

Curriculum Vitae

Nicole Walasek

walasek.nicole@gmail.com

<https://github.com/Nicole-Walasek> - <https://twitter.com/NicoleWalasek> - <https://osf.io/3gfw7/>

born 18th February, 1992 in Nordhorn, Germany – nationality: German

EDUCATION

- 09/2022 **Doctorate of Philosophy (PhD)**
Radboud University, Nijmegen, Netherlands
Subject: Mathematical Modeling of Evolution, Development & Behavior
[link to dissertation](#)
- 2017 **Master's of Science (MSc)**
Radboud University, Nijmegen, Netherlands
Subject: Computing Science with specialization in Data Science (cum laude)
- 2015 **Bachelor's of Science (BSc)**
University of Osnabrück, Osnabrück, Germany
Subject: Cognitive Science
Grade: 1,1 (excellent)
Main fields: Neuroinformatics, Computer Science, Mathematics, Artificial Intelligence, Cognitive Neuropsychology
- 2011 **Abitur (University Entrance Diploma)**
Burg Gymnasium Bad Bentheim, Bad Bentheim, Germany
Best of the year, grade: 1,0 (excellent)
Advanced courses: Mathematics, Chemistry, English

ACADEMIC POSITIONS

- 04/2024 – 03/2026 **Postdoctoral Researcher**
University of Amsterdam, Evolutionary and Population Biology, Netherlands
Advisor: dr. Willem Frankenhuis
- 04/2022 – 03/2024 **Postdoctoral Researcher**
Utrecht University, Developmental Psychology, Netherlands
Advisor: dr. Willem Frankenhuis

09/2017– 02/2022

PhD Candidate

Radboud University, Behavioural Science Institute, Nijmegen, Netherlands

PhD in Mathematical Modeling of Evolution, Development & Behavior
Topic: *Evolution and development of sensitive periods in varying environments*

Advisors: dr. Willem Frankenhuis, dr. Karthik Panchanathan, prof. dr. Toon Cillessen

CONFERENCES, WORKSHOPS & OTHER RESEARCH VISITS

Presentations

04/2024

Invited keynote at the annual individualization symposium

ZIF (Centre for interdisciplinary research), Bielefeld, Germany

Invited by prof. dr. Barbara Caspers

11/2023

CBEN conference

Utrecht, Netherlands

The Cognition, Behavior & Evolution Network

Chair of the organizing committee

Theme: The interplay between evolution, behavior, and development

10/2023

Invited talk at Hartley Lab, New York University

Online

Invited by dr. Catherine Hartley

08/2023

ECDP conference

Turku, Finland

European Conference on Developmental Psychology

Individual talk on quantifying environmental statistics across development

Part of an accepted symposium on *Modeling Sensitive Periods of Development*

07/2023

ISDP conference

Utrecht, Netherlands

Meeting of the international society for developmental psychobiology

Presenter at and chair of symposium 'Plasticity across the lifespan – The *when, why, and how* of sensitive periods at later life stages'

This symposium was sponsored by the Columbia University Department of Psychiatry

05/2023

Rita Vuyk Lecture – Developmental Psychology

Amsterdam, Netherlands

Invited lecture for the University of Amsterdam (UvA)

- 05/2023 **Sungkyunkwan University (SKKU)**
Seoul, South Korea
- Invited talk by dr. Daeun Park
- 03/2023 **Invited talk at CHANGE, Leiden University**
Leiden, Netherlands
- Invited by dr. Ili Ma
- 07/2022 **Workshop at ESLR**
Amsterdam, Netherlands
- Organized workshop on stochastic dynamic programming
Topic: Evolution and development of sensitive periods
[Link to materials](#)
- 07/2022 **Future of game theory workshop**
Plön, Germany
- Organized by Prof. John McNamara
- 04/2022 **Brown bag (VU Amsterdam)**
online
- Invited by Dr. Björn Lindström
- 04/2022 **EHBEA**
online
- European Human Behaviour & Evolution Society
- 03/2022 **Institute of Child Development (University of Minnesota)**
online
- Invited by Prof. Glenn Roisman
- 01/2022 **Behavior and Evolution Seminar (Bielefeld)**
online
- Invited by Dr. Irene Godoy
- 11/2021 **DMCA**
online
- Decision-making in the context of adversity meeting
- 06/2021 **HBES 2021**
online
- Human Behavior and Evolution Society
- 03/2021 **Youth Development Institute**
online
- Invited by Dr. Assaf Oshri

