



# Athanasia Monika Mowinckel

STAFF SCIENTIST

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## Education

### Philosophiae doctorem - University of Oslo - Norway

THESIS TITLE: NEUROCOGNITIVE PROCESSES OF DECISION-MAKING IN ADULTS WITH ADHD

2012 - 2016

### Master in Cognitive Neuroscience - University of Oslo - Norway

THESIS TITLE: DEFAULT MODE RESTING-STATE FUNCTIONAL CONNECTIVITY OF THE AGING BRAIN

2009 - 2011

### Bachelor in Psychology - University of Oslo - Norway

THESIS TITLE: ATTENTION DEFICITS IN MILD COGNITIVE IMPAIRMENT AND DEMENTIA OF THE ALZHEIMER TYPE

2006 - 2009

## Research positions

### University of Oslo - Center for Lifespan Changes in Brain and Cognition

STAFF SCIENTIST

Oslo

2018 - present

- Creation and maintenance of LCBC data-base
- Data sharing and management in Lifebrain EU-project (WP2)
- Oversee data quality in ongoing data-collection

### University of Oslo - Center for Lifespan Changes in Brain and Cognition

RESEARCHER / PROJECT MANAGER

Oslo

2016 - 2017

- Coordinating data collection, data-management, and research collaborations
- Running analyses and data preparations

### University of Oslo - Dept. of Psychology

RESEARCH ASSISTANT AND LAB-TECHNICIAN

Oslo

2011 - 2012

- Work with functional MRI-analysis, supervising students, and transitioning lab from windows to a Linux
- Scripting of experiments, testing of participants and work on application for grants and ethical approval

## Memberships & Services

I am passionate about increasing the representation and retention of women in science, and in improving the formal training and competencies taught at the University. These interests are evident from task force and board memberships, and in activities I engage in outside of work, like R-Ladies.

### R-Ladies global team

GLOBAL TEAM MEMBER

Oslo

2019 - present

- Assisting in daily coordination and webpage maintenance of R-Ladies globally
- Initiative running events for coding, networking and support of minority genders in the R-community

### R-Ladies Oslo

CO-FOUNDER AND CHAIR

Oslo

2018 - present

- Assisting in daily coordination and webpage maintenance of R-Ladies globally
- Initiative running events for coding, networking and support of minority genders in the R-community

### University of Oslo

MEMBER

Oslo

2019 - NA

- Dept. of Psychology internal ethics committee

### University of Oslo

MEMBER

Oslo

2017 - 2018

- Task force proposing changes to the PhD-program

### University of Oslo

MEMBER

Oslo

2016 - 2017

- Central task force regarding research ethics, GDPR, and Hospital/University collaboration

### University of Oslo

FACULTY BOARD MEMBER, ELECTED

Oslo

2015 - 2015

- Faculty of Social Sciences

## University of Oslo

DEPARTMENT BOARD MEMBER, ELECTED

- Dept. of Psychology

## University of Oslo

CO-FOUNDER AND CHAIR

- PsyDoc - Interest organisation for PhDs and PostDocs.

Oslo

2014 - 2015

Oslo

2013 - 2015

## Teaching & Dissemination

In addition to teaching and workshops, I run a coding and neuroscience blog, [drmwinkels.io](https://drmwinkels.io), that includes tutorials in R and neuroimaging. I am also a certified Software Carpentry Instructor.

### UNIVERSITY

#### University of Oslo

SEMINAR TEACHER

- Introduction to research methods (PSY1010/PSYC1100)
- Experimental Cognitive Psychology (PSYC2102)

#### University of Oslo

SUPERVISOR

- Bachelor thesis

#### University of Oslo

SEMINAR TEACHER

- Introduction to research methods (PSY1010/PSYC1100)
- Introduction to social psychology (PSY1100)

Oslo, Norway

2012 - 2015

Oslo, Norway

2012 - 2015

Oslo, Norway

2009 - 2011

### WORKSHOPS

#### Monthly internal R-workshops for LCBC

INSTRUCTOR

- 2 hour workshops in using R for analysis, visualization, dissemination etc.

#### Workshop: Straightforward introduction to mixed models

INSTRUCTOR

- A short workshop in the use of Mixed-models for repeated measurement data

#### Linear Mixed models on repeated measurement data

INSTRUCTOR

- A short workshop in the use of Mixed-models for repeated measurement data

#### TidyVerse R

CO-INSTRUCTOR

- Two-day workshop on using R and the Tidyverse-packages for data handling and analysis

Center for Lifespan Changes in Brain  
and Cognition

Monthly 2018 - present

Oslo UseR!

