

# Athanasia Monika Mowinckel

STAFF SCIENTIST

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### **Education**

#### Philosofiae 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

Oslo

2018 - present

STAFF SCIENTIST

- 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

Oslo 2016 - 2017

RESEARCHER / PROJECT MANAGER

Coordinating data collection, data-management, and research collaborations

· Running analyses and data preparations

#### **University of Oslo - Dept. of Psychology**

Oslo

RESEARCH ASSISTANT AND LAB-TECHNICIAN

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 Oslo

GLOBAL TEAM MEMBER

• Assisting in daily coordination and webpage maintenance of R-Ladies globally

2019 - present

Initiative running events for coding, networking and support of minority genders in the R-community

R-Ladies Oslo Oslo

CO-FOUNDER AND CHAIR

Assisting in daily coordination and webpage maintenance of R-Ladies globally

2018 - present

• Initiative running events for coding, networking and support of minority genders in the R-community

University of Oslo Oslo

 Мемвек
 2019 - NA

 • Dept. of Psychology internal ethics committee
 2019 - NA

University of Oslo Osl

Member 2017 - 2018

Task force proposing changes to the PhD-program
 University of Oslo

MEMBER 2016 - 2017

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

University of Oslo Oslo

FACULTY BOARD MEMBER, ELECTED 2015 - 2015

· Faculty of Social Sciences

**University of Oslo** Oslo 2014 - 2015 DEPARTMENT BOARD MEMBER, ELECTED

· Dept. of Psychology

**University of Oslo** CO-FOUNDER AND CHAIR 2013 - 2015

• PsyDoc - Interest organisation for PhDs and PostDocs.

### **Teaching & Dissemination**

In addition to teaching and workshops, I run a coding and neuroscience blog, drmowinckels.io 🚱, that includes tutorials in R and neuroimaging. I am also a certified Software Carpentry Instructor .

#### UNIVERSITY

**University of Oslo** Oslo, Norway

2012 - 2015

and Cognition Monthly 2018 - present

> Oslo UseR! June 5, 2019

Carpentry

Sept. 25 - 26, 2018

R-Ladies London March 28, 2019

University of Oslo - Software

Center for Lifespan Changes in Brain

SEMINAR TEACHER

Introduction to research methods (PSY1010/PSYC1100)

• Experimental Cognitive Psychology (PSYC2102)

**University of Oslo** Oslo, Norway 2012 - 2015

SUPERVISOR

• Bachelor thesis

**University of Oslo** Oslo, Norway 2009 - 2011

SEMINAR TEACHER

Introduction to research methods (PSY1010/PSYC1100)

Introduction to social psychology (PSY1100)

#### 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 @

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

Linear Mixed models on repeated measurement data 🚱

· 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

## 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  $(\mathbf{S})$ , and github repositories  $(\mathbf{S})$  where source code is openly available.

