



# Curriculum Vitae Christoph Bamberg

## Profile

I am researching how intermittent fasting affects us individually, pursuing a topic of personal interest to me and relevance to public health. I designed original research lines for this investigation and apply state-of-the-art Bayesian statistics to the collected data. Besides publishing scientific reports, I talk and write about my findings to reach a broad audience.

## Education

**PHD | EATING BEHAVIOR LAB, PARIS LODRON UNIVERSITY, SALZBURG, AT | SINCE 10.2022**

- ▶ First supervisor: Prof. Jens Blechert. Second Supervisor: Dr. Julia Reichenberger
- ▶ Developing a controlled, longitudinal, high sampling experiment on the effects of Intermittent Fasting on cognitive performance, interoception, mood and body
- ▶ Continuing my work on a Meta-Analysis and online study

**M.SC. COGNITIVE SCIENCE | RUHR UNIVERSITY BOCHUM, GER | 10.2017 - 10.2019**

- ▶ Final grade: 1.2 (first class honours degree)
- ▶ Courses included cognitive science, psychology, neuropsychology, psychiatry, research methods (EEG, fMRI), philosophy of mind, philosophy of science

**SUMMER SCHOOL ANALYSING NEURAL TIME SERIES DATA | RADBOUD UNIVERSITY, NL | 08.2019**

- ▶ Instructor: Prof. Mike X. Cohen
- ▶ Studied mathematical foundations of time frequency analysis, Fourier transformation, simulating data
- ▶ Focused on programming exercises in Matlab

**B.A. PHILOSOPHY & ECONOMICS | UNIVERSITY OF BAYREUTH, GER | 10.2013 - 04.2017**

- ▶ Final grade: 2.0 (upper second class honours degree)
- ▶ Bachelor thesis on explanations of behaviour in the Wason Selection Task. Supervisor: Prof. Olivier Roy
- ▶ Courses included logic, statistics, theory of science, decision theory, economics
- ▶ Spent one semester in Estonia, studying at the Tallinn University of Technology

## Publications

- ▶ Thürmer, J. L., Bamberg, C., McCrea, S. M., & Blechert, J. (2024). *Social impediments to meat-eaters' adherence to critical calls for a meat-free diet: An experimental test of social norm and message source effects*. *Appetite*, 200, 107528. <https://doi.org/10.1016/j.appet.2024.107528>
- ▶ Bamberg C, Flasbeck V, Juckel G, Brüne M. *Central serotonergic activity is affected by fasting and selective uptake of nutrition*. *Clinical EEG and Neuroscience*, 2021. doi: 10.1177/15500594211000925
- ▶ Bamberg C\*, Flasbeck V\*, Diop S, Brüne M. *Ecology of cooperation: the influence of fasting and satiety on interpersonal trust*. *Soc Neurosci.*, 2021. doi:10.1080/17470919.2021.1876758

- Flasbeck V, Bamberg C, Brüne M. *Short-term fasting and ingestion of caloric drinks affect heartbeat-evoked potentials and autonomic nervous system activity in males*. Front. Neurosci., 2021, doi: 10.3389/fnins.2021.622428

\*these authors contributed equally

## Presentations

- Talk. *Intermittent Fasting as a Potential Stressor: A Randomised Controlled Trial*. Symposium Time Scales and stress Tales. EHPS 2024, Cascais. 09.2024
- Roundtable with Jennifer Inauen et al. *Stress and Health behaviour: avenues for Future Research and Collaboration*. EHPS 2024, Cascais. 09.2024
- Poster. *Cognitive Performance Is Not Worse When Fasted, a Preregistered Meta-Analysis*. SAMBA Salzburg Mind Brain Annual Meeting, Salzburg. 07.2022
- Poster. *A Meta-Analysis of the Effects of Temporary Calorie Restriction on Cognitive Performance*. Mind Brain Body Symposium 2022. Online. 03.2022
- Talk. *Developmental trajectories of flexible feedback processing and probabilistic reversal learning from late childhood to adulthood*. TeaP 2021. Online. 03. 2021
- Poster. *Fasting and nutrition affect the Loudness Dependence of Acoustic Evoked Potentials*. Live MEEG 2020. Online. 10. 2020
- Poster. *Developmental changes in extinction learning from infancy to adulthood*. IGSN-BIOME-CRC1280 conference on extinction learning, Bochum, 02. 2020
- Talk. *Trust is disrupted by physical needs and is payed when it seems worth it*. 16th annual conference of the Italian Association for Cognitive Science AISC, Rome, 12. 2019

## Funding and Prizes

- Scholarship for the promotion of scientific theses. Paris Lodron University Salzburg. Funding amount: 2,000€.
- Poster Prize, 3rd place. SAMBA Salzburg Mind Brain Annual Meeting. 07.2022. <https://samba.ccns.sbg.ac.at/samba-2022/>
- Special Poster Prize. Mind Brain Body Symposium. 03. 2022. <https://www.cbs.mpg.de/en/mbb-symposium/details>

## Research Experience

**GUEST RESEARCHER | BRAIN DYNAMICS LAB, THE UNIVERSITY OF AUCKLAND, NZ | 06.2021 - 02.2022**

- First supervisor: Prof. David Moreau, second supervisor: Dr. Christopher Erb
- Conducting a systematic review and meta-analysis
- Participated in a many-analysts project for EEG analysis
- Visiting the Eat-Lab in Maastricht, conducting an online study (ongoing)
- *Note*: I started this PhD remotely but could not continue due to the ongoing Covid-19 pandemic and resulting administrative changes at the university.

