Johanna Prugger (she/her)

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based in Berlin, Germany







EDUCATION

M.Sc. (grad. 2022): International Graduate Program Medical Neurosciences at Charité Medical University, Berlin, GER

Thesis: Systematic literature review and meta-analysis: Dose-response relationships of LSD- induced subjective experiences in humans

Thesis grade: 1.3

B.Sc. (grad. 2020): Molecular Biology at University of Vienna, AT Thesis (at Medical University and Technical University of Vienna): Establishing a simultaneous qualitative imaging method for 5HT2A- and NMDAreceptor distribution mapping in rat brain using lanthanide labeled antibodies and LA-ICP-mass spectrometry

Thesis grade: 1

Secondary School (grad. 2015): Wissenschaftliches Realgymnasium Bozen, IT,

with Focus: Applied Natural Sciences Thesis: The Deep Brain Stimulation

Thesis grade: 1

EXPERIENCE

2024.11 Freelance work for the Freie University Berlin (4 months)

- present Creating an onboarding platform for international Master students at FU (OIM Project)

Freie Universität Berlin, GER

2024.03 **Gender Equality Officer** (1 year)

- present Center for Environmental Neuroscience (CEN)

Max Planck Institute for Human Development (MPIB), Berlin, GER

Research Coordinator (~2 years) 2023.05

- present Center for Environmental Neuroscience (CEN)

Max Planck Institute for Human Development (MPIB), Berlin, GER

2021 Freelance contribution to open science:

present <u>The Altered States Database</u> (~4 years)

Schmidt, TT. & Prugger, J. The Altered States Database (ASDB). Open Science Framework (OSF): https://doi.org/10.17605/OSF.IO/8MBRU

2022 Employment (7 months): Creating an onboarding-platform for the Master

- 2023 Cognitive Neuroscience Berlin containing courses with learning material

ranging from neuroanatomy to statistics to scientific writing, etc.

Center for Cognitive Neuroscience Berlin (CCNB), Freie Universität Berlin,

GER



CHARITÉ





FREIE UNIVERSITÄT

FREIE UNIVERSITÄ



2022 - 2023	Project assistance : on the citizen science <i>Altered eXperience Project</i> with Prof. Enzo Tagliazucchi, Dr. Timo Torsten Schmidt, and others in Buenos Aires, AR	
2022 - 2023	Research Project Meta-analysis for calculation of Dose-response relationships of LSD- induced subjective experiences in humans Psychedelic Substances Research Group, Dept. of Psychiatry and Psychotherapy, Charité Medical University, Berlin, GER	CHARITÉ
2022 - 2023	Clinical Trials Advisor (9 months) at Knowde Group, Inc., a Canadian-based global Contract Research Organization (remote)	
2021 - 2022	Research assistant (6 months) fMRI neuroimaging for the study Efficacy and Safety of Psilocybin in Treatment-Resistant Major Depression: EPIsoDE Pls: Prof. Gerd Gründer (Zentralinstitut für Seelische Gesundheit, Mannheim) and Prof. Andreas Ströhle (Charité Medical University, Berlin) Berlin Center for Advanced Neuroimaging (BCAN); Dept. of Psychiatry and Psychotherapy, Charité Medical University, Berlin, GER	CHARITÉ POLICIBILIZADE DE PROPERTO DE PROP
2021	Lab rotation (3 months) Post-Acute Effects of Psilocybin Treatment on Depression Patients: Establishing a fMRI-Data Analysis Preprocessing Pipeline using fMRIPrep Dept. of Psychiatry and Psychotherapy, Charité Medical University, Berlin, GER Supervision: Prof. Florian Schlagenhauf, Dr. Michael Koslowski	CHARITÉ
2021	Lab rotation (5 months) Psychometric Data of Altered States of Consciousness Experiences and Updating the Altered States Database: A Systematic Review according PRISMA Standards), Psychedelic Substances Research Group, Dept. of Psychiatry and Psychotherapy, Charité Medical University, Berlin, GER Supervision: Dr. Timo T. Schmidt, Dr. med. Tomislav Majić	CHARITÉ
2021	Research assistant (5 months) Neuropsychological testing and data analysis for the study <i>Long-term Effects of Serotonergic Hallucinogens: LZESH</i> Psychedelic Substances Research Group, Dept. of Psychiatry and Psychotherapy, Charité Medical University, Berlin, GER	CHARITÉ
2021	Lab rotation (3 months) Levels of Emotional Awareness in patients suffering from schizophrenia spectrum disorders: Examining the validity of the Levels of Emotional Awareness Scale research groups Empathy and Interpersonal Processes; Psychotherapy for Psychosis, Dept. of Psychiatry and Neurosciences, Charité Medical University, Berlin, GER	CHARITÉ

