

Joshua Erich Efraim Jäger

Date of Birth: 09.02.1993

Schwarzenburgstrasse 972, CH-3147 Mittelhäusern

Joshua.jaeger@unibe.ch, +41 79 535 2660

ORCID iD: 0000-0001-9366-9202

In my research, I investigate addiction disorders, particularly alcohol use disorders, and seek to understand and utilize machine learning to predict symptom trajectories and systematically identify patterns.

EDUCATION

Ph.D. Student <i>University of Bern, Vrije Universiteit Amsterdam</i> Supervised by dr. phil. Maria Stein and prof. dr. Mark Hoogendoorn	Bern, CH 3/2021 - Present
Master of Science in Psychology - Summa cum laude <i>University of Bern</i> Clinical Psychology & Cognitive Psychology, Perception, and Methodology Thesis (at the Universitäre Psychiatrische Dienste Bern): " <i>Improved Drinking Behavior After Inhibition Training in Patients With Alcohol Use Disorder: Evidence From Hierarchical Linear Analyses of a Randomized, Controlled, Double-Blind Trial</i> "	Bern, CH 9/2017 - 1/2021
Bachelor of Science in Psychology <i>University of Bern</i> Law and Biochemistry as minor subjects	Bern, CH 9/2012 - 3/2017

EMPLOYMENT HISTORY

Research Assistant <i>University of Bern</i>	Bern, CH 3/2021 - Present
Research Assistant <i>Pädagogische Hochschule Bern: Supervision by Dr. Alexander Wettstein</i> Data collection and analyses	Bern, CH 1/2020 - 12/2020
Research Assistant <i>University of Hawaii at Mānoa: Supervision by Dr. Scott Sinnett</i> Planning and execution of a study Submission of an article	Honolulu, USA 1/2019 - 5/2019
Editorial Production Director <i>Journal of Eye Movement Research</i> "PubMed Central" registration management	Bern, CH 4/2017 - Present
Caregiver <i>Suchthilfe Region Basel, drug rehab center ESTA</i> Stationary assistance and care of people with addiction	Reinach, CH 1/2012 - 8/2012

FURTHER EDUCATION

Care assistance <i>Swiss Red Cross</i> Course about medicine, hygiene, and the documentation of the care	Schwarzsee, CH 11/2016
Non-violent handling of conflicts <i>Institute of Communication & Leadership</i> Course about analysis and prevention of conflicts	Luzern, CH 03/2102

EXTRA-CURRICULAR ACTIVITIES

Founding Member & Member of the Board

Substance - Association for the prevention of substance abuse

Counseling sessions and crisis intervention

Organization of events

Applications for financial support of the association

Basel, CH

05/2012 - Present

Founding Member

ZETA Movement - Raising awareness about mental health problems

Assisting in the generation of ideas and content

Bern, CH

10/2019 - Present

Special class for gifted mathematicians

Gymnasium Leonhard

Participation in classes and competitions for gifted mathematics students

Basel, CH

2007 - 2012

APPROVED RESEARCH PROJECTS

Doc.CH, Swiss National Science Foundation (SNSF)

University of Bern, Vrije Universiteit Amsterdam

Project: A Machine Learning-Based Approach to Predict Post-Treatment Drinking Behavior in Patients with Alcohol Use Disorder

Bern, CH

03/2022 - Present

TEACHING ACTIVITIES

Lecturer

Universität Bern

Seminar: Alcohol use disorders, selected and innovative aspects of treatment

Bern, CH

2022

Supervision

Universität Bern

Bachelor theses: Various projects in the field of addiction and data prediction

Bern, CH

2021 - Present

Tutor

Beraber Bern

Teaching children with a migrant background in natural sciences

Bern, CH

2014 - 2019

Teacher, Assistant to the Course Director

Bildungszentrum Interlaken, Integro

Development and design of the courses offered

Teaching people with a migrant background in German and Informatics

Interlaken, CH

1/2017 - 1/2018

PRIZES, AWARDS, FELLOWSHIPS

Mobility Grant

Swiss National Science Foundation (SNSF)

Amount: 12'810.- CHF

CH

5/2022

Doc.CH Grant

Swiss National Science Foundation (SNSF)

Amount: 215'210.- CHF

CH

6/2021

PERSONAL SKILLS

R, data preparation, visualization, and statistical modeling

Python, experimental task programming, machine learning

CAREER BREAKS

Civilian service

Bürgerspital Basel

Basel, CH

10/2016 - 1/2017

Buddhist practice in Kung Fu

Wu Wei Si Monastery

Dali, CN

1/2017 - 4/2017

MAJOR SCIENTIFIC ACHIEVEMENTS

Master's thesis: Jaeger, J. (2021). *Improved Drinking Behavior After Inhibition Training in Patients With Alcohol Use Disorder: Evidence From Hierarchical Linear Analyses of a Randomized, Controlled, Double-Blind Trial*. Unpublished master's thesis, University of Bern, Switzerland.

In my master's thesis supervised by Dr. Maria Stein, which was embedded at the "Universitäre Psychiatrische Dienste Bern" (University Psychiatric Services Bern), I investigated the relationship of a newly developed intervention for the treatment of alcohol use disorder in a randomized controlled trial with three different treatment groups. To account for the complexity and longitudinal nature of the data set, I developed hierarchical linear models that estimated the relationship between the interventions and the post-treatment drinking behavior of the patients. I published the developed "R" code on "Github"¹ to share it publicly and to allow other researchers in the field to utilize it.

Sinnett, S., Jäger, J., Singer, S. M., & Philippe, R. A. (2020). Flow states and associated changes in spatial and temporal processing. *Frontiers in psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.00381>

In my internship at the University of Hawaii in the lab of Professor Scott Sinnett, in collaboration with Sarah Singer and Roberta Philippe, I was able to develop a study investigating the relationship between "flow" and spatial-temporal processing. Sarah Singer and I organized the pre-registration of the study on the "Open Science Framework"². Together with Sarah Singer and Roberta Philippe, I organized and conducted the implementation and survey of the subjects in an environment that was foreign to me. Sarah Singer and I then developed the statistical analysis in "R" based on linear mixed-effect regression models. Back in Switzerland, I wrote the manuscript together with Sarah Singer with the aim of publishing the results and findings from this study in an open access journal. After proofreading and editing of the manuscript by Scott Sinnett and Roberta Philippe, we jointly submitted the article to *Frontiers in Psychology*. The article was subsequently published after a "minor revision."

¹ Jaeger, J., Penedo, J. M. G., Moggi, F., Soravia, L., Tschuemperlin, R., Batschelet, H., & Stein, M. (2021, January 3). Code and Analyses of the impact of alcohol specific inhibition training: Master's thesis within the INTRA study. (Version V.1.0.0). Zenodo. <http://doi.org/10.5281/zenodo.4412309>

² <https://osf.io/xfrmu>