**GUEST RESEARCHER | EAT-LAB, MAASTRICHT UNIVERSITY, NL | 02.2022 – 08.2022**

- PI Anne Roefs, Eat-Lab, Department of Clinical Psychological Sciences, Faculty of Psychology and Neuroscience

- ▶ Conducting an online study on the effects of hunger and subjective expectations on concentration

**RESEARCH ASSISTANT | TECHNICAL UNIVERSITY DORTMUND, GER | 11.2019 – 05.2021**

- ▶ PI Prof. Sarah Weigelt, subproject of the Collaborative Research Centre CRC1280
- ▶ Conducted an fMRI study on extinction learning in adolescence
- ▶ Designed a novel reversal learning paradigm for a preregistered online study on cognitive flexibility across different ages
- ▶ Collected, analysed and presented the results of the online study
- ▶ Supervised and guided two student assistants, an intern, a bachelor and master thesis

**MASTER THESIS PROJECT | LWL PSYCHIATRIC CLINIC, BOCHUM | 08.2018 – 10.2019**

- ▶ Supervisor Prof. Martin Brüne, Dr. Vera Flasbeck
- ▶ Conducted a study on the effects of fasting and eating on cortical serotonergic activity (measured indirectly through acoustic evoked EEG-potentials) and social behaviour
- ▶ Using a repeated measures, cross-over, double blind design
- ▶ Analysed behavioural, electrophysiological and electrocardiographic data, wrote manuscripts for publication
- ▶ Helped standardising the analysis pipeline in the clinic.

**STUDENT ASSISTANT | BERGMANN SHEIL CLINIC, BOCHUM | 03.2018 – 01.2019**

- ▶ PIs Prof. Albert Newen, Prof. Martin Tegenthoff, Prof. Martin Brüne
- ▶ Assisted in a study on the effects of hypnotic suggestions on tactile acuity and associated neural representations
- ▶ Performed and analysed EEG measurements of resting state and somatosensory evoked potentials

## Teaching

**LECTURER | PARIS LODRON UNIVERSITY | 04.2023 - 08.2024**

- ▶ Two years in a row: Graduate level seminar for practical research skills. Supervising students in their projects, teaching programming and research skills
- ▶ Introduction to Scientific Methods in Psychology for undergraduate students
- ▶ Introduction to Statistics for undergraduate students

**SUBSTITUTE LECTURER | PARIS LODRON UNIVERSITY | 05.2023, 02.2023, 01.2024**

- ▶ Lecture on health psychology for BA students

**GUEST LECTURER | UNIVERSITY OF BAYREUTH | 04.2019**

- ▶ Guest lecturer for an undergraduate level block seminar with 18 students
- ▶ Seminar introduced students to research in cognitive science, philosophy of mind and neuroscience
- ▶ Graded students' presentations and essays

**TUTOR | RUHR UNIVERSITY BOCHUM | 09.2018 - 03.2019**

- ▶ Tutor for logic and theory of science accompanying a graduate level lecture
- ▶ Drafted exercises, supervised the students in class and graded their final exam

## Science Communication

### TALKS

- ▶ Talk for high school students. 2024. "Eating, Drinking, Body: What News are there from Eating Psychology?"
- ▶ Invited talk for high school students. 2024. "Nutrition, Diet and Body Image - A Scientific Survival Guide"

### ARTICLES

- ▶ Print Magazine Article on intermittent fasting and concentration, 2024. Published in Spektrum der Wissenschaft 05/2024
- ▶ Blog article on breakfast and its effects on concentration. 2024. Published in InMind (German / English). <https://de.in-mind.org/blog/post/fruehstueck-ist-die-wichtigste-mahlzeit-am-tagoder-doch-nicht>
- ▶ Contribution to S4F press release. 2023. <https://at.scientists4future.org/2023/12/01/scientists4future-salzburg-kritisiert-studie-der-wirtschaftskammer-zur-wiederaufnahme-von-kurzstreckenfliegen-salzburg-wien/>
- ▶ Blog article on sustainable conferences for S4F blog. 2023. <https://at.scientists4future.org/2023/01/25/konferenzen-nachhaltiger-gestalten/>

**LEARNING BAYESIAN STATISTICS PODCAST | 04.2022 - 04.2024**

- ▶ Promoting the podcast on social media, cutting interesting sound snippets and creating abstracts
- ▶ Writing and publishing newsletter for listeners
- ▶ Hosting webinars
- ▶ <https://learnbayesstats.com/>

#### PINT OF SCIENCE FESTIVAL | 05.2023 & 05.2024

- ▶ Organising and hosting a science festival to promote local science, two years in a row
- ▶ <https://pintofscience.at/team/Salzburg>

## Skills

### EXPERIMENTATION

- ▶ Ambulatory assessment/ Ecological Momentary Assessment
- ▶ EEG recordings with different systems, EOG, ECG
- ▶ Acoustic evoked potentials, somatosensory evoked potentials
- ▶ Functional (fMRI) and structural neuroimaging (MRI) (Philips scanner) with simultaneous heartbeat and respiration recordings
- ▶ Physiological measurements, i.e. two-point discrimination threshold, blood glucose
- ▶ Developing behavioural paradigms with Psychopy (Python)
- ▶ Systematic literature search and review

### DATA ANALYSIS

- ▶ Statistical analysis with R and Python
- ▶ EEG data preprocessing and analysis with MNE Python
- ▶ Behavioural data processing with Python
- ▶ Meta-analysis