Supervision: Prof. Christiane Montag, Dr. Eva Maaßen

2019 **Research Project** (1 year)

- 2020 Establishing a simultaneous qualitative imaging method for 5-HT_{2A} and NMDA neuroreceptor distribution mapping in rat brain using lanthanide labelled antibodies and laser ablation-inductively coupled plasma-mass spectroscopy (LA-ICP-MS)



Dept. of Psychiatry and Psychotherapy, research groups Neuroimaging; Neuropsychopharmacology, Medical University of Vienna, AT; and Technical University of Vienna, Research Group for Surface Analytics, Trace Analytics and Chemometry, Vienna, AT

Supervision: Prof. Dr.techn. Andreas Limbeck, Prof. Rupert Lanzenberger

2019 **Internship** (6 months)

Analysis of the radioactivity emitted from Harmin-C13 tracer in blood plasma during PET-Scans



Dept. of Psychiatry and Psychotherapy, research groups Neuroimaging; Neuropsychopharmacology, Medical University of Vienna, AT; Supervision: Prof. Rupert Lanzenberger

2018 **Research assistance** (1.5 years)

 Laboratory and fMRI / PET imaging for 8 psychopharmacological neuroimaging studies (analyzing different SSRIs, FDOPA, ketamine)
 Dept. of Psychiatry and Psychotherapy, research groups Neuroimaging;
 Neuropsychopharmacology, Vienna General Hospital, AT

2018 **Internship** (6 months)

Segmentation of the Hippocampus and its Subfields: A 7T MRI analysis, as part of the study A Randomized Controlled Trial on the Effects of a 12-Week High- vs. Low-Intensity Exercise Intervention on Hippocampal Structure and Function in Healthy Adults



Dept. of Radiology and Nuclear Medicine, Academic Medical Centre Amsterdam, NL

Supervision: Prof. Dr. Liesbeth Reneman, Dr. Antonia Kaiser

PUBLICATIONS (6 first-authored/co-first-authored, 1 co-authored)

- (5) Ulkova O.*, **Prugger J.***, Hirschfeld T., Schmidt T. T. (2025) *Update of the Altered States Database (ASDB): 2024-12-31*. Preprint on PsyArXiv. https://doi.org/10.31234/osf.io/wkpjc_v1
- (4) Devitt K.*, **Prugger J.***, Hirschfeld T., Schmidt T. T. (2024) *Update of the Altered States Database (ASDB): 2023-12-31*. Preprint on PsyArXiv. https://doi.org/10.31234/osf.io/ge93w
- (3) Hirschfeld T.*, **Prugger J.***, Majić T., Schmidt T. T. (2023) *Dose-response relationships of LSD-induced subjective experiences in humans*. Nature: Neuropsychopharmacology 1–10. https://doi.org/10.1038/s41386-023-01588-2 LSD Dose-Response Web-Application: https://dose-response-lsd.asdb.info

^{*} equal contributions

- (2) Peters M.*, **Prugger J.***, Dimkov P., Schmidt T. T. (2023) *Update of the Altered States Database (ASDB): 2022-12-31*. Preprint on PsyArXiv. https://doi.org/10.31234/osf.io/wdfhg
- (1) **Prugger J.**, Derdiyok E., Dinkelacker J., Costines C., Schmidt T. T. (2022) *The Altered States Database: Psychometric Data from a Systematic Literature Research*.

