# Leon D. Lotter, M.D.

Curriculum Vitae

#### **Education**

Sep 2022 – Ongoing

PhD in neuroscience Research group Biomarker Development

Institute of Systems Neuroscience, University Hospital HHU Duesseldorf, Germany INM-7: Brain and Behaviour, Research Center Juelich, Germany Clinician Scientist Program, Max Planck School of Cognition, Germany

- Project: Multilevel brain systems underlying typical and atypical neurodevelopment
- Supervision: Prof. Juergen Dukart | Prof. Simon Eickhoff | Prof. Julian Koenig
- Collaborations:
  - Research group Biological Child and Adolescent Psychiatry, University Hospital Cologne, Germany (Prof. Koenig)
  - Max Planck Institute of Psychiatry, Munich, Germany (Prof. Binder | Dr. Spoormaker)

Dec 2017 – Sep 2022

**Doctor of medicine** Research groups Clinical Neuropsychology and Biomarker Development Department of Child and Adolescent Psychiatry, University Hospital RWTH Aachen, Germany INM-7: Brain and Behaviour, Research Center Juelich, Germany

- Project: Longitudinal development of resting-state fMRI alterations in Anorexia nervosa
- Supervision: Prof. Kerstin Konrad | Prof. Juergen Dukart | P.D. Dr. Jochen Seitz
- Grade: summa cum laude

Oct 2014 - Nov 2021

### Medical studies RWTH Aachen University, Germany

- Elective subject: Clinical neuroscience
- Clinical internships: Child and adolescent psychiatry (6 mos) | Adult psychiatry (1 mo) | Internal medicine (4 mos) | General surgery (4 mos)

# **Work Experience**

Sep 2023 – Ongoing

**Research associate** Research group Biomarker Development

Institute of Systems Neuroscience, University Hospital HHU Duesseldorf, Germany

• 100% ("postdoctoral") contract financed via Max Planck School of Cognition

Apr 2022 - Aug 2022

Research assistant Research group Biomarker Development

INM-7: Brain and Behaviour, Research Center Juelich, Germany

• Project: Linking cortical thickness development to multilevel brain systems

May 2019 – Jan 2022

**Student research assistant** Research group Clinical Neuropsychology

Department of Child and Adolescent Psychiatry, University Hospital RWTH Aachen, Germany

Diverse projects involving neuroimaging, behavioral data analysis, and visualization

Sep 2013 – Aug 2014

Voluntary service Samuha Samarthya, India | Service Civil International, Germany

- Program: weltwärts, German government-funded
- Project: Creating barrier-free environments for people with disabilities in rural South India

#### Academic Contributions, Skills, and Personal Interests

Software Tools	<b>JuSpyce</b> A toolbox for flexible assessment of spatial associations between brain images <b>ABAnnotate</b> A toolbox for ensemble-based multimodal gene-category enrichment analysis of human neuroimaging data
Peer Reviews	Journal of the American Academy of Child and Adolescent Psychiatry   Neuropsychopharmacology   Translational Psychiatry   Neuroimage   Neuroimage Clinical   Cortex   Frontiers in Human Neuroscience   BMC Psychiatry   European Journal of Neuroscience
Programming	Python since 2021 (example)   R since 2020   Matlab since 2019 (example)
Languages	German native speaker   English professional proficiency
Interests	Academic Developmental neuroscience and psychiatry   Open science   Data science and visualization Private Climbing   Cycling   Photography

#### **Publications and Preprints**

Preprint Lotter, L. D., Saberi, A., Hansen, J. Y., Misic, B., Paquola, C., ... Imagen-Consortium, Nees, F., Banaschewski, T., Eickhoff, S. B., and Dukart, J. "Human cortex development is shaped by molecular and cellular brain systems". In: *bioRxiv*.

Chechko, N., Nehls, S., Losse, E., Dukart, J., and **Lotter, L. D.** "Temporal dissociation between local and global functional adaptations of the maternal brain to childbirth: A longitudinal assessment". In: *bioRxiv*.

Schloesser\*, L., **Lotter\***, **L. D.**, Offermann, J., Borucki, K., Biemann, R., Seitz, J., Konrad, K., and Herpertz-Dahlmann, B. "Sex-dependent clinical presentation, body image, and endocrine status in long-term remitted anorexia nervosa". In: *European Eating Disorders Review*.

Corneille, O., Havemann, J., Henderson, E. L., IJzerman, H., Hussey, I., Orban de Xivry, J.-J., Jussim, L., Holmes, N. P., Pilacinski, A., Beffara, B., Carroll, H., Outa, N. O., Lush, P., and **Lotter, L. D.** "Beware 'persuasive communication devices' when writing and reading scientific articles". In: *eLife*.

**Lotter, L. D.**, Kohl, S. H., Gerloff, C., Bell, L., Niephaus, A., Kruppa, J. A., Dukart, J., Schulte-Rüther, M., Reindl, V., and Konrad, K. "Revealing the neurobiology underlying interpersonal neural synchronization with multimodal data fusion". In: *Neuroscience and Biobehavioral Reviews*.

**Lotter, L. D.**, von Polier, G., Offermann, J., Buettgen, K., Stanetzky, L., Eickhoff, S. B., Konrad, K., Seitz\*, J., and Dukart\*, J. "Recovery-Associated Resting-State Activity and Connectivity Alterations in Anorexia Nervosa". In: *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*.

Pankert, K., Pankert, A., **Lotter, L. D.**, Herpertz-Dahlmann, B., and Konrad, K. "Autism Spectrum Symptoms in Children with Congenital Blindness". In: *Zeitschrift für Kinder- und Jugendpsychiatrie und Psychotherapie*.

2021

2020

Mar 2023

Jun 2023

2023

# **Conference presentations**

Jul 2023 | Organization for Human Brain Mapping (OHBM) Annual Meeting 2023 Montréal, Canada

Poster: Human cortex development is shaped by molecular and cellular brain systems

Mar 2023 | Minerva Symposium: Interactive Brains - From Methods to Applications Tel Aviv, Israel

• Invited talk: Revealing the neurobiology underlying interpersonal neural synchronization with multimodal data fusion

Meeting of the German Society for Child and Adolescent Psychiatry (DGKJP) Essen, Germany

Poster: Linking cortical thickness development to molecular and cellular brain systems

# Awards and Scholarships

72nd Lindau Nobel Laureate Meeting (Physiology and Medicine) Lindau, Germany

• Participation as "Young Scientist", supported by the Research Centre Juelich

<sup>\*</sup> Equal contributions