- 01/2021 **ASAB twitter conference**
online
Twitter conference of the Association of the Study of Animal Behaviour
- 12/2020 **ASAB winter meeting**
online
Winter conference of the Association of the Study of Animal Behaviour
- 11/2020 **CBEN conference**
online
The Cognition, Behavior & Evolution Network
- 04/2020 **Theory Meeting at the University of Bristol**
online
Invited by dr. Sinead English
- 03/2020 **workshop: 'The mouse in the supermarket'**
Frauenchiemsee, Germany
Seminar on formal modeling of evolution and development
funded by the workshop grant within the Kurswechsel program (Change of direction)
- 08/2019 **Max Planck Institute for Evolutionary Anthropology**
Leipzig, Germany
Invited by and presented for prof. dr. Richard McElreath's lab group
- 06/2019 **HBES 2019**
Boston, United States
Human Behavior and Evolution Society
- 12/2018 **Invited research meeting**
CRTD, TU Dresden, Germany
Invited by prof. dr. Gerd Kempermann from the Center for Regenerative Therapies at the TU Dresden to discuss the emergence of individual differences in genetically identical mice
- 02/2017 **CLIN 27**
Leuven, Belgium
Computational Linguistics in the Netherlands

Posters

- 11/2019 **CBEN conference**
Amsterdam, Netherlands
The Cognition, Behavior & Evolution Network

06/2019

Summer Institute on Bounded Rationality
Max Planck institute for Human Development, Berlin

Topic: Bounded Rationality in a Digital World

HONORS & AWARDS

12/2023

ODISSEI LISS Panel Grant (2023)

Cognitive strengths and deficits in adverse conditions: A balanced view

Main applicant: Stefan Vermeent

Co-applicants: Nicole Walasek & Willem. E. Frankenhuys

€39,500

04/2023

Columbia University Department of Psychiatry Sponsored Symposium at ISDP 2023

International Society for Developmental Psychobiology

3000\$ to be distributed across the symposium speakers

01/2023

NWO Scientific Meetings and Consultations grant

Dutch Science Foundation

3250€ to organize CBEN 2023

06/2021

Nominated for young investigator award at HBES 2021

06/2019

Best poster award at the Summer Institute on Bounded Rationality

Max Planck institute for Human Development, Berlin

First prize (350€) for the best poster

04/2015 – 08/2015

ERASMUS grant

To visit the CVC in Barcelona for an internship

10/2014

Deutschlandstipendium (Germany Scholarship)

One-year scholarship for excellent grades

04/2014 – 08/2014

Mobilitätzuschussstipendium University of Osnabrück

Scholarship enhancing the mobility of outstanding students awarded by the University of Osnabrück

10/2013

Deutschlandstipendium (Germany Scholarship)

One-year scholarship for excellent grades

07/2011

Admittance into the Deutsche Physikalische Gesellschaft

Award for high-school graduates for outstanding performance in Physics

WORK EXPERIENCE

Teaching

2023-2024

Teaching assistant Advanced Research Methods and Statistics for Psychology
Utrecht University

Involvement in two modules: *Using Bayesian statistics* and *Analyzing Categorical and Ordinal data*

2022-2024

Bachelor and master theses supervision
Utrecht University

Supervision of eight psychology bachelor students and four clinical psychology master students

2016, 2018, 2019, 2020

Teaching Assistant for advanced statistics at the BSI
Behavioral Science Institute, Radboud University (Research Master Behavioural Science)

The entire course spans one academic year and is divided into the following submodules:

*Statistics: Multivariate Analysis**

Course content included, but was not limited to linear and logistic regression, hierarchical loglinear analysis, repeated measures analyses of variance and covariance, and discriminant function analysis, principal component analysis, and exploratory factor analysis.

*Statistics: Analyzing in R**

Course content included, but was not limited to data management and issues associated with pre-processing of data. Specific attention is paid to the visualization of data, both in terms of descriptive and inferential results. Furthermore, the course expanded upon the concepts and analytic techniques described in the previous course.

Statistics: Mixed-effects Models

Course content included theoretical understanding and statistical implementation of linear mixed effects models in R.

Statistics: Structural Equation Modelling

Course content included the design, implementation, and interpretation of structural equation models, including path models, factor analyses, mediation, moderation, and crossed legged panels.

* In 2018 the two courses were merged into *Advanced Statistics in R*.

The new course uses the book *Serious stats: A guide to advanced statistics for the behavioral sciences* (Baguley, T.,2012) and covers the previous topics, as well as an introduction to Bayesian regression with brms.