 Nature: Scientific Data 9, 720. https://doi.org/10.1038/s41597-022-01822-4

 Website: https://alteredstatesdb.org/
 OSF: https://osf.io/8mbru/

(submitted to Nature: Molecular Psychiatry, 2025) **Prugger J.***, Sztuka M. I.*, Kühn S. *Urban versus Rural Living: Associations with Mental Health, Physical Health, and Psychological Constructs*

(in prep, 2025) **Prugger J.**, Kühn S. *The Blind Spot in Research on Nature's Benefits: Restorative vs. Instorative Effects and Potential Biases*.

(in prep, 2025) **Prugger J.***, Mascherek A. C.*, Kühn S., Gallinat J. *Salutogenic Psychiatry Architecture and Design*

PRESENTATIONS

- 2024 Preliminary data: Review on effects of rural vs. urban living on mental and physiological health.

 at Max Planck Institute for Human Development (MPIB), Berlin, GER
- 2022 Dose-response relationships of LSD and psilocybin experiences. at Psychedelic Substances Research Group, Charité Medical University, Berlin, GER
- 2019 Mapping receptor distributions in rat brain using rare-earth elements and mass spectrometry.

 at Neuropsychopharmacology Research Group, Medical University of Vienna, AT
- 2018 Segmenting the hippocampus on MRI imaging using FSL. Preliminary findings of an exercise study.
 at Translational Neuroradiology Research Group, Academic Medical Centre, Amsterdam, NL

CONFERENCES, SUMMER SCHOOLS, LAB VISITS

- 2023 1-week visit of the lab Theoretical Neurosciences Group, PI: Prof. Viktor Jirsa at Institut de Neurosciences des Systèmes (INS), Inserm and Aix-Marseille University, Marseille, FR
- 2023 10-day participation of the summer school Neuroscience School of Advanced Studies "Integrated Information Theory of Consciousness", in Venice, IT
- 2018 1-day conference attendance of the Annual Meeting of Amsterdam Neuroscience at Amsterdam University Medical Center, NL
- 2015 1-day lab visit at Institute for Biomedicine, Eurac Research, with Dr. Andrew A. Hicks, in Bolzano, IT

CERTIFICATIONS, SCHOLARSHIPS

- 2024 1-day course certificate *Track, organize and share your work: An introduction to Git/GitHub for research*, from Max Planck Institute, Berlin, GER
- 2022 2-weeks *Python intensive course certificate*, from Charité Medical University, Berlin, GER
- 2021 MRI Operation and Safety Certificate (Advanced User), from Berlin Center for Advanced Neuroimaging (BCAN), Charité Medical University, GER
- 2021 Certificate of Attendance and exam of the course *MRI in neuroscience and neurology* (24 units á 45 min), from Center for Stroke Research Berlin, Charité Medical University, GER
- 2020 Certificate of Attendance of the kickoff workshop of the *Experimental and Preclinical Imaging Cluster and Charité 3^R*, Charité Medical University, GER
- 2018 ERASUMS Plus Traineeship Certificate, from Academic Medical Center, Amsterdam, NL
- 2018 ERASMUS Plus stipend for research internship abroad, from University of Vienna, AT

MEMBER OF

- Gender Equality Teams of Max Planck Institute for Human Development, Berlin, GER
- Psychedelic Substances Research Group, Dept. of Psychiatry and Neurosciences, Charité Medical University, Berlin, GER
- Berlin Neuroscience Network, Einstein Center for Neurosciences (ECN), Berlin, GER
- International Graduate Program Medical Neurosciences Alumni, Charité Medical University, Berlin, GER

