Nicholas **Judd**

Cognitive Neuroscientist

Amsterdam, Netherlands

✉ nickkjudd@gmail.com | ⌂ https://njudd.com | njudd | 🎓 Dr. Judd

2024 eScience fellow
Using mixed methods to understand human development
Particularly interested in environmental malleability, causal inference and cognition
Avid proponent of Open Science - 'ggrain' R package creator

Academic Positions

Postdoctoral Researcher
Apr 2023 - ongoing (Nov 2025)

Lifespan Cognitive Dynamics Lab, Donders Institute
Nijmegen, Netherlands

- Isolating environmental influences on the brain using causal inference methods
- Examining variability (cognitive fluctuations) using Dynamic Structural Equation modeling
- Building open-source cognitive testing stimuli
- Workshops, teaching and supervision

Data Scientist
Sep 2022 - March 2023

Donders Institute for Brain, Cognition and Behaviour
Nijmegen, Netherlands

- Created ggrain - a popular open source R plotting package

Research Scientist
Sep 2016 - Jul 2022

Karolinska Institute
Stockholm, Sweden

Research Assistant
Feb 2016 - Aug 2016

University of Amsterdam
Amsterdam, Netherlands

Education

Ph.D. Medical Science
2018 - 2022

Department of Neuroscience, Karolinska Institute
Stockholm, Sweden

- Escaping the riptide - Probing the malleability of cognition (Prof. Klingberg & Prof. Almeida)

M.Sc. Brain and Cognitive Sciences
2015 - 2017

University of Amsterdam
Amsterdam, Netherlands

M.Sc. Psychology & M.Sc. Cognitive Science
2014 - 2015

Umeå University
Umeå, Sweden

B.A. Psychology (Hons)
2011 - 2014

DBS School of Arts
Dublin, Ireland

Awards & Funding

eScience Fellow
€2000 + 40 contact hours

2024 - 2025

NWO Open Science Fund
€50,000

Open Matrices Stimuli Set (co-applicant)
2024 - 2025

Travel Grants

01/22	**Doctoral Travel Grant,** Karolinska Institute	*€3,300*
06/18	**New Entrant Stipend,** ISMRM	*€550*
06/18	**Society for Neuroscience Travel Grant,** Amsterdam University Fund	*€600*

Supervision

DOCTORAL (DAILY SUPERVISOR)

PhD	**Jordy van Langen**, Radboud University Medical Center	*09/23 - ongoing*
PhD	**Michael Aristodemou**, Radboud University Medical Center	*01/23 - ongoing*
PhD	**Lea Michel**, Radboud University Medical Center	*09/22 - 03/23*

MASTERS STUDENTS

MSc	**Ben Kretzler**, Radboud University (thesis & rotation)	*04/23 - ongoing*
MSc	**Caroline Wunn**, Radboud University (rotation)	*01/24 - 03/24*
MSc	**Ann Hogenhuis**, Radboud University (rotation)	*04/23 - 06/23*
MSc	**Maud Megen**, Radboud University (rotation)	*04/23 - 06/23*
MSc	**Evgenija Kravchenko**, KTH Royal Institute of Technology (thesis)	*09/20 - 06/21*
MSc	**Jeshua Tromp**, Utrecht University (thesis)	*09/18 - 06/19*
MSc	**Sebastian Ghomri**, Karolinska Institute & KTH (thesis)	*09/18 - 06/19*

Tutorials & Teaching Experience

Deputy course coordinator & lecturer　　　　　*2024*
DATA SCIENCE FOR BIOMEDICAL RESEARCH (MSC BIOMEDICAL SCIENCES)　　*Radboud UMC*

Workshop organizer　　　　　*2022 - 2024*
TRANSPARENT DATA VISUALIZATION IN R FOR RESEARCHERS (8 OCCASIONS)　　*Donders Institute*

TEACHING ASSISTANT

MSc	**Medicine**, Basic Human Neuroscience (Karolinska Institute)	*2018 - 2020*
B.A.	**Biomedicine**, Neuroscience (Karolinska Institute)	*2018 - 2020*
MSc	**Medicine**, The healthy human being III (Karolinska Institute)	*2018 - 2020*

Selected Presentations

Nature and Nurture Contribution to Variation in Learning: Insights from Developmental Cognitive Neuroscience　　*Sep, 2024 (future)*
FLUX (INVITED)　　*Baltimore, USA*

Modeling cognitive variability in 11 tasks　　*July, 2024 (future)*
COGSCI 2024 DYNAMICS OF COGNITION　　*Rotterdam, Netherlands*

Natural Experiments – a Tool for Causal Inference in Childhood Development　　*May, 2024*
ASSOCIATION FOR PSYCHOLOGICAL SCIENCE　　*San Fransisco, USA*

Leveraging Large Neuroimaging Studies to Elucidate Socioeconomic Impacts on Neurocognitive Development　　*May, 2022*
AMERICAN PSYCHIATRIC ASSOCIATION ANNUAL MEETING (INVITED)　　*New Orleans, USA*

Training Spatial Cognition Enhances Mathematical Learning – A Randomized Study in 17,000 Children　　*Nov, 2021*
CENTRE FOR EDUCATIONAL NEUROSCIENCE, UNIVERSITY COLLEGE LONDON (INVITED)　　*London, England*

Selected Publications

links to pdfs are embedded in the title

Judd, N., Aristodemou, M., Klingberg, T., Kievit, R. (2024). Interindividual Differences in Cognitive Variability Are Ubiquitous and Distinct From Mean Performance in a Battery of Eleven Tasks. **Journal of Cognition**, 7(1), 45.

Judd, N., Kievit, R. (2024). No effect of additional education on long-term brain structure: a preregistered natural experiment in over 30,000 individuals. In **bioRxiv** (p. 2024.05.17.594682).

Judd, N., Sauce, B., Klingberg, T. (2022). Schooling substantially improves intelligence, but neither lessens nor widens the impacts of socioeconomics and genetics. **NPJ Science of Learning**, 7(1), 33.

Judd, N., Klingberg, T. (2021). Training spatial cognition enhances mathematical learning in a randomized study of 17,000 children. **Nature Human Behaviour**, 5, 1548–1554.

Judd, N., Sauce, B., .. Klingberg, T. (2020). Cognitive and brain development is independently influenced by socioeconomic status and polygenic scores for educational attainment. **Proceedings of the National Academy of Sciences**, 117(22), 12411–12418.

References

Prof. Rogier Kievit - Donders Institute   rogier.kievit@radboudumc.nl
Prof. Rita Almeida - Stockholm University   rita.almeida@su.se
Prof. Torkel Klingberg - Karolinska Institutet   torkel.klingberg@ki.se