PERSONAL INFORMATION

Name (1st/last): Andre Marquand
Date of birth: 12 November 1977
Nationality: British / New Zealander
IDs: ResearcherID: B-6050-2012, ORCID: 0000-0001-5903-203X, SCOPUS: 36914890300
Webpage: http://www.predictiveclinicalneuroscience.com

EDUCATION

2011 PhD (Clinical Neuroscience). Degree awarded with no corrections required
Department of Neuroimaging, Institute of Psychiatry, King's College London, U.K.
Supervisors: Dr. Janaina Mourao-Miranda and Dr. Mitul Mehta

2007 MSc (Neuroscience). Awarded with distinction. I achieved the highest mark in a class of 35
Department of Neuroimaging, Institute of Psychiatry, King's College London, U.K.

1999 BSc (Computer Science and Psychology). GPA: A- (= first class honours in the U.K.)
University of Canterbury, Christchurch, New Zealand

CURRENT POSITION(S)

2014 – present Principal Investigator and Full Professor (promoted in 2019 from Assistant Professor and in 2022 from Associate Professor). Radboud University Medical Centre and Donders Institute for Brain Cognition and Behaviour, Radboudumc, Nijmegen, Netherlands

2014 – present Honorary Researcher, Institute of Psychiatry, Psychology and Neuroscience (IoPPN), King's College London, U.K.

PREVIOUS POSITIONS

2011 – 2014 Lecturer (equivalent to assistant professor) IoPPN, King's College London, U.K (promoted from post-doctoral research associate in 2012

2011 – 2013 Faculty Member, Machine Learning and Neuroimaging, University College London, U.K.

2007 Research Assistant, Institute of Psychiatry, King's College London, U.K.

2000 – 2006 Various positions in the commercial IT sector (senior technical roles).
2000: Canterbury Health Limited, Christchurch, N.Z. 2000-2002, National Bank of New Zealand, Wellington, N.Z. 2003-2006: Credit Agricole Indosuez, London, U.K.

FELLOWSHIPS AND GRANTS

- 2024-2026: Raynor Foundation (USA). Value: $1 million
- 2023-2028: National Institute of Health (USA) R01 (co-I). Value $4 million
- 2023-2026: Wellcome Trust Mental Health Award (PI). Value €1 million
- 2022-2027: Horizon Europe grant (Co-I and WP lead). Value €10 million
- 2022-2027: NIH R01 grant (co-I). Value: US$4 million
- 2021-2026: European Research Council consolidator grant (PI). Value €2 million
- 2020-2024: Radboudumc Principal Investigator predicate. Competitive internal call €400K over 5 years
- 2020-2022: Wellcome Trust Digital Innovator award (PI). Value: €614,357
- 2020-2024: Radboudumc junior researcher round (PI): Competitive internal call, €240,000 over 4 years
- 2017-2019: Radboudumc junior Principal Investigator. Competitive internal call, €180,000 over 3 years
- 2016-2021: Dutch Organization for Scientific Research, VIDI personal fellowship. Value: €800,000
- 2021-2026: UK Medical Research Council (MRC) Industry Collaboration Agreement (collab.) £1.3 mil.
- 2016-2021: UK MRC Experimental Medicine Challenge grant (co-PI). Value: £2.7 million
- 2014: DFG Heisenberg Professorship. (Collaborator, PI: C. Ecker) Value: ~€500,000
- 2013: MRC (UK) Strategic Skills (PI). Shortlisted (top 5%) but declined. Requested value: £330,000
- 2013: MRC New investigator award (co-Investigator, PI: M. O'Sullivan). Award value: £403,313
- 2013: MRC Research grant (collaborator, PI: A. Egerton). Award value: £787,060
- 2013: Industrial post-doctoral fellowship sponsored by Roche (co-PI). Award value: £154,013
- 2013: Industrial grant sponsored by Janssen (co-PI) Award value: £148,073
- 2013: Industrial grant sponsored by Johnson & Johnson (co-PI) Award value: £37,373
- 2012: Industrial grant sponsored by Janssen (co-Investigator, PI: S. Williams). Award value: ~£100,000
- 2011: MRC Developmental Pathway Funding (co-Investigator, PI: S. Williams). Award value: £393,715
- 2011: MRC EME (co-Investigator, PI: S. Williams). Shortlisted (top 2%) but declined. Value: £603,093
- 2011: MRC Neuroscience and Mental Health Board (collaborator, PI: A. Mechelli). Value: £205,228

- 2008: King's College London Annual Fund. Value: tuition fees and stipend (£48,000 over three years)
- 2008: King's College London Overseas Research Student Award. Value: international tuition top-up
- 2008: King's College London MMW studentship. Value: tuition fees and stipend of £14,700 for one year

