

Curriculum Vitae Prof. Dr. H. Bekkering

Personal data:

Name: Harold Bekkering
Day of Birth: 19 October 1965 (Oldenzaal, The Netherlands)
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Education:

PD (Habilitation): Ludwig-Maximilians-University, Munich (2000)
Ph.D.: University of Maastricht (1995)
MA: Cognitive Psychology, Radboud University Nijmegen (1990)
BSc: Psychology, Radboud University Nijmegen (1985-1990)
Athenaeum: Nederrijn College, Arnhem (1985)

Employment history:

- 2002, Oct. -
Professor, Chair, Dept. of Cognitive Psychology, Radboud University Nijmegen, The Netherlands.
- 2015, May – Sept.
Visiting Scientist, Psychology Department, Harvard, USA
- 2001 - 2002
Associate Professor, Dept. of Experimental Psychology, University of Groningen,
- 1995 - 2000
Senior Researcher, Dept. Cognition and Action, Max-Planck-Institute for Psychological Research, Munich, Germany.
- 1994, January - July
Visiting Graduate Research Assistant, Dept. of Psychology, Washington University, St. Louis, USA
- 1991-1994
Ph.D., Faculty of Life Sciences, University of Maastricht, Netherlands.
- 1989-1990
Research Assistant, Inst. of Human Factors (TNO), Soesterberg, Netherlands
- 1986-1989
Student Assistant, Radboud University Nijmegen, Netherlands

Scientific expertise:

Disciplines

Cognitive Neuroscience, Psychology, Cognitive Robotics, Educational Neuro Sciences,

Topics

Action and Intention, Social Interaction, Sensorimotor and knowledge representations (Embodied Cognition), The Predictive Brain/Mind

Professional experiences and responsibilities

Management

- 2014 –
Board member Donders Institute for Brain, Cognition and Behaviour
- 2012 – 2013
Chair, Board of Directors Donders Institute for Brain, Cognition and Behaviour
- 2008 - 2011
Director, Donders Institute for Brain, Cognition and Behaviour, Donders Centre for Cognition.
- 2007 - 2008
Vice-Dean Faculty of Social Science, Radboud University Nijmegen.
- 2002 - 2007
Chairman of the Advisory Board of the Nijmegen Institute for Cognition and Information.
- 2002 - 2007
Advisory Board Member of the MSc Cognitive Neuroscience, Nijmegen.
- 2003 – 2007, 2012 -
Member of the Educational Board at the Radboud University of Nijmegen “Psychology and Cognitive Science”.
- 1996 -1999
Scientific supervisor of the technical staff of the Max-Planck-Institute for Psychological Research.

Organization of main events

- 2015 – Advisor of NWO: Professional Games for Professional Skills
- 2014 – Advisor of NWO: Brain, Cognition & Education
- 2012 - Chairman of the Advisory Board of the National Initiative Brain and Cognition
- 2010 - 2012 Scientific Advisory Board Member of the National Initiative Brain and Cognition
- 2007 Chairman, “From molecule to man: The future of Cognitive Sciences in the Netherlands”, Royal Netherlands Academy of Arts and Sciences (KNAW).
- 2006 – 2007 Member Task-force “Dutch National Research Initiative “Brain and Cognition”, Dutch Science Organization, (NWO).

- 2000 – 2010 Chief-organizer of the European Diploma in Cognitive and Brain Sciences (EDCBS). Post-graduate school and practical education.
- 2006 -
- Organizing science symposia in the USA, Spain, Germany, The Netherlands within Cognitive Neuroscience, Psychology, Robotics.

Editorial

- Associate editor *Human Movement Science*, 2002-2007
- Associate editor *Interaction Studies*, 2006 -
- Associate editor *Psychological Research*, 2008 -
- Frequent reviewer for international scientific journals:
 - *Acta Psychologica*
 - *Animal Cognition*
 - *Autonomous Robots*
 - *Behavioral Brain Research*
 - *Brain Research, Brain & Language*
 - *Brazilian Journal of Medicine*,
 - *Cerebral Cortex*
 - *Child Development*
 - ***Current Biology***
 - *Cognitive Neuropsychologia*
 - ***Cognition***
 - *Cortex*
 - *Developmental Psychology*
 - *Developmental Science*
 - *Experimental Brain Research*
 - *Journal of Experimental Psychology: Human Perception and Performance*
 - *Journal of Experimental Psychology: Learning, Memory and Cognition*
 - *Journal of Experimental Psychology: General*
 - *Journal of Motor Behavior*
 - *Journal of Neurophysiology*
 - *Journal of Neuroscience*
 - *Journal of Neurology*
 - *Neurosurgery and Psychiatry*
 - ***Nature***
 - ***Nature Neuroscience***
 - *NeuroImage*
 - *Journal of Sport Sciences*
 - *Learning and Instruction*
 - *Neuropsychologia*
 - *Perception and Psychophysics*
 - *Psychological Bulletin & Review*
 - *Psychological Science*
 - *Quarterly Journal of Experimental Psychology*
 - ***Science***

