

## Curriculum Vitae

---



### Nicolas Rothen, Prof. Dr.

FernUni Schweiz  
Bahnhofstrasse 9a  
3904 Naters  
Switzerland  
[nicolas.rothen@fernuni.ch](mailto:nicolas.rothen@fernuni.ch)  
+41(0)76 690 11 51

<https://orcid.org/0000-0002-8874-8341>

<https://osf.io/5b7ha/>

[https://www.researchgate.net/profile/Nicolas\\_Rothen](https://www.researchgate.net/profile/Nicolas_Rothen)

<https://scholar.google.ch/citations?hl=de&user=Qu04IAcAAAAJ>

---

## Research Interests

I am mostly interested in factors with a strong potential to enhance memory. A great majority of my research focused on synesthetic experiences to investigate how individual differences in visual perception affect memory performance. Moreover, I used extensive training procedures to investigate how perceptual phenomenology is shaped and how synesthetic experiences develop. Recently, I developed a strong interest in evidenced based education from a teacher (factors that enhance teaching) and student (factors that enhance learning) perspective. In my studies, I have used various methodical approaches: laboratory- and internet-based data acquisition, psychophysiology (EDA, SCR), neurophysiology (EEG, ERP), non-invasive brain stimulation (TMS), computation modeling.

---

## Education

- 11/2016 **Habilitation in Psychology**, University of Bern, Switzerland  
Defense "Sensorische Substitution: können fehlende / verlorene Sinne durch Technologie ersetzt werden?" [Sensory substitution: is it possible to replace missing / lost senses with technology?] | defense: 21/11/2016
- 11/2006 – 10/2009 **PhD in Psychology**, University of Bern, Switzerland  
Thesis "Synästhesie: Ursachen, Folgen und assoziierte Eigenschaften" [Synaesthesia: causation, consequences and associated characteristics] | advisor: Prof. Dr. Beat Meier | defense: 05/10/2009
- 10/2001 – 11/2006 **Licenciate (MSc equivalent) in Psychology**, University of Bern, Switzerland  
Thesis "Der Einfluss von Synästhesie auf grundlegende Lernprinzipien" [The influence of synaesthesia on basic principles of learning] | advisor: Prof. Dr. Beat Meier | date: 17/11/2006
-

## Work Experience

- 02/2020 – current Faculty of Psychology, Swiss Distance University Institute, Switzerland  
Associate Professor (Extraordinarius, tenured)
- 01/2018 – 01/2020 Faculty of Psychology, Swiss Distance University Institute, Switzerland  
Assistant Professor (Tenure Track)
- 05/2015 – 11/2018 Institute of Psychology, University of Bern, Switzerland  
Swiss National Science Foundation “Ambizione” Fellow (Postdoc)
- 01/2011 – 04/2015 School of Psychology, Sackler Centre for Consciousness Studies, University of  
Sussex, Brighton, United Kingdom  
(advisors: Prof. Dr. Jamie Ward, Prof. Dr. Anil Seth)  
Visiting Research Fellow;  
Swiss National Science Foundation (2011, 2013, 2014, 2015);  
Holcim Foundation (2012);  
Additional support: Dr Mortimer & Theresa Sackler Foundation (2011-  
2012)
- 09/2005 – 12/2010 Institute of Psychology, University of Bern, Switzerland  
(advisor: Prof. Dr. Beat Meier)  
Postdoc: Research and Teaching Assistant (2009-2010);  
PhD student: Research and Teaching Assistant (2007-2009);  
MSc student: Research Assistant (2005-2007)
- 08/2008 – 01/2009 Faculty of Psychology, Swiss Distance University Institute, Switzerland  
Research and Teaching Assistant (advisor: Prof. Dr. Beat Meier)
- 10/2006 – 10/2007 Institute of Psychology, University of Bern, Switzerland  
(advisor: Prof. Dr. Beat Meier)  
Research Assistant in the Swiss National Science Foundation project: “The  
Relationship between the Prospective and the Retrospective Components  
in Prospective Memory Tests.”
- 

## Funding

Total capacity since 2011 in CHF ≈ 2,9 Mio.

- 10/2019 – 09/2022 **Swiss Canton of Valais (CHF 1'606'600)** | project grant  
Project: “Entwicklung und neurokognitive Evaluation einer digitalen  
Lernhilfe für den Sprachunterricht im Kanton Wallis” [Development and  
Neurocognitive Evaluation of a Digital Tool for Language Classes in the  
Canton of Valais]  
Principal Investigator: Nicolas Rothen together with Prof. Dr. Thomas  
Reber
- 05/2015 – 05/2018 **Swiss National Science Foundation (CHF 600'000)** | career grant: Am-  
bizione Fellowship  
Project: “Natural Foundations of Enhanced Memory”  
Principal investigator: Nicolas Rothen

- 02/2013 – 02/2015 **Swiss National Science Foundation (CHF 108'880)** | career grant: late postdoc Grant for advanced postdocs. Project: "Perceptual functioning and memory performance: What is the link?"  
Principal investigator: Nicolas Rothen
- 02/2013 – 02/2016 **Economic & Social Research Council (GBP 387'000)** | project grant  
Project: "Enhanced memory ability: Insights from synaesthesia"  
Principal investigator: Prof. Dr. Jamie Ward | Co-investigator: Prof. Dr. Julia Simner | Named postdoc (co-applicant): Nicolas Rothen (declined resulting position, due to the awarded grant above)
- 01/2012 – 01/2013 **Holcim Foundation (CHF 46'920)** | career grant  
Research grant. Project: "How Synaesthesia Affects Different Memory Systems – Part 2"  
Principal investigator: Nicolas Rothen
- 01/2011 – 01/2012 **Swiss National Science Foundation (CHF 42'600)** | career grant: early postdoc  
Grant for early postdocs. Project: "How Synaesthesia Affects Different Memory Systems"  
Principal investigator: Nicolas Rothen
- 