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

- Supervised 17 PhD candidates including 11 completed: William Petterson-Yeo (2013), Derek Andrews (2017), Richard Parker (2018), Leon Askman (2017), Ismael Huertas (2018), Divya Brundavanum (2019), Thomas Wolfers (2019, cum laude), Richard Dinga (2020), Mariam Zabihi (2022) Charlotte Fraza (2025, cum laude), Saige Rutherford (2025) and 7 current (Christina Isakoglou, Emin Serin, Ramona Cirstian, Loran Knol, Imogen Leaning, Linda Schlueter, Bram Meijer).
- Supervised 12 postdocs: Alice Chavanne (2024-), Barbora Rehak-Buckova (2023-), Johanna Bayer (2023-), Antoine Bernas (2023-), Amanda Worker (2019-2022), Pierre Berthet (2019-2022), Nathalie Holz (2019-2020), Hannah Savage (2021-2024) Seyed Kia (2017-21), Richard Dinga (2019-21), Maria Rosa (2013), William Pettersson-Yeo (2013-14)

TEACHING AND SUPERVISION ACTIVITIES

Accredited with Dutch national teaching certificate (BKO; 'basiskwalificatie onderwijs') since 2017
Awarded *Ius Promovendi* in 2020 (the right to promote PhD students in the Netherlands)

2020 – present	Coordinator – Big Data in Biomedical Sciences (MSc level), RadboudUMC, Netherlands
2014 – present	Coordinator – Advanced Mathematics (MSc level), Radboud University, Netherlands
2018 – present	Lecturer – Neuroimaging II: Haemodynamics, Radboud University, Netherlands
2018 – present	Lecturer – Donders Toolkit: Advanced (f)MRI, Radboud University, Netherlands
2016 – present	Lecturer – Donders Toolkit: Neuroimaging, Radboud University, Netherlands
2016 – present	Lecturer – Computational Psychiatry Course, ETH Zurich, Switzerland
2011 – 2014	Lecturer – Neuroimaging MSc programme, King's College London, U.K.
2011 – 2015	Lecturer – Pattern Recognition in Neuroimaging Course, University College London, U.K.

ORGANISATION OF SCIENTIFIC MEETINGS

2018-2021	Special Area Team (Biomedical Signal Processing) European Signal Processing Conference, ~3000 participants
2018-2022	Workshop on Machine Learning in Clinical Neuroimaging, satellite for Medical Image Computing & Computer Assisted Intervention conference, 3000 participants
2014-2018	Programme committee, Workshop on Bayesian & Graphical Models for Biomedical Imaging, Massachusetts Institute of Technology, Cambridge, MA, U.S.A. (~100 participants)
2013	Symposium Organiser, "Methods for discovering neuroimaging-based biomarkers in mental disorders" European Congress of Psychiatry, Nice, France (~200 participants).
2011-2018	Programme Committee, Int. Workshop in Pattern Recognition in Neuroimaging. Seoul (~300 participants), London (~250), Pittsburgh (~200), Tuebingen (~200 participants)
2012	International Workshop in Pattern Recognition in Neuroimaging, U.K. (~250 participants)
2010	Brain Decoding Workshop, International Conference of Pattern Recognition, Turkey (~150)

INSTITUTIONAL RESPONSIBILITIES

2024 – present	Member of the steering group for Radboudumc Sector Plan: AI and data-driven innovation
2024 – present	Member of RadboudAI steering committee for AI across Radboud University campus
2016 – present	Faculty member, Radboud University Medical Centre, Netherlands
2018 – 2022	Personal Grants Committee member, Radboud University Medical Centre, Netherlands
2014 – present	Site contact and methodological advisor, ENIGMA and EU-AIMS consortia
2014 – present	Personal Tutor, Radboud University Medical Centre, Netherlands
2011 – 2014	Personal Tutor, King's College London, U.K.

POSITIONS OF TRUST

2023 – present	Senior editor, eLife
2023 – present	Scientific Advisory Board, NeuroSpin (the leading centre for brain imaging in France)
2020 – present	Scientific Advisory Board, PsyCare project (€9million French government funded project)
2023 – present	Senior member Editorial Board for eLife
2019 – 2024	Review Board for European Union ERA-NET NEURON funding programme
2021 – present	Editorial Board for Neuroimage: Reports
2021 – present	Associate Editor. Frontiers in Neuroimaging

2019 Senior Programme Committee International Joint Conference on Artificial Intelligence.
2016 – present Programme Committee for Neural Information Processing Systems (NeurIPS)
2016 – present Programme Committee for Artificial Intelligence and Statistics (AISTATS)
2016 – present Programme Committee for the International Conference on Machine Learning (ICML)
2010 – 2017 Programme Committee for the IEEE workshop on Pattern recognition in Neuroimaging
2014 – 2016 Programme Committee Int. Workshop Bayesian and Graphical Models Biomedical Imaging
Continuous Reviewer for many funding bodies including the European Research Council, UK Wellcome Trust, DFG, UK Medical Research Council and top-tier journals.