2017, 2020

General introduction to Psychology
Radboud University, Nijmegen

Course for Psychology Bachelor students
Workgroup teacher

- 2019 **Introduction to Artificial Intelligence (practical)**
Radboud University, Nijmegen
- Course for Artificial Intelligence Bachelor students
Teaching assistant: assistance in practical sessions to implement search algorithms within a game environment in Python
- 2019 **Statistics I**
Radboud University, Nijmegen
- Course for Psychology Bachelor students
Workgroup teacher: Introduction to statistics in behavioral research
- 2018 **Development and Health**
Radboud University, Nijmegen
- Course for Psychology Bachelor students
Workgroup teacher
- 2014 **Teaching Assistant for Mathematics**
University of Osnabrück
- Course for Cognitive Science Bachelor students
Preparing and giving a weekly math tutorial
Correcting homework
Preparing the students for the exam
- 2012, 2013, 2014 **Teaching Assistant for Statistics**
University of Osnabrück
- Course for Cognitive Science and Psychology Bachelor students
Supervision of the weekly practice sessions

Internships

- 09/2016 – 12/2016 **Internship at TNO**
The Hague, Netherlands
- Project on entity extraction in the medical domain
- 04/2015 – 08/2015 **Internship at the CVC**
Universitat Autònoma de Barcelona
- Learning and machine perception group (LAMP)
- 04/2014 – 08/2014 **Internship at the Nicolelis Laboratory**
Duke University, Durham, USA
- Decoding neural signals for Brain Computer Interfaces using Reservoir Computing (also thesis topic)

Reviewing

Evolution and Human Behavior
Royal Society Open Science
Peer Community in Evolutionary Biology
The Quarterly Review of Biology

ACADEMIC SERVICE

- 11/2023 **Organized the Cognition, Behavior, and Evolution (CBEN) network meeting**
Utrecht, Netherlands
- 09/2019 – 10/2021 **Colloquium Committee member**
Behavioural Science Institute, Radboud University, Nijmegen
- Selection of and support for colloquia, symposia & workshops organized at the BSI

PEER-REVIEWED ARTICLES

- Van Dongen, N. N. et al. (2024) Practicing Theory Building in a Many Modelers Hackathon: A Proof of Concept. *Meta Psychology*, in press. <https://doi.org/10.31234/osf.io/r5yFz>
- Walasek, N.**, Young, E. S., & Frankenhuys, W. E. (2023) A framework for studying environmental statistics in developmental science. *Psychological Methods*, in press. <https://doi.org/10.31234/osf.io/fr87n>
- Walasek, N.**, Frankenhuys, W. E., & Panchanathan, K. (2022b) Sensitive periods, but not critical periods, evolve in a fluctuating environment: a model of incremental development. *Proceedings of the Royal Society B: Biological Sciences*, 289, 20212623. <https://doi.org/10.1098/rspb.2021.2623>
- Walasek, N.**, Frankenhuys, W. E., & Panchanathan, K. (2022a). An evolutionary model of sensitive periods when the reliability of cues varies across ontogeny. *Behavioral Ecology*, 33(1), 1–14. <https://doi.org/10.1093/beheco/arab113>
- featured in: Gee, D. G. (2022). When do sensitive periods emerge later in development? *Trends in Cognitive Sciences*, 26(2), 97–98. <https://doi.org/10.1016/j.tics.2021.12.001>
- Frankenhuys, W. E., & **Walasek, N.** (2020). Modeling the evolution of sensitive periods. *Developmental Cognitive Neuroscience*, 41, 100715. <https://doi.org/10.1016/j.dcn.2019.100715>
- Johannes, N., Meier, A., Reinecke, L., Ehlert, S., Setiawan, D. N., **Walasek, N.**, Dienlin, T., Buijzen, M., & Veling, H. (2020). The relationship between online vigilance and affective well-being in everyday life: Combining smartphone logging with experience sampling. *Media Psychology*, 1–25. <https://doi.org/10.1080/15213269.2020.1768122>
- Setio, A. A. A. et al. (2017). Validation, comparison, and combination of algorithms for automatic detection of pulmonary nodules in computed tomography images: the LUNA16 challenge. *Medical Image Analysis*, 42, 1–13. <https://repository.ubn.ru.nl/handle/2066/179531>

van Oortmerssen, G., Raaijmakers, S., Sappelli, M., Boertjes, E., Verberne, S., **Walasek, N.**, & Kraaij, W. (2017). Analyzing cancer forum discussions with text mining. In: Riano D., Peleg M., Lenz R., Reichert M., Denecke K., Deng Y., Declerck T., Harmelen F. van (red.) *Proceedings of the International Joint Workshop KR4HC - ProHealth 2017 (in conjunction with AIME 2017)*, 127-130.

ADDITIONAL QUALIFICATIONS

Languages

| | |
|----------------|----------------------|
| English | fluent |
| German | native |
| Dutch | basic knowledge (B1) |

Programming languages and software

Python, R, Matlab, Java, Prolog, SPSS, LaTeX

Selected analysis techniques

Stochastic Dynamic Programming, Bayesian inference, Deep learning, Reinforcement Learning, Machine Learning