## Organization of Symposia

- Rothen, N.**, & Meier, B. (2016, July). Neural basis of prospective memory. Symposium organized at the ICOM, 6th International Conference on Memory, Budapest, Hungary.
- Rothen, N.**, & Rusted, J. (2015, September). Current methods and advances in prospective memory research. Symposium organized at the ESCOP, 19th Meeting of the European Society for Cognitive Psychology, Paphos, Cyprus.
- Rothen, N.**, Walter, S., & Meier, B. (2015, September). Prospective memory: Psychology of the future. Symposium organized at the SGP, 14th Conference of the Swiss Psychological Society, Geneva, Switzerland.
- Rothen, N.**, & Ward, J. (2013, August). Synaesthesia: How unusual perception can inform normal cognition. Symposium organized at the ESCOP, 18th Meeting of the European Society for Cognitive Psychology, Budapest, Hungary.
- 

## Invited Talks

- Rothen, N. (2017, December). Training-induced synaesthesia: a special case of expertise? Invited talk, University of Chinese Academy of Sciences, Yanqihu, China.
- Rothen, N. (2017, December). On the links between perception and memory. University of Giessen, Germany.
- Rothen, N. (2017, January). How individual differences in perception affect memory. University of Heidelberg, Germany.
- Rothen, N. (2016, May). Memory and neural plasticity: What we can learn from synaesthesia research. Centre de Recherche Cerveau et Cognition (CerCo), Toulouse, France.

Rothen, N. (2014, June). Perceptual functioning and memory performance: How synaesthesia can inform theories in cognitive science. University of Amsterdam, Netherlands.

Rothen, N. (2009, July). Synaesthesia: Memory advantages, implicit bidirectionality, and training of synaesthetic experiences. University of Amsterdam, Netherlands.

---

## Prizes and Awards

Highly Cited Research Award received from Journal of Neuroscience Methods (2017, January) for the following publication: **Rothen, N.**, Seth, A. K., Witzel, C., & Ward, J. (2013). Diagnosing synaesthesia with online colour pickers: Maximising sensitivity and specificity. Journal of Neuroscience Methods, 215(1), 156–160.

---

## Editorial Tasks and Reviewing Activities

2019 – current     Editor in Chief: Swiss Journal of Psychology  
2015 – 2018       Associate Editor: Swiss Journal of Psychology  
2014 – 2015       Guest Editor: Frontiers in Human Neuroscience

Ad hoc reviewer for: Acta Psychologica / Aging and Psychology / Annals of Neurology / Behavioural Brain Research / Cognition / Cognitive Neuroscience / Consciousness and Cognition / Current Biology / Deutsche Forschungsgemeinschaft (DFG) / Encyclopedia of Human Behaviour - 2nd Edition / Frontiers in Cognitive Science / Frontiers in Human Neuroscience / Frontiers in Perception Science / Frontiers in Psychology / Human Brain Mapping / iPerception / The Israel Science Foundation / Journal of Experimental Psychology: Learning, Memory, and Cognition / Journal of Experimental Psychology: Human Perception Performance / Journal of Experimental Psychology: Memory and Cognition / Journal of Neuropsychology / Journal of Visualized Experiments / Perception / Memory / Memory Cognition / Neuropsychologia / Philosophical Transactions B / PLoS one / Psychology and Aging / Psychopharmacology / Quarterly Journal of Experimental Psychology / Science

---

## Active Memberships

since 2016     Fellow of the Psychonomic Society (PsyS) since 2013  
European Society for Cognitive Psychology (ESCOP) since 2008  
United Kingdom Synaesthesia Association (UKSA)

---

## Institutional Responsibilities

Co-Dean (“Studienbereichsleiter”) of the German Master course-programme, Faculty of Psychology, Swiss Distance University Institute, Switzerland

Member of the academic council, Swiss Distance University Institute, Switzerland

Full Member of KPSYCH (formerly KDIPS: Konferenz der Direktorinnen und Direktoren der Institute für Psychologie der Schweiz) representing Swiss Distance University Institute

---

## Supervision (since 2015)

### Ongoing

Postdoc: Ms Alodie Rey-Mermet

PhD: Ms Mariela Mihaylova, Ms Sandy Marca, Ms Nicole Skieresz, Mr Nik Hunziker

MA: Mr Dieter Studer, Ms Carmen Schreier, Mr Dominique Kuster

### Completed

PhD: Ms Rebecca Ovalle Fresa

MA: Mr Felix Häsler, Mr Christopher Ritter, Mr Sinan Arif Uslu, Ms Eleonora Balbi, Ms Esther Brill

BA: Ms Adriana Frei, Mr Simon Aebli, Ms Annika Wyss, Ms Laura Schmid

---

## Teaching (since 2015)

**Wissenschaftliches Arbeiten** [Scientific Practice] (master course, Swiss Distance University Institute, Switzerland): spring term 2019, spring term 2020

**Neurokognition** [Cognitive Neuroscience] (master course, Swiss Distance University Institute, Switzerland): spring term 2018, spring term 2019, spring term 2020

**Datenanalyse mit R** [Data Analysis with R] (summer course, University of Bern, Switzerland): summer 2018

**Lernen und Gedächtnis** [Learning and Memory] (Lecture on Bachelor level, University of Bern, Switzerland): spring term 2018

**Computergestützte Versuchsdurchführung** [Computer Assisted Data Collection] (master course, University of Bern, Switzerland): autumn term 2016, spring term 2017, autumn term, 2017, spring term 2018

---