

Jan van Weering
Research Associate
Clinical genetics
Amsterdam Neuroscience - Cellular & Molecular Mechanisms
CCA - Cancer biology and immunology
CCA - Imaging and biomarkers



Research interests

My research group aims to uncover the molecular mechanisms involved in membrane trafficking and recycling in synapses at nanometer resolution. We study the transport, docking and fusion of secretory vesicles and the sorting of critical synaptic proteins through endosomes. Endosome recycling is important for the maintenance of basic neurotransmission, but it is also highly dysregulated in neurodegenerative diseases such as Alzheimer's disease. We aim to understand the causal relation between disease progression and the disruption of the endolysosomal pathway. Our group also runs the VU campus Electron Microscopy Facility, where we make advanced electron microscopy techniques available for all researchers at the VU campus and beyond. We specialize in cryofixation and quantitative morphometric analysis of ultrastructural elements. By this, we contribute to multiple high impact publications from the center for Neurogenomics and Cognitive Research (CNCR), Cancer Center Amsterdam (CCA) and other institutes based at the VU campus including Amsterdam UMC, location VUmc. More recently, we combine electron microscopy with a wide variety of (super-resolution) fluorescence microscopy techniques to investigate these dynamic processes in living cells as well as observing specific pathological hallmarks in patient brain material.

Employment

Research Associate

Clinical genetics
VU University medical center
1 May 2013 → 31 Dec 9999

Research Associate

Amsterdam Neuroscience - Cellular & Molecular Mechanisms
VU University medical center
1 Jan 2016 → 31 Dec 9999

Research Associate

CCA - Cancer biology and immunology
VU University medical center
1 Jan 2017 → 31 Dec 9999

Research Associate

CCA - Imaging and biomarkers
VU University medical center
1 Jan 2017 → 31 Dec 9999

Team leader, Staff

Department of Functional Genomics, CNCR, Neuroscience Campus Amsterdam, VU University, Amsterdam, The Netherlands.
1 Aug 2013 → present

Education

2012-2013: Postdoctoral researcher with Prof M. Verhage at the Department of Functional Genomics, Center of Neurogenomics and Cognitive Research, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands
2008-2012: Postdoctoral researcher with Prof P.J. Cullen at the Henry Wellcome Laboratories for Integrated Cell Signaling, University of Bristol, Bristol, United Kingdom
2003-2008: PhD student with Prof M. Verhage at the Department of Functional Genomics, Center of Neurogenomics and Cognitive Research, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands

2000-2002: MSc Neuroscience at University of Utrecht, Utrecht, The Netherlands
1997-2000: BSc Biomedical Sciences at University of Utrecht, Utrecht, The Netherlands

Publications

see ORCID: <https://orcid.org/0000-0001-5259-4945>
and SCOPUS: <https://www.scopus.com/authid/detail.uri?authorId=23669763200>

Grants and awards

2020-2024: Alzheimer Nederland Major Award WE.03-2019-16, lead PI
2017-2021: Alzheimer Association Research Grant AARG-17-498856, lead PI
2016-2018: Alzheimer Nederland Standard Award WE.03-2016-05, lead PI
2013-2016: Marie-Curie ITN CognitionNet, co-applicant on project led by Prof S. Spijker
2008-2011: Wellcome Trust Project Grant 085743, co-writer on project led by Prof P.J. Cullen

Team

Maria Pons Vizcarra, PhD student
Josse Poppinga, PhD student
Joke Wortel, technician
Rien Dekker, technician

Alumni:

Sonia Vazquez Sanchez, PhD
Girish Kedar, PhD
Julia Kurps, PhD