- *Visual Cognition*
- *Vision Research*

Referent or member jury of scientific funding agencies:

- Russian Science Federation of Education and Science (Group Leader of Psychology 2012-3)
- Canadian Research Council
- Flamish Science Organization
- Deutsche Forschungs Gesellschaft (i.e., Excellence initiatives, SPP, SFB)
- Netherlands Organization for Scientific Research (VENI\VIDI\VICI)
- Royal Netherlands Academy of Arts and Sciences
- National Science Foundation, USA
- Swiss Science Organization
- Wellcome Trust, UK
- EU: FP Programs, ERC-advanced, ERC-starters, Marie-Curie

Projectleader of Research Grants acquired in competition (largest on top):

- 2012 – 2022, Work-package leader Gravitation program Language in Interaction, NW), 27,6 M Euro.
- **2004 – 2009. IP-Coordinator together with Ruud Meulenbroek. Joint Action System Technology, Integrated Project, 6th Framework Programme “Information Society Technologies”, 6M Euro.**
- **2001 – 2004. WP-leader. Artifact structural learning through Imitation. European Community, STREP, 5th Framework Programme “Information Society Technologies”, 3 M Euro.**
- 2005 – 2010, NWO-VICI, highest personal grant in competition in the Netherlands “Conceptual knowledge in goal-directed Action”, 1.25 M Euro.
- 2012-2017, NWO, TOP programme, How the integration of sensorimotor simulation and mentalizing allows for human action understanding Highest group subsidy in the Netherlands, 750 k Euro.
- 2011-15, NWO, Brain-and-Cognition, Excellence programme, Coordinator Joint Action: The Role of Motor Simulation and Cognitive Control in Young Children and Adults, 750 k.
- 2011-2015, NWO, Brain-and-Cognition, Social Innovation. Coordinator, Understanding and improving the development of language skills in primary school children, 500k.
- 2011-2015, NWO: PROO, Yes Wii Can: An Embodied Cognition Approach to Improving the Design of Animations for Primary Education, 500k.
- 2005 – 2009, ICIS, Interactive Collaborative Information Systems, 400k.
- 2009, NWO-VENI, Shirley-Ann Rueschemeyer, Using actions to understand language, 300k.
- 2005, NWO-Investment, Coordinator, Understanding human action: High-quality measurements of three-dimensional body kinematics and brain activities during goal-directed actions, 250k
- 2000 – 2002, „Sensorimotor Integration in eye-hand coordination“

- German Science Foundation, DFG-SPP 1001 „Sensomotorische Integration“, 250k.
- 1997 – 1998. Bekkering, H., Zihl, J., & Prinz, W.: „Task-dependent perception“. German Science Foundation, DFG-Forschergruppe Wahrnehmungspplastizität“, 200k.
 - 1996 – 1998. „Stabilization of saccadic eye movements during goal-directed hand movements“. German Science Foundation, DFG-SPP 1001 „Sensomotorische Integration“, 200k.
 - 1996 – 1998.: „Eye-hand coordination for visual and tactile target stimuli“. German Science Foundation, DFG-SPP 1001 „Sensomotorische Integration“, 200k.
 - 2009-2013. M.Meyer, Acting together: Early development of Brain and Behaviour, TopTalent - Cognitive Neuroscience Master, Donders Institute for Brain, Cognition and Behaviour, Radboud University Nijmegen (PhD), 200k.
 - 2009-2013. F. Krause, Numbers in Action, TopTalent - Cognitive Neuroscience Master, Donders Institute for Brain, Cognition and Behaviour, Radboud University Nijmegen (PhD), 200k.
 - 2008 – 2012. Hunnius, S. & Bekkering, H. The early development of action understanding: Brain and behaviour, Donders Centre for Cognition, Radboud University Nijmegen (PhD), 200k.
 - 2008 – 2012. Ruschemeyer, S-A, & Bekkering, H. Motion is Meaning: on the semantic representation of action-related objects. Donders Centre for Cognition, Radboud University Nijmegen (PhD), 200k..
 - 2004 – 2008 Bekkering, H., & Toni, I. Intention & Action.. NICI, University of Nijmegen (PhD), 200k
 - 2012-2016, Associative learning. Donders Centre for Cognition, Radboud University Nijmegen (PhD), 200k.
 - 2001 – 2005 Bekkering, H. Ubbo Emmius Bursaal. University of Groningen (Ph.D. and research funds).
 - 2002 – 2005 Cornelissen, F.W., & Bekkering, H. Ubbo Emmius Bursaal.. University of Groningen (Ph.D. and research funds).

