

DANIEL ROELFS

Biomedical researcher with a particular interest in the intersection between neuroimaging and genetics in the domain of neurobiology and psychiatry.



RESEARCH EXPERIENCE

present
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2019

Doctoral Research Fellow

Multimodal Imaging group at NORMENT

📍 University of Oslo

- PhD position in imaging and genetics in schizophrenia
- Utilizing large imaging databases such as the UK Biobank and the TOP psychosis database from NORMENT.

2019
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2018

Research Assistant

EEG Group at NORMENT

📍 University of Oslo

- Managing EEG data, training new EEG testers, performing EEG experiments, data preprocessing and analysis.

2019
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2018

Research Assistant

Department of Medical Physics

📍 Rikshospitalet, Oslo University Hospital

- Data collection and managing in an MRI study on sleep deprivation
- Analysis of the fMRI data and the output from the camera

2018
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2017

Erasmus Traineeship

EEG Group at NORMENT

📍 University of Oslo

- Investigating brain plasticity through EEG paradigm
- Planning and running EEG experiments on both healthy individual and patients

2016
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2015

Research Intern

Brain Institute

📍 University Medical Centre Utrecht, NL

- Identifying factors associated with risk outcome in children with CD and ODD

2015
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2014

Undergraduate Research Intern

Emergis, Psychiatric Institute for Mental Health Care

📍 Goes, NL

- Identifying risk factors associated with physical restraint in acute psychiatric care

2014

Undergraduate Research Intern

Erasmus Cancer Institute Rotterdam

📍 Rotterdam, NL

- Status research into comorbidities associated with different cancer therapies



CONTACT

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EDUCATION

present
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2019

PhD Candidate, Neuroimaging & genetics

University of Oslo

📍 Oslo, Norway

- Doctoral education at the Institute of Clinical Medicine at the University of Oslo
- Courses relevant to neurobiology, advanced statistics, and other academic skills

2018
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2016

MSc, Biomedicine

Lund University

📍 Lund, Sweden

- Master's program in Biomedicine at the Faculty of Medicine
- Focus on molecular biology and neuroscience

2015
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2012

BSc, Pre-medical track

University College Roosevelt, Utrecht University

📍 Middelburg, NL

- Major in the pre-medical science track, minor in philosophy.
- Liberal Arts & Science program
- Honors College

2014

Epidemiology (summer course)

University College Roosevelt, Utrecht University

📍 Middelburg, NL

- Summer course in theory and methods behind epidemiology

2013

French Language & Literature (summer course)

Université de Paris I: Panthéon-Sorbonne

📍 Paris, France

- Summer course in French language and literature

The PhD program at the University of Oslo has a distinct research component and educational component. Both need to be fulfilled to qualify for the PhD defense.



CLINICAL EXPERIENCE

2016

Assistant nurse/phlebotomist

Gelre Hospital Apeldoorn

📍 Apeldoorn, NL



COMMISSIONS

present
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2019

Committee Member

Norwegian Research School in Neuroscience

present
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2020

Committee Member

NORMENT Early Career Researchers Meeting

2015
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2014

General Board Member

The Netherlands Red Cross Student Desk Zeeland



SELECTED PUBLICATIONS

- 2021 • **The genetic architecture of human cortical folding**
bioRxiv
- Preprint
 - Co-author
 - First author: Dennis van der Meer
- 2021 • **Phenotypically independent profiles relevant to mental health are genetically correlated**
Translational Psychiatry
- First author
 - Co-authored with Dag Alnæs, Oleksandr Frei, Dennis van der Meer, Olav Smeland, Ole Andreassen, Lars Westlye, and supervised by Tobias Kaufmann
- 2020 • **Experience-dependent modulation of the visual evoked potential: Testing effect sizes, retention over time, and associations with age in 415 healthy individuals**
NeuroImage
- Co-author
 - First author: Mathias Valstad
- 2020 • **Sleep and sleep deprivation differentially alter white matter microstructure: A mixed model design utilising advanced diffusion modelling**
NeuroImage
- Co-author
 - First author: Irene Voldsbekk

The second article of my PhD will be posted to *medRxiv* in June 2021



SELECTED WRITINGS

- 2020 • **Running an ICA on Questionnaires**
danielroelfs.com
- 2020 • **How I make QQ Plots Using ggplot**
danielroelfs.com
- 2019 • **How I Create Manhattan Plots Using ggplot**
danielroelfs.com
- 2019 • **Introduction To Basic Statistics in R**
For internal purposes
- Gentle introduction to performing statistical analysis and plotting in R
 - Intended for NORMENT employees and other medical researchers

I occasionally write blogposts that serve as tutorials or showcases for how I solve certain data science problems