June 5, 2019

R-Ladies London

March 28, 2019

University of Oslo - Software  
Carpentry

Sept. 25 - 26, 2018

## Research software development

A recent interest and professional endeavor is creating R-packages to improve data workflows and visualization in R. Icons link to package websites with documentation, and github repositories where source code is openly available.

2018 - **ggseg**: Lead developer

present Visualization tool for brain atlas segmentations through R

2018 - **ggeg3d**: Lead developer

present 3 dimensional visualization tool for brain atlas segmentations through R

2018 - **ggegExtra**: Lead developer

present Repository of atlas data for the ggseg-packages

2019 - **nettskjemar**: Lead developer

present Package to retrieve data and meta-data from the nettskjema questionnaire tool developed by the University of Oslo

2020 **metagam**: Contributor

Meta-Analysis of Generalized Additive Models in Neuroimaging Studies

# Publications & Preprints

In descending chronological order.

2021	Ø Sørensen, AM Brandmaier, D Macià, K Ebmeier, P Ghisletta, RA Kievit, et al. <i>Meta-analysis of generalized additive models in neuroimaging studies</i> NeuroImage 224 117416	cites: 2
2021	JM Roe, D Vidal-Piñero, Ø Sørensen, AM Brandmaier, S Düzel, et al. <i>Asymmetric thinning of the cerebral cortex across the adult lifespan is accelerated in Alzheimer's disease</i> Nature communications 12 1 111	cites: 1
2021	AM Fjell, Ø Sørensen, IK Amlie, D Bartrés-Faz, AM Brandmaier, et al. <i>Poor Self-Reported Sleep is Related to Regional Cortical Thinning in Aging but not Memory Decline—Results From the Lifebrain Consortium</i> Cerebral Cortex 31 4 19531969	cites: 0
2021	D Vidal-Piñero, MH Sneve, IK Amlie, H Grydeland, AM <b>Mowinckel</b> , et al. <i>The functional foundations of episodic memory remain stable throughout the lifespan</i> Cerebral Cortex 31 4 20982110	cites: 0
2020	AM Fjell, Ø Sørensen, IK Amlie, D Bartrés-Faz, DM Bros, N Buchmann, et al. <i>Self-reported sleep relates to hippocampal atrophy across the adult lifespan: results from the Lifebrain consortium</i> Sleep 43 5 zsz280	cites: 20
2020	AM <b>Mowinckel</b> , D Vidal-Piñero <i>Visualization of Brain Statistics With R Packages ggseg and ggseg3d</i> Advances in Methods and Practices in Psychological Science 3 4 466483	cites: 16
2020	D Vidal-Piñero, N Parker, J Shin, L French, H Grydeland, AP Jackowski, et al. <i>Cellular correlates of cortical thinning throughout the lifespan</i> Scientific reports 10 1 114	cites: 10
2020	KB Walhovd, AM Fjell, Ø Sørensen, AM <b>Mowinckel</b> , CS Reinbold, et al. <i>Genetic risk for Alzheimer disease predicts hippocampal volume through the human lifespan</i> Neurology Genetics 6 5	cites: 5
2020	VM Danielsen, D Vidal-Piñero, AM <b>Mowinckel</b> , D Sederevicius, AM Fjell, et al. <i>Lifespan trajectories of relative corpus callosum thickness: regional differences and cognitive relevance</i> Cortex 130 127141	cites: 5
2020	KB Walhovd, ACS Bråthen, MS Panizzon, AM <b>Mowinckel</b> , Ø Sørensen, et al. <i>Within-session verbal learning slope is predictive of lifespan delayed recall, hippocampal volume, and memory training benefit, and is heritable</i> Scientific reports 10 1 113	cites: 0
2020	I Budin-Ljøsne, BB Friedman, S Suri, C Solé-Padullés, S Düzel, et al. <i>The global brain health survey: development of a multi-language survey of public views on brain health</i> Frontiers in public health 8 387	cites: 0
2020	VP Didac, N Parker, J Shin, L French, G Håkon, AP Jackowski, et al. <i>Cellular correlates of cortical thinning throughout the lifespan</i> Scientific Reports (Nature Publisher Group) 10 1	cites: 0
2020	KB Walhovd, A Fjell, Y Wang, IK Amlie, AM <b>Mowinckel</b> , U Lindenberger, et al. <i>Education and income show heterogeneous relationships to lifespan brain and cognitive differences across European and US cohorts</i> bioRxiv	Preprint cites: 0
2020	A Fjell, H Grydeland, Y Wang, IK Amlie, D Bartrés-Faz, A Brandmaier, et al. <i>The genetic organization of subcortical volumetric change is stable throughout the lifespan</i> bioRxiv	Preprint cites: 0
2020	A Fjell, O Sorensen, IK Amlie, D Bartres-Faz, A Brandmaier, D Macia, et al. <i>Self-reported sleep problems are related to cortical thinning in aging but not memory decline and amyloid-β accumulation-results from the Lifebrain consortium</i> bioRxiv	Preprint cites: 0
2019	AM Fjell, CH Chen, D Sederevicius, MH Sneve, H Grydeland, et al. <i>Continuity and discontinuity in human cortical development and change from embryonic stages to old age</i> Cerebral Cortex 29 9 38793890	cites: 11
2019	D Vidal-Piñero, MH Sneve, LH Nyberg, AM <b>Mowinckel</b> , D Sederevicius, et al. <i>Maintained frontal activity underlies high memory function over 8 years in aging</i> Cerebral Cortex 29 7 31113123	cites: 11
2019	AM Fjell, MH Sneve, D Sederevicius, Ø Sørensen, SK Krogsrud, et al. <i>Volumetric and microstructural regional changes of the hippocampus underlying development of recall performance after extended retention intervals</i> Developmental cognitive neuroscience 40 100723	cites: 4
2019	KB Walhovd, AM Fjell, Ø Sørensen, AM <b>Mowinckel</b> , CS Reinbold, et al. <i>Genetic risk for Alzheimer's disease predicts hippocampal volume through the lifespan</i> bioRxiv 711689	Preprint cites: 4