Supervised PhD students (including their current position):

1. Dirk Kerzel, Max-Planck-Institute Munich 2000, Professor in Psychology, Geneve, Switzerland
2. Marcel Brass, Max-Planck-Institute Munich 2000, Professor in Psychology, Gent, Belgium
3. Bas Neggers, Max-Planck-Institute Munich 2000, Associate Professor Psychiatry, Utrecht Medical Centre, Utrecht, Netherlands
4. Dominique van Roon, NICI Nijmegen 2005, Post-doc, University Leuven, Belgium, not daily supervised
5. Makiko Sadakata, NICI Nijmegen, 2006, Post-doc, Radboud University, Nijmegen, not daily supervised
6. Marcel Mutsaerts, NICI Nijmegen, 2007, Psychology Lecture, Hanse Hogeschool Nijmegen

7. Oliver Lindemann, RUG Groningen, 2008, Post-doc, Radboud University Nijmegen
8. Pines Nuku, NICI Nijmegen, 2008, Senior researcher, Herlaarhof, Vught, Netherlands
9. Rens Vingerhoets, Donders Nijmegen, 2008, Clinical Physicus
10. Jurjen Bosga, Donders Nijmegen, 2008, Physical therapist, Doorn, not daily supervised
11. Edita Poljac, Donders Nijmegen 2009, Post-doc in Oxford
12. Maaike de Vrijer, Donders Nijmegen, 2010, second promotor
13. Stan van Pelt, Donders Nijmegen 2009, Post-doc Donders Centre for Cognitive Neuroimaging, not daily supervised
14. Don Willems, Donders 2010, second promotor.
15. Sabine Beurze, Donders Nijmegen, 2010 not daily supervised
16. Jasminka Majdandzic, Donders Nijmegen, 2010, Post-doc Vienna
17. Michiel van Elk, Donders Nijmegen, 2010, Assistant Prof. UvA, (Cum Laude)
18. Martijn Lamers, Donders Nijmegen 2011, Industry
19. Jurrian van der Werf, Donders Nijmegen 2011, Post-doc Donders Centre for Cognitive Neuroimaging, not daily supervised
20. Johanna Egetemeier, Donders Nijmegen, 2012, Post-doc Regensburg,, not daily supervised
21. Markus Paulus, Donders Nijmegen 2011, Post-doc Munich (Cum Laude)
22. Sven Vrins, Donders Nijmegen 2012, Lecturer Psychology Nijmegen, not daily supervised
23. Birgit Knudsen, Max-Planck-Institute Nijmegen 2012, Post-doc Germany, not daily supervised
24. Wessel van Dam, Donders Nijmegen 2012, Post-doc USA
25. Sebo Uithol, Donders Nijmegen 2012 Post-doc Italy
26. Sasha Ondobaka, Donders Nijmegen 2013, Post-doc Donders
27. Anneloes Overvelde, Donders Nijmegen, 2013, Child Physiotherapist, not daily supervised
28. Marlene Meyer, Donders Nijmegen, 2014, Post-doc Chicago
29. Florian Krause, Donders Nijmegen, 2014, Post doc at Brainvoyager
30. Janny Stapel, 2015, Post-doc Donders
31. Wim Schlooz, 2015, Psychiatrist
32. Simon-Jan Hazenberg, 2016
33. Kostermans, Evelien, 2016
34. **Prof. Karl Friston, Honorary Doctors Degree**, Radboud University, 2016

Awards and prizes:

- Member of the Royal Dutch Academy of Sciences (KNAW), 2016
- Visiting Scientist, Harvard university (sabbatical), 2015
- Gravitation Award (co-applicant, 27 M), 2012.
- TOP: best group award in competition of NWO, 750k, 2011
- Summer School students (EDCBS), Best teacher and organizer of Science events, 2008
- VICI highest personal grant in competition of NWO, 1.5M, 2005

- Visiting scholarship. Washington University, St. Louis, USA (6 months, NWO, Stichting “De 3 lichten”), 1994
- Poster prizes (~20) at conferences since 1994
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Publications, 26-1-2017, Web of Science, 191 pubs, 8353 citations, H-index = 42, Researcher ID: A-6357-2009.

