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*

Staff scientist — *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 — *Oslo*

Researcher / Project Manager — *2016 - 2017*

- 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 — *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 — *Oslo*

Co-founder and chair — *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 — *Oslo*

Member — *2019 - NA*

- Dept. of Psychology internal ethics committee

University of Oslo — *Oslo*

Member — *2017 - 2018*

- Task force proposing changes to the PhD-program

University of Oslo — *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*
DEPARTMENT BOARD MEMBER, ELECTED *2014 - 2015*
- Dept. of Psychology

University of Oslo *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*
SEMINAR TEACHER *2012 - 2015*
- Introduction to research methods (PSY1010/PSYC1100)
- Experimental Cognitive Psychology (PSYC2102)

University of Oslo *Oslo, Norway*
SUPERVISOR *2012 - 2015*
- Bachelor thesis

University of Oslo *Oslo, Norway*
SEMINAR TEACHER *2009 - 2011*
- Introduction to research methods (PSY1010/PSYC1100)
- Introduction to social psychology (PSY1100)

WORKSHOPS

Monthly internal R-workshops for LCBC *Center for Lifespan Changes in Brain and Cognition*
INSTRUCTOR *Monthly 2018 - present*
- 2 hour workshops in using R for analysis, visualization, dissemination etc.

Workshop: Straightforward introduction to mixed models *Oslo UseR!*
INSTRUCTOR *June 5, 2019*
- A short workshop in the use of Mixed-models for repeated measurement data

Linear Mixed models on repeated measurement data *R-Ladies London*
INSTRUCTOR *March 28, 2019*
- A short workshop in the use of Mixed-models for repeated measurement data

TidyVerse R *University of Oslo - Software Carpentry*
CO-INSTRUCTOR *Sept. 25 - 26, 2018*
- 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 (), and github repositories () where source code is openly available.

2018 - present	**ggseg**: Lead developer Visualization tool for brain atlas segmentations through R
2018 - present	**ggeg3d**: Lead developer 3 dimensional visualization tool for brain atlas segmentations through R
2018 - present	**ggegExtra**: Lead developer Repository of atlas data for the ggseg-packages
2019 - present	**nettskjemar**: Lead developer 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

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: 13*
2020	VM Danielsen, DV Pineiro, AM **Mowinckel**, D Sederevicius, AM Fjell, et al. *Lifespan trajectories of relative corpus callosum thickness: regional differences and cognitive relevance.* PsyArXiv	*Preprint* *cites: 4*
2020	D Vidal-Pineiro, N Parker, J Shin, L French, H Grydeland, AP Jackowski, et al. *Cellular correlates of cortical thinning throughout the lifespan* BioRxiv 585786	*Preprint* *cites: 4*
2020	Ø Sørensen, AM Brandmaier, DM Bros, K Ebmeier, P Ghisletta, RA Kievit, et al. *Meta-Analysis of Generalized Additive Models in Neuroimaging Studies* arXiv preprint arXiv: 200202627	*Preprint* *cites: 2*
2020	KB Walhovd, AM Fjell, Ø Sørensen, AM **Mowinckel**, CS Reinbold, et al. *Genetic risk for Alzheimer disease predicts hippocampal volume through the human lifespan* Neurology Genetics 6 5	*cites: 1*
2020	KB Walhovd, ACS Bråthen, MS Panizzon, AM **Mowinckel**, 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	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	*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	KB Walhovd, A Fjell, Y Wang, IK Amlien, AM **Mowinckel**, 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 Bartres-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 Bartrés-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*
2020	D Vidal-Pineiro, MH Sneve, IK Amlien, HH Grydeland, AM **Mowinckel**, et al. *The functional foundations of episodic memory remain stable throughout the lifespan* 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: 10*
2019	AM **Mowinckel**, D Vidal-Piñeiro *Visualisation of brain statistics with r-packages ggseg and ggseg3d* arXiv preprint arXiv: 191208200	*Preprint* *cites: 9*
2019	D Vidal-Piñeiro, MH Sneve, LH Nyberg, AM **Mowinckel**, D Sederevicius, et al. *Maintained frontal activity underlies high memory function over 8 years in aging* Cerebral Cortex 29 7 31113123	*cites: 9*
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: 3*
2019	KB Walhovd, AM Fjell, Ø Sørensen, AM **Mowinckel**, CS Reinbold, et al. *Genetic risk for Alzheimers disease predicts hippocampal volume through the lifespan* bioRxiv 711689	*Preprint* *cites: 1*
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: 24*

2017 AM **Mowinckel**, 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: 21*

2016 S Ziegler, ML Pedersen, AM **Mowinckel**, 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: 52*

2015 AM **Mowinckel**, 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: 79*

2012 AM **Mowinckel**, 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: 129*