EXTRA-CURRICULAR, VOLUNTEER WORK

- Member of the SCIENTISTS FOR FUTURE (S4F South Tyrol), participating at workshops on clime change, IT (since 2023)
- Member of the association eclipse e.V., offering psycare and information on safer substance use at festivals and in clubs, GER (since 2022)
- Member of *Students for Sensible Drug Policy (SSDP)*, advocating transformation of global drug policy towards a focus on human rights, public health, harm reduction, and equity, Berlin, GER (since 2022)
- Translation of the book "How to Regulate Cannabis. A Practical Guide. 3rd edition" from English into German with #MyBrainMyChoice initiative and akzept e.V., Berlin, GER (2022-2023)
- 1-month volunteering at the eco-farm *Puilquen Posada de Campo* in Argentina, which offers trainings in sustainability and ecological awareness as well as daycare for children, AR (2022)
- Translating and proofreading translations of scientific articles for the online blog of the *MIND Foundation*, Berlin, GER (2021)
- Leading a movement and exercise group for patients with paranoid schizophrenia through the *Psychosocial Services of Vienna*, AT (2019-2020)

SKILLS

Languages <u>fluent</u>: English, German, Italian. <u>conversational</u>: Spanish, Ladin. <u>learning</u>: French

Software & IT good: R Studio, VOSviewer, BioRender, Zotero, Lightworks, Wiki Atlassian Confluence, Open Science Framework (OSF), MS Office

<u>beginner</u>: Python, fMRIPrep, Brain Imaging Data Structure (BIDS), Matlab (Psychtoolbox), Git/Github, Bash, FMRIB Software Library (FSL), ITK: Insight Toolkit, FreeSurver (Freeview), ASHS: Automatic Segmentation of Hippocampal Subfields, GraphPad Prism, SPSS, Unix Shell Scripting, C#

Neuropsychological testing, Questionnaires: Wechsler Adult Intelligence Scale IV (WAIS-IV), Stroop test, Wisconsin Card Sorting Test – 64 (WCST-64), Raven's Progressive Matrices, Rey-Osterrieth Complex Figure (Rey-O CFT), Tower of London (TL-D), Wechsler Memory Scale IV Logical Memory, Wortschatztest (WST), Altered States of Consciousness Rating Scale (APZ, 5D-ASC, 11-ASC), Phenomenology of Consciousness Inventory (PCI), Hallucinogen Rating Scale (HRS), Mystical Experience Questionnaire (MEQ30), Levels of Emotional Awareness Scale (LEAS), Reversal Learning task, Face Recognition task

Molecular Biology: PCR, Western blotting, DNA Sequencing, Electrophoresis, Cloning, Mass spectrometry, fPET-blood analyses with gamma counter Wizard2

Teaching

Supervision of a total of 4 M.Sc. and 4 B.Sc. students on various projects/theses, at Charité Medical University / Freie Universität Berlin / Max Planck Institute for Human Development, GER (paid and voluntary);

Tutoring in Mathematics, Chemistry, and Biology for B.Sc. students at the University of Vienna, AT (voluntarily);

Piano lessons, Vienna, AT (voluntary);

English lessons in Hoi An, Vietnam (voluntarily);

German lessons for children, Bozen, IT (paid);

Teaching natural sciences (theory and laboratory) at the high school Wissenschaftliches Realgymnasium Bozen, IT (paid);

Private tutoring in secondary school subjects for pupils Bolzano, IT (paid)

Other skills

review writing according to Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 standards;

Grant writing (e.g., "Berlin Institute of Health at Charité: Digital Health Accelerator Program 2023", "Funding Consciousness Research with Registered Reports - Center for Open Science", "Veteran Marijuana Research Grant Program - State of Michigan", "Wiener Wissenschafts-, Forschungs- und Technologiefonds");

Creating graphical abstracts for papers;

first aid courses

Passionate for Open Science, Philosophy of Science, Gender roles in academia, Ashtanga Yoga, Mountain climbing, Friendships

REFERENCES