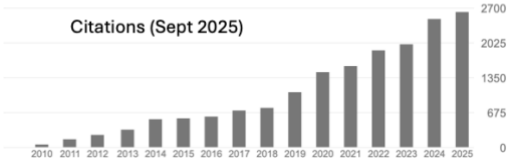
OTHER

Developed and maintain multiple software packages for neuroimaging data analysis used by thousands of researchers worldwide, e.g.: www.github.com/amarquand, www.github.com/predictive-clinical-neuroscience, www.mlnl.cs.ucl.ac.uk/pronto/ and https://fsl.fmrib.ox.ac.uk/fsl/fslwiki/OtherSoftware.

CAREER BREAKS

2000-2006 After my undergraduate degree I spent several years working in the commercial IT sector.

PUBLICATION SUMMARY: H-Index = 68, >17,000 citations (Google Scholar)



SELECTED PUBLICATIONS

Full list: Google Scholar

Numbers in brackets indicate 5- year impact factor for the publishing journal.

1. Holz, N. E., M. Zabihi, S. M. Kia, M. Monninger, P. M. Aggensteiner, S. Siehl, D. L. Floris, A. L. W. Bokde, S. Desrivieres, H. Flor, A. Grigis, H. Garavan, P. Gowland, A. Heinz, R. Bruhl, J. L. Martinot, M. P. Martinot, D. P. Orfanos, T. Paus, L. Poustka, J. H. Frohner, M. N. Smolka, N. Vaidya, H. Walter, R. Whelan, G. Schumann, A. Meyer-Lindenberg, D. Brandeis, J. K. Buitelaar, F. Nees, C. Beckmann, Imagen Consortium, T. Banaschewski, **Marquand, A.F..** A stable and replicable neural signature of lifespan adversity in the adult brain. Nature Neuroscience 26, 1603-12 (2023). DOI: 10.1038/s41593-023-01410-8. [27.7]
2. Segal A, Parkes L, Aquino K, Kia SM, Wolfers T, Franke B, Hoogman M, Beckmann CF, Westlye LT, Andreassen OA, Zalesky A, Harrison BJ, Davey CG, Soriano-Mas C, Cardoner N, Tiego J, Yücel M, Braganza L, Suo C, Berk M, Cotton S, Bellgrove MA, **Marquand AF***, Fornito A.* (2023) Regional, circuit and network heterogeneity of brain abnormalities in psychiatric disorders. Nat Neurosci. 26(9):1613-1629. doi: 10.1038/s41593-023-01404-6. [27.7]
3. Xu J, Liu N, Polemiti E, Garcia-Mondragon L, Tang J, Liu X, Lett T, Yu L, Nöthen MM, Feng J, Yu C, **Marquand A*,** Schumann G*; the environMENTAL Consortium (2023) Effects of urban living environments on mental health in adults. Nature Medicine Jun;29(6):1456-1467. doi: 10.1038/s41591-023-02365-w [82.9]
4. Wolfers, T., Doan, N. T., Kaufmann, T., Alnæs, D. Moberget, T., Agartz, I., Buitelaar, J. K., Ueland, T., Melle, I., Franke, B, Andreassen, O. A., Beckmann, C. F., Westlye, L. T., **Marquand A. F.** (2018) Mapping the heterogeneous phenotype of schizophrenia and bipolar disorder using normative models JAMA Psychiatry 75: 1146-1155 [16.6]
5. **Marquand, A. F.**, Kia, S., Zabihi, M., Wolfers, T., Buitelaar, J., Beckmann, C. F. (2019) Conceptualizing mental disorders as deviations from normative functioning. Molecular Psychiatry, in press [12.4]
6. **Marquand, A.F.**, Rezek, I., Buitelaar, J., Beckmann, C.F. Understanding Heterogeneity in clinical cohorts using normative models: beyond case control studies. (2016) Biological Psychiatry 80: 552-561. [10.3]
7. Wolfers, T., Buitelaar, J., Beckmann, C., Franke, B., **Marquand, A**. (2015) From estimating activation locality to predicting disorder: A review of pattern recognition for neuroimaging-based psychiatric diagnostics. Neuroscience and Biobehavioral Reviews 57, 328-49. [11.1]

