cognitive, Affective, and Behavioral Neuroscience* 7(4), 337-346
- Harris, L.T., McClure, S.M., **van den Bos, W.**, Fiske, S.T., Cohen, J.D. (2007) MPFC as an affective region especially tuned to social stimuli. *Cognitive, Affective, and Behavioral Neuroscience*, 7(4), 309-316

Submitted

- **van den Bos, W.**, van der Bulk, B. G., Grođlu, B., Rombouts, S.A.R.B. & Crone, E. A., Better than expected or as bad as you thought? The neurocognitive development of probabilistic feedback processing (under revision)
- Grođlu, B., van den Bos, W., Rombouts, S.A.R.B. & Crone, E. A. Unfair? It depends: Neural correlates of fairness in social context (under revision)
- **van den Bos, W.**, van Dijk, E., Westenberg, P. M., Rombouts, S.A.R.B. & Crone, E. A. Neurocognitive Development of Reciprocal Exchange (submitted).

In preparation

- **van den Bos, W.**, Westenberg, P. M., van Dijk, E. & Crone, E. A., Trust and Altruistic Punishment a developmental perspective.
- Grođlu, B., **van den Bos, W.**, Rombouts, S.A.R.B. & Crone, E. A. Neural correlates of fairness in social decision-making: A developmental study.

TALKS

- Neurocognitive development of probabilistic learning and feedback processing. *Workshop challenges and methods in developmental neuroimaging 2009, Amsterdam, the Netherlands*
- Neurocognitive development of reciprocity in Adolescence. *10th annual EFCAP conference 2008, Amsterdam, the Netherlands*
- Neural correlates of Reciprocity. *ASPO Social Neuroscience Symposium 2008, Nijmegen, the Netherlands*
- 'Het puberbrein onder de loep'. *Nationale DenkTank Summer school 2008, Driebergen, The Netherlands*
- Developmental Changes in Brain Mechanisms underlying Cooperation and Competition in Adolescence. *20th Biennial ISSBD meeting 2008, Wurzburg, Germany.*
- Development of Trust and Reciprocity. *Society for Neuroeconomics Third annual meeting 2007, Boston, USA,*
- Development of Trust in Adolescence. *Expert meeting: Risks and opportunities in adolescent brain development. hosted by Leiden University. 2007*
- The Winner's Curse and the value of victory. *Baylor Medical College, Human Neuroimaging Institute, 2006, Houston, Texas, USA*
- The Medial Prefrontal Cortex and Social Cognition, *Neuroscience of Social Decision Making Seminar series (NSDM) 2006, Princeton University, Princeton, USA*