

## Prof. Dr. rer. nat. Carolin Wichmann

### GENERAL INFORMATION

Date of birth: 18.07.1973  
Gender: female

Address of institution: Molecular Architecture of Synapses Group  
Center for Biostructural Imaging of Neurodegeneration (BIN)  
Institute for Auditory Neuroscience  
University Medical Center Göttingen  
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Current position: Professor for “Molecular Ultrastructure of Synapses” at the  
Institute for Auditory Neuroscience, University Medical Center  
Göttingen

### ACADEMIC EDUCATION

1999 – 2002 Doctoral studies, Institute for Microbiology and Genetics,  
University of Göttingen (Prof. Dr. F. Mayer)  
1993 – 1999 Studies of Biology (Diploma), University of Göttingen

### SCIENTIFIC DEGREES

2002 Dr. rer. nat., Institute for Microbiology and Genetics, University  
of Göttingen (Prof. Dr. F. Mayer)

### PROFESSIONAL CAREER AFTER COMPLETING DEGREE

Since 12/ 2016 W2 Professorship “Molecular Ultrastructure of Synapses” at the  
Institute for Auditory Neuroscience, University Medical Center  
Göttingen  
2011 - 2016 Group Leader in the InnerEarLab, University Medical Center  
Göttingen (Group: Molecular Architecture of Synapses),  
Department of Otolaryngology (since January 1<sup>st</sup> 2015: Institute  
for Auditory Neuroscience)  
2010 – 2011 Research Associate, Freie Universität Berlin (Prof. Dr. Stephan  
J. Sigrist)  
2008 – 2010 Research Associate at the Charité Berlin (Prof. Dr. Stephan J.  
Sigrist)  
2006 – 2008 Research Associate, Bio-Imaging Center, University of  
Würzburg (Prof. Dr. Stephan J. Sigrist)  
2005 – 2006 Research Associate at the Clinical Neurobiology, University of  
Würzburg (Prof. Dr. Manfred Heckmann/Prof. Dr. Stephan J.  
Sigrist)

2002 – 2005                      Research Associate at the European Neuroscience Institute (ENI), Göttingen (Dr. Stephan J. Sigrist)

## MISCELLANEOUS

### *Fellowships, Awards and Honors*

1999-2002                      Stipend for Ph.D. thesis, graduate school of the University of Göttingen: „Chemische Aktivitäten von Mikroorganismen“  
2011                                Developmental award for female postdocs and group leaders of the CRC 889 “Cellular Mechanisms of Sensory Processing”

### *Further Scientific Activities (selected)*

Since 06/2015                      Board member of “Sensory and Motor Neuroscience” Program, Göttingen Graduate School for Neuroscience, Biophysics and Molecular Biosciences  
  
Since 10/2015                      Member of the ARO  
  
May 2017                              Participation in “Advanced workshop in Cryo-Electron tomography”, Vienna, Nexperion and Biocenter, Vienna

## SELECTED PUBLICATIONS (*with scientific assurance*)

- 1) Strenzke N<sup>#</sup>, Chakrabarti R<sup>\*</sup>, Al-Moyed H<sup>\*</sup>, Müller A, Hoch G, Pangrsic T, Yamanbaeva G, Lenz C, Pan K-T, Auge E, Geiss-Friedlander R, Urlaub H, Brose N, **Wichmann C<sup>#</sup>**, Reisinger E<sup>#</sup> (2016) Hair cell synaptic dysfunction, auditory fatigue and thermal sensitivity in otoferlin Ile515Thr mutants. **EMBO J** 35, 2519-2535.
- 2) Jung S\*, Oshima-Takago T\*, Chakrabarti R<sup>§</sup>, Wong AB<sup>§</sup>, Jing S, Yamanbaeva G, Picher MM, Wojcik SM, Göttfert F, Predoehl F, Michel K, Hell SW, Schoch S, Strenzke N<sup>#</sup>, **Wichmann C<sup>#</sup>**, Moser T<sup>#</sup> (2015). Rab3-interacting molecules 2 $\alpha$  and  $\beta$  (RIM2 $\alpha$  and RIM2 $\beta$ ) promote the abundance of voltage gated Ca<sub>v</sub>1.3 Ca<sup>2+</sup> channels at hair cell active zones. **PNAS** 112:E3141-9.
- 3) Vogl C<sup>#</sup>, Cooper BH, Neef J, Wojcik SM, Reim K, Reisinger E, Brose N, Rhee JS, Moser T<sup>#</sup>, **Wichmann C<sup>#</sup>** (2015). Unconventional molecular regulation of synaptic vesicle replenishment in cochlear inner hair cells. **J Cell Science**, 128, 638-44.
- 4) Mendoza-Schulz A, Jing Z, Sánchez Caro JM, Wetzel F, Dresbach T, Strenzke N<sup>#</sup>, **Wichmann C<sup>#</sup>**, Moser T<sup>#</sup> (2014). Bassoon-disruption slows vesicle replenishment and induces homeostatic plasticity at a CNS synapse. **EMBO J** 33:512-27.
- 5) Wong AB\*, Rutherford MA\*, Gabrielaitis M\*, Pangršič T, Göttfert F, Frank T, Michanski S, Hell S, Wolf F<sup>#</sup>, **Wichmann C<sup>#</sup>**, Moser T<sup>#</sup> (2014). Developmental refinement of hair cell synapses tightens the coupling of Ca<sup>2+</sup> influx to exocytosis. **EMBO J** 33, 247-64.