

Katja Reinhard

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Date of birth: 07 May 1988
Nationality: Swiss (German-speaking)



EDUCATION

- 7/2011 - today **PhD in Neural and Behavioural Sciences**
Research topics: Retinal physiology of mouse, pig, and human. Retinal adaptation during changing luminance. Effect of diseases (optic atrophy and ischemia) on retinal physiology.
Institute: Werner Reichardt Centre for Integrative Neuroscience, Tübingen, DE
Supervisor: Thomas Münch, PhD
- 2009 – 2011 MSc insigni cum laude in Biomedical Sciences, University of Bern (CH),
- 2006 – 2009 BSc in Biomedical Sciences, University of Fribourg (CH)

PUBLICATIONS

2015

Tikidji-Hamburyan A*, **Reinhard K***, Seitter H, Hovhannisyan A, Procyk CA, Allen AE, Schenk M, Lucas RJ, Münch TA (2015) Retinal output changes qualitatively with every change in ambient illuminance. Nature Neuroscience 18(1):66-74.

***equal contributions**

2014

Reinhard K*, Tikidji-Hamburyan A*, Seitter H*, Idrees S, Mutter M, Benkner B, Münch TA (2014) Step-By-Step Instructions for Retina Recordings with Perforated Multi Electrode Arrays. PLoS ONE 9(8): e106148.

*** equal contributions**

2013

Reinhard K, Rougier JS, Ogrodnik J, Abriel H (2013) Electrophysiological properties of mouse and epitope-tagged human cardiac sodium channel Nav1.5 expressed in HEK293 cells [v2; ref status: indexed, <http://f1000r.es/10d>] F1000Research 2013, 2:48

Submitted

Gonzalez-Menendez *I, **Reinhard K***, Tolivia J, Wissinger B, Münch TA. Influence of Opa1 mutation on survival and function of retinal ganglion cells. IOVS

*** equal contributions**

CONTRIBUTIONS AT CONFERENCES

27-28/3/2015	Pro Retina Conference 2015 <u>Poster</u> : "Physiology of explanted human retina: a comparative study"
1-4/7/2014	MEA Meeting 2014 – 9th International Meeting on Substrate-Integrated Microelectrode Arrays <u>Poster</u> : "Novel insights into visual information processing of human retina"
22-27/6/2014	2014 FASEB Retinal Neurobiology and Visual Processing <u>Poster</u> : "Insights into visual processing of human retina in-vitro"
4-8/5/2014	2014 ARVO Annual meeting <u>Poster</u> : "Insights into visual processing of human retina in-vitro"
4-5/4/2014	Pro Retina Conference 2014 <u>Poster</u> : "Novel insights into visual information processing of human retina"
2-5/10/2013	European Retina Meeting 2013 <u>Poster</u> : "Studying circuit level function of human retina in vitro"
24-27/9/2013	Bernstein Conference 2013 <u>Poster</u> : "Studying circuit level function of human retina in vitro"
21-23/6/2013	Vision Camp 2013 <u>Invited talk</u> : " <i>In-vitro</i> model to study human retina function on cell and system level"
22-23/3/2013	Pro Retina Conference 2013 <u>Poster</u> : "Extracellular Recordings from Retinal Ganglion Cells in the Human Retina".
10-13/7/2012	MEA Meeting 2012 – 8th International Meeting on Substrate-Integrated Microelectrode Arrays <u>Poster</u> : "Characterization of retinal ganglion cells in OPA-mice"

SCIENTIFIC SKILLS

Electrophysiology	Multi-electrode recordings of spinal cord slices and retina explants Patch clamping of HEK293 cells
Computation / Analysis	Programming of scripts (Matlab) for stimulus-based analysis of neuronal responses Application and modification of clustering algorithms for cell type grouping
Biochemistry / Molecular Biology	basic experience with Western blots, immunoprecipitations, PCR, plasmid modification and amplification

STIPENDS

- 11/2012 - 10/2015 **PhD stipend, Pro Retina Stiftung, DE**
- 7/2011 – 10/2012 **PhD stipend, Centre for Integrative Neuroscience, Tübingen, DE**
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THESES / INTERNSHIPS

- 7/2010 – 1/2011 **Master thesis**
Generation and characterisation of differently S-tagged mouse Na_v1.5 (mouse voltage-gated sodium channel subunit α)
Laboratory: Prof. Hugues Abriel, DKF Bern (Department of Clinical Research, CH)
Techniques: biochemistry, patch clamp, molecular biology
- 5/2010 Rhythm generation in neuronal networks
Laboratory: Prof. Jürg Streit, University of Bern (CH)
Techniques: multi-electrode arrays, cell culture (organotypic)
- 4/2010 Channelopathies in heart and PNS
Laboratory: Prof. Hugues Abriel, DKF Bern (CH)
Techniques: patch clamp, biochemistry
- 8/2008 – 5/2009 Development of M- and P-Cells in the Macaque's Lateral Geniculate Nucleus
Laboratory: Prof. Pierre Lavenex, University of Fribourg (CH)
Techniques: microscopy (volume measurements), cryosectioning
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ACHIEVEMENTS

- Travel Grant & Poster Awardee** ARVO Travel Grant (1100 US\$) and Awardee for MIT Outstanding Poster Award in 2014
- Poster Prize** Pro-Retina conference 2014
- Lush Prize 2013** “for her research into visual impairment and blindness using human retinal tissue in vitro.”, 12'500 GBP
- Nomination for poster prize** Pro-Retina conference 2013
- Co-chairing of workshop** on perforated multi-electrode arrays at the MEA Meeting 2012
- CSL Behring Prize** for best marks of Biomedical Sciences Master students (2011), 2000.- CHF
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SOFT SKILLS

Networking / Communication	Establishment and maintenance of collaborations with scientists, clinicians (human retina donations), and industrial partners (MultiChannel Systems)
Coordination / Time management	Coordination of several projects in parallel within the lab and with collaborators
Data presentation / Proposal writing	Attendance of conferences; writing of scientific and ethics commission proposals
Teaching	Practical courses for undergraduate students; teaching of science and languages to grammar students; teaching of dancing and horse riding
Analytical skills	Identification of common aspects of various projects in terms of data analysis and scientific content/questions

LANGUAGES

German	Native language
English	Very good knowledge, IELTS band 8 (7-9) in 2010
French	Good knowledge, bilingual grammar school and university studies
Spanish	Good knowledge, 4 weeks course in Argentina in 2011, level B2
Latin	2 years

SIDELINES AND OTHER INTERESTS

Scientific assistant	in research project "Research of Teenage Slang in the German-Speaking Switzerland" by Prof. Dr. Erika Werlen (HWZ, Switzerland) in 2006
Secretary	of Biomedical Students Association Fribourg in 2008/2009
Waitress	at "Caffe Spettacolo", Bern, CH in 2008
Horse-back riding	15 years, including training of own horse and teaching for beginners
Music	playing of the piano, clarinet, and Bamboo flute
Dancing	Latin dances, including teaching for beginners

REFERENCES

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(Master thesis supervisor)
 Director of Department of Clinical Research
 University of Bern
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