5 recent key articles articles

1. Newman-Norlund, R.D., van Schie, H.T., van Zuijlen, A.M., Bekkering, H. (2007). The mirror neuron system is more active during complementary compared with imitative action. *Nature Neuroscience*, 10(7), 817-8.
2. Ondobaka, S., de Lange, F. P., Wittmann, M., Frith, C. D., & Bekkering, H. (2015). Interplay between conceptual expectations and movement predictions underlies action understanding. *Cerebral Cortex*, 25(9), 2566-2573.
3. Cuijpers, R. H., van Schie, H. T., Koppen, M., Erhagen, W., & Bekkering, H. (2006). Goals and means in action observation: A computational approach. *Neural Networks*, 19(3), 311-322.
4. Adank P, Hagoort P, Bekkering H. (2010). Imitation improves language comprehension. *Psychological Science*, 1, 21(12), 1903-9.
5. de Lange, F.P., Spronk, M., Willems, R.M., Toni, I., Bekkering, H. (2008). Complementary systems for understanding action intentions. *Current Biology*, 18(6), 454-7.

Main Invited Key-lectures:

- **Robots and the Mirror Neuron System, Osaka, 2016**
- Social Interaction, Bangor, 2015
- **Social Brain, FENS, Copenhagen, 2014**
- **Robotics, ICDL – EPIROBOT, Genoa, 2014**
- Cognitive Science Germany, Tübingen, 2014
- **Developmental Psychology, ICIS, Berlin, 2014**
- Embodied Cognition, Opening Science Centre, Lille, France, 2013
- Science Debate, Glasgow, UK, 2012
- **20-years Mirror Neurons, Erice, Italy, 2012**
- International Congress of Psychology, Berlin, Germany, 2008
- **Human-Robot-Interaction, Amsterdam, The Netherlands, 2007**
- Cognition lecture, Dutch Science Foundation, NWO, Utrecht, NL, 2007
- New year lecture Behavioral Cognitive Neuroscience, RUG, NL, 2006
- Social learning in human and non-human primates, Kyoto, Japan, 2005
- **European Neuropsychology, Bressanone, Italy, 2004**
- **European Society for Philosophy and Psychology, France, 2003**
- **Cognitive Neuroscience, New York, USA, 2002**
- European Society for Brain and Behaviour, Marseille, France, 2002
- Over 100 lectures at Universities (i.e., UCLA Los Angeles, UCLondon, LMU-Munich, ATR-Japan).

Societal Relevance:

Public meetings

- > 30 Lectures at primary and secondary schools about Learning
- 50-year Clinical Psychology in the Netherlands (NIP: Haarlem, 2008).
- Brainspotting (Pakhuis de Zwijger, Amsterdam, 2006).
- National Day of the Brain (Utrecht Jaarbeurshal, 2005).
- Science cafes / Studium Generale (Enschede, Nijmegen, Munich, Maastricht, Amsterdam)
- > 5 Lectures for Children at primary schools
- Lectures for Educational Groups (teachers, managers, policy-makers)
- Lectures for Clinician related to Movement, Intention, Social Cognition etc.

Television appearances

- NPO 2015, Future of Science (1 of 4 selected Dutch eminent scientists)
- VPRO Noorderlicht, 2002, 2013
- VPRO, Labyrinth, 2011
- RAI, 2002
- VARA, Hoezo?!, 2006
- RTL4, Actie-nieuws, 2007
- VPRO, Noorderlicht Nieuws, 2008
- VPRO, 2009
- National Television (NTR Pavlov), 2011, 2012

Radio

- Noorderlicht (3x)
- BNR
- Gelderland,
- Groningen

National newspapers

- NRC
- Volkskrant,
- Gelderlander
- Die Zeit
- New York Times

Magazines

- Psychologie
- De Psycholoog
- Ouders van nu
- MIND
- Quest
- Kijk
- Natuur en techniek