8. Dinga, R., Schmaal, L. Penninx, B., van Tol, M. J. Veltman, D. J., van Velzen, L, Mennes, M., van der Wee, N., **Marquand A.** (2019) Evaluating the evidence for biotypes of depression: Methodological replication and extension of Drysdale et al 2017 NeuroImage: Clinical, in press [4.8]
9. **Marquand, A. F**, Haak, K. V., Beckmann, C. F. (2017) Functional corticostriatal connection topographies predict goal directed behaviour in humans. Nat Hum Behav. 1(8):0146
10. **Marquand A. F.,** Wolfers, T., Mennes, M., Buitelaar, J. K., Beckmann, C. F. (2016) Beyond lumping and splitting: a review of computational approaches for stratifying psychiatric disorders. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging [6.5]

BOOK CHAPTERS

1. Marquand, A., Dinga, R., Wolfers, T. Phenomapping: methods and measures for deconstructing diagnosis in psychiatry (2019). In: Personalized and Predictive Psychiatry: Big Data Analytics in Mental Health. Springer Nature
2. Andrews, D., Marquand, A., Ecker, C. and McAlonan, G Using Pattern Classification to Identify Brain Imaging Markers in Autism Spectrum Disorder. Biomarkers in Psychiatry, Springer Nature
3. Marquand, A., Kia, S. (2019). Linear Classification Methods. In: Machine Learning: methods and applications to brain disorders. Elsevier (in press)
3. Doyle, O. & Marquand, A. (2015) Machine Learning. Basic Neuroimaging: A guide to the methods and their applications. Editors: Veronese, M., Brigadoi, S., Doyle, O. (2018). OpenSpace publishers
4. Ecker, C. & Marquand, A. (2015) Neuroimaging Biomarkers for Autism Spectrum Disorder. In Autism Imaging and Devices. Editors: Casanova, M., El-Baz, A. & Suri, J. (In press)

SELECTED INVITED LECTURES AND PRESENTATIONS

2024 Lecture at the 'Future of the Mind' symposium directed at policy-makers
2022 Lecture at 2022 Lorenz symposium, University of Leiden, Netherlands
2019 Lecture at the 2019 meeting for the Organisation for Human Brain Mapping (OHBM), Rome
2019 Keynote lecture at Neuroscience Society, Trinity College Dublin
2019 Keynote lecture at the Behavioural and Cognitive Neuroscience Symposium, Groningen, Netherlands
2019 Lecture at the Dutch Neuroscience Meeting, Lunteren, Netherlands
2018 Lecture at the Medical Imaging and Computer Aided Intervention (MICCAI) conference, Granada
2017 Keynote lecture at the Amsterdam eScience symposium, Amsterdam
2017 Keynote lecture at the Donders Discussions conference, Nijmegen
2017 Keynote lecture at the Presidential symposium of the Society for Psychophysiological Research, at the Hofberg palace, Vienna.
2016 Invited lecture at the Transcontinental Computational Psychiatry Workshop
2015 Lecture at the Dutch Psychiatric Association annual meeting. Maastricht
2014 Lecture at the International Workshop on Pattern Recognition and Neuroimaging, Max Planck Institute, Tuebingen, Gemany
2013 Lecture at the Medical Engineering Centres (U.K.), Annual Meeting, York, U.K
2013 Lecture at the European Psychiatric Association Annual Meeting, Nice, France

PRIZES AND AWARDS

- 2025: Radboud University Medical Centre, Open Science Award.
- 2023: Organization for Human Brain Mapping replication award (Laidi et al 2022) for the best replication study showing the 'highest standards of experimental design, data collection and statistical analysis'
- 2019: Organization for Human Brain Mapping replication award (Dinga et al 2019).
- 2014: Submitted by King's College London as a top early career researcher to the Research Excellence Framework assessment 2014 (one of only 65 early career researchers submitted by the college)
- 2013: Medical Engineering Centres U.K. annual meeting best paper award
- 2010: National Health Service (NHS) healthcare, excellence and leadership Innovation of the year award
- 2009: Guarantors of Brain travel award (£900)

PUBLIC ENGAGEMENT, POLICY AND OUTREACH

2024 Board member for the Nature Commission: 'Earth, Brain, Health' (forthcoming, autumn 2024).
2024 Presentation at the 'Future of the Mind' public symposium, Donders Institute, Netherlands.
2023-4 Keynote lecture at symposium for AI in the mental health service, Utrecht and Amsterdam, NL
2023 Interviews with Dutch public radio 1 (NPO1), and television (Editie:NL)
2023 Interviews in public magazines 'AG: Connect' and 'de Psychiater' (the Psychiatrist)
2022 Keynote lecture at the 2022 Amsterdam Public Health Event