ggseg ♀ ♀: Lead developer

present Visualization tool for brain atlas segmentations through R

ggeg3d ♥ ②: Lead developer

present 3 dimensional visualization tool for brain atlas segmentations through R

ggegExtra 🔾 😧: Lead developer 2018 -

present Repository of atlas data for the ggseg-packages

nettskjemar 🗘 🚱: Lead developer 2019 -

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

of Oslo

metagam (?) (3): Contributor 2020

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. Meta-analysis of generalized additive models in neuroimaging studies NeuroImage 224 117416	cites: 2
2021	JM Roe, D Vidal-Piñeiro, Ø Sørensen, AM Brandmaier, S Düzel, et al. Asymmetric thinning of the cerebral cortex across the adult lifespan is accelerated in Alzheimer's disease Nature communications 12 1 111	cites: 1
2021	AM Fjell, Ø Sørensen, IK Amlien, D Bartrés-Faz, AM Brandmaier, et al.  Poor Self-Reported Sleep is Related to Regional Cortical Thinning in Aging but not Memory Decline—Results From the Lifebrain Consortium  Cerebral Cortex 31 4 19531969	cites: 0
2021	D Vidal-Piñeiro, MH Sneve, IK Amlien, H Grydeland, AM <b>Mowinckel</b> , et al.  The functional foundations of episodic memory remain stable throughout the lifespan  Cerebral Cortex 31 4 20982110	cites: 0
2020	AM Fjell, Ø Sørensen, IK Amlien, D Bartrés-Faz, DM Bros, N Buchmann, et al.  Self-reported sleep relates to hippocampal atrophy across the adult lifespan: results from the Lifebrain consortium  Sleep 43 5 zsz280	cites: 20
2020	AM <b>Mowinckel</b> , D Vidal-Piñeiro <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-Pineiro, N Parker, J Shin, L French, H Grydeland, AP Jackowski, et al. Cellular correlates of cortical thinning throughout the lifespan Scientific reports 10 1 114	cites: 10
2020	KB Walhovd, AM Fjell, Ø Sørensen, AM <b>Mowinckel</b> , CS Reinbold, et al. Genetic risk for Alzheimer disease predicts hippocampal volume through the human lifespan Neurology Genetics 6 5	cites: 5
2020	VM Danielsen, D Vidal-Piñeiro, AM <b>Mowinckel</b> , D Sederevicius, AM Fjell, et al. Lifespan trajectories of relative corpus callosum thickness: regional differences and cognitive relevance Cortex 130 127141	cites: 5
2020	KB Walhovd, ACS Bråthen, MS Panizzon, AM <b>Mowinckel</b> , Ø Sørensen, et al. Within-session verbal learning slope is predictive of lifespan delayed recall, hippocampal volume, and memory training benefit, and is heritable Scientific reports 10 1 113	cites: 0
2020	I Budin-Ljøsne, BB Friedman, S Suri, C Solé-Padullés, S Düzel, et al.  The global brain health survey: development of a multi-language survey of public views on brain health  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 Amlien, AM <b>Mowinckel</b> , U Lindenberger, et al. Education and income show heterogeneous relationships to lifespan brain and cognitive differences across European and US cohorts bioRxiv	Preprint cites: 0
2020	A Fjell, H Grydeland, Y Wang, IK Amlien, D Bartrés-Faz, A Brandmaier, et al.  The genetic organization of subcortical volumetric change is stable throughout the lifespan bioRxiv	Preprint cites: 0
2020	A Fjell, O Sorensen, IK Amlien, D Bartres-Faz, A Brandmaier, D Macia, et al. Self-reported sleep problems are related to cortical thinning in aging but not memory decline and amyloid-β accumulation-results from the Lifebrain consortium bioRxiv	Preprint cites: 0
2019	AM Fjell, CH Chen, D Sederevicius, MH Sneve, H Grydeland, et al.  Continuity and discontinuity in human cortical development and change from embryonic stages to old age  Cerebral Cortex 29 9 38793890	cites: 11
2019	D Vidal-Piñeiro, 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.  Volumetric and microstructural regional changes of the hippocampus underlying development of recall performance after extended retention intervals  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 Krogsrud, et al.  Volumetric and microstructural regional changes of the hippocampus underlying development of extended delay long-term memory  bioRxiv 595827	Preprint cites: 1
2019	D Bartrés-Faz, Ø Sørensen, IK Amlien, AM Fjell, DM Bros, N Buchmann, et al. Self-reported sleep relates to hippocampal atrophy over the adult lifespan–results from the Lifebrain consortium Sleep 43 5	cites: 0
2018	KB Walhovd, AM Fjell, R Westerhausen, L Nyberg, KP Ebmeier, et al. Healthy minds 0–100 years: Optimising the use of European brain imaging cohorts ("Lifebrain") European Psychiatry 50 4756	cites: 29
2018	D Vidal-Piñeiro, SH Markus, L Nyberg, AM <b>Mowinckel</b> , D Sederevicius, et al.  P2-395: TESTING MAINTENANCE AND COMPENSATION NOTIONS IN NORMAL AGING: AGE-RELATED CORRELATES OF ASSOCIATIVE ENCODING SUCCESS Alzheimer's and Dementia 14 7SPart16 P854P854	cites: 0
2017	AM <b>Mowinckel</b> , D Alnæs, ML Pedersen, S Ziegler, M Fredriksen, et al.  Increased default-mode variability is related to reduced task-performance and is evident in adults with ADHD  NeuroImage: Clinical 16 369382	cites: 26
2016	S Ziegler, ML Pedersen, AM <b>Mowinckel</b> , G Biele Modelling ADHD: A review of ADHD theories through their predictions for computational models of decision-making and reinforcement learning Neuroscience and Biobehavioral Reviews 71 633656	cites: 65
2015	AM <b>Mowinckel</b> , ML Pedersen, E Eilertsen, G Biele A meta-analysis of decision-making and attention in adults with ADHD Journal of attention disorders 19 5 355367	cites: 87
2012	AM <b>Mowinckel</b> , T Espeseth, LT Westlye Network-specific effects of age and in-scanner subject motion: a resting-state fMRI study of 238 healthy adults Neuroimage 63 3 13641373	cites: 134