2019	AM Fjell, MH Sneve, D Sederevicius, Ø Sørensen, SK Krogstad, et al. <i>Volumetric and microstructural regional changes of the hippocampus underlying development of extended delay long-term memory</i> bioRxiv 595827	Preprint cites: 1
2019	D Bartrés-Faz, Ø Sørensen, IK Amlie, AM Fjell, DM Bros, N Buchmann, et al. <i>Self-reported sleep relates to hippocampal atrophy over the adult lifespan—results from the Lifebrain consortium</i> Sleep 43 5	cites: 0
2018	KB Walhovd, AM Fjell, R Westerhausen, L Nyberg, KP Ebmeier, et al. <i>Healthy minds 0–100 years: Optimising the use of European brain imaging cohorts (“Lifebrain”)</i> European Psychiatry 50 4756	cites: 29
2018	D Vidal-Piñero, SH Markus, L Nyberg, AM <b>Mowinckel</b> , D Sederevicius, et al. <i>P2-395: TESTING MAINTENANCE AND COMPENSATION NOTIONS IN NORMAL AGING: AGE-RELATED CORRELATES OF ASSOCIATIVE ENCODING SUCCESS</i> Alzheimer’s and Dementia 14 7SPart16 P854P854	cites: 0
2017	AM <b>Mowinckel</b> , D Alnæs, ML Pedersen, S Ziegler, M Fredriksen, et al. <i>Increased default-mode variability is related to reduced task-performance and is evident in adults with ADHD</i> NeuroImage: Clinical 16 369382	cites: 26
2016	S Ziegler, ML Pedersen, AM <b>Mowinckel</b> , G Biele <i>Modelling ADHD: A review of ADHD theories through their predictions for computational models of decision-making and reinforcement learning</i> Neuroscience and Biobehavioral Reviews 71 633656	cites: 65
2015	AM <b>Mowinckel</b> , ML Pedersen, E Eilertsen, G Biele <i>A meta-analysis of decision-making and attention in adults with ADHD</i> Journal of attention disorders 19 5 355367	cites: 87
2012	AM <b>Mowinckel</b> , T Espeseth, LT Westlye <i>Network-specific effects of age and in-scanner subject motion: a resting-state fMRI study of 238 healthy adults</i> Neuroimage 63 3 13641373	cites: 135