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

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 VISISTS

Workshops & summer schools

06/2024 SICSS - ODISSEI Summer School 2024

Summer Institutes in Computational Social Science, University of Rotterdam

Focus on analysis of administrative data (LISS panel and CBS data)

06/2019 Summer Institute on Bounded Rationality

Max Planck institute for Human Development, Berlin

Topic: Bounded Rationality in a Digital World

Presentations

08/2025 European Society for Evolutionary Biology (ESEB)

Barcelona, Spain

Title: The evolution of reversible plasticity in stable environments

05/2025 Society for Research in Child Development (SRCD)

Minneapolis, USA

Symposium chair and presenter

Title: Unpredictability unveiled: Recent advances in capturing

environmental dynamics

05/2025 Evolution, Science, and Society seminar

Missouri, USA

Invited speaker at monthly colloquium series

10/2024 CBEN conference

Maastricht, Netherlands

The Cognition, Behavior & Evolution Network

10/2024 Dissertation award presentation

Chicago, USA

Meeting of the International Society for Developmental Psychobiology

(ISDP)

07/2024 Invited talk at the Max Planck Institute for Evolutionary Biology

Plön, Germany

Invited by Dr. Anja Günther

04/2024 Presentation at NVTB annual meeting

Schoorl, Netherlands

Annual meeting of the Dutch Society for Theoretical Biology

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

HONORS & AWARDS

07/2025 Veni grant (Dutch Science Foundation, NWO)

From theory to test and back: Testing and advancing theory about sensitive

periods beyond early ontogeny

320000€

05/2024 Dissertation award

International Society for Developmental Psychobiology

700\$ cash prize

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. Frankenhuis

39500€

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 Mobilitätszuschussstipendium 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

WORK EXPERIENCE

Teaching

2024,2025 Co-coordinator of Evolutionary Psychobiology: Ecology, Behavior &

Cognition

University of Amsterdam

This course is taught in two parts. Part one teaches students the theoretical underpinnings of the evolution of behavior and cognition. In part two the students apply this knowledge during a four-day pilot

study in ARIS zoo.

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 Autonoma 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

Proceedings of the Royal Society B: Biological Sciences

Current Opinion in Behavioral Sciences

Animal Behaviour Child Development Functional Ecology

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

- **Walasek, N.**, Jovicic, M., & Guenther, A. (2025). Personality development in non-domesticated house mice: Evidence for a nutrition-dependent sensitive period early in life. *Proceedings of the Royal Society B: Biological Sciences*, 292(2050), 20242689. https://doi.org/10.1098/rspb.2024.2689
- **Walasek, N.**, Panchanathan, K., & Frankenhuis, W. E. (2025). The evolution of reversible plasticity in stable environments. *Evolution Letters*, qraf015. https://doi.org/10.1093/evlett/qraf015
- **Walasek, N.**, Panchanathan, K., & Frankenhuis, W. E. (2024) The evolution of sensitive periods beyond early ontogeny: Bridging theory and data. *Functional Ecology, advance online publication*. https://doi.org/10.1111/1365-2435.14615
- Van Dongen, N. N. et al. (2024) Practicing Theory Building in a Many Modelers Hackathon: A Proof of Concept. *Meta Psychology, 9.* https://doi.org/10.15626/MP.2023.3688
- **Walasek, N.**, Young, E. S., & Frankenhuis, W. E. (2024) A framework for studying environmental statistics in developmental science. *Psychological Methods, in press.* https://doi.org/10.31234/osf.io/fr87n
- **Walasek, N.**, Frankenhuis, 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.**, Frankenhuis, 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
- Frankenhuis, 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.

Preprints

DeJoseph, M., **Walasek, N.**, Liu, S., Young, E. S., Raikes, A., Waldman, M. R., ... & Fisher, P. (2025). Hidden dynamics of economic hardship: Characterizing economic unpredictability and its role on self-regulation in early childhood. *PsyArXiv*. https://osf.io/preprints/psyarxiv/r5yfz v1

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