

## Dr. Carine Gaiser

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*Current research topics:*

*3D cellular models, Alzheimer's disease, Hepatotoxicity, Nephrotoxicity, Bioprinting*



### Employment

<b>2015-now</b>	<b>Scientist, FHNW</b> School of Life Sciences, Institute for Chemistry and Bioanalytics, Basel, Switzerland
<b>2013-2015</b>	<b>Contribution to scientific publication, DBM, Basel, Switzerland</b> <b>Parental leave</b>
<b>2010-2012</b>	<b>Post-doctoral research scientist in Neuroscience,</b> DBM, Basel, Switzerland / University of Freiburg, Germany
<b>2006-2010</b>	<b>Post-doctoral research scientist in Cellular Biology,</b> Biozentrum, Basel, Switzerland

### Education

<b>2001-2005</b>	<b>Ph.D. in Neuroscience,</b> Aix-Marseille University, France
<b>2001</b>	<b>M.Sc. in Neuroscience,</b> Aix-Marseille University, France
<b>1999</b>	<b>B.Sc. in Cellular Biology (major in Molecular and Cellular Genetics),</b> Aix-Marseille University, France
<b>1995-1997</b>	<b>First cycle of medical studies (PCEM1),</b> Faculty of Medicine, Marseille, France
<b>1995</b>	<b>Baccalaureate in Science,</b> France

### Technical expertise

<b>Cellular Biology</b>	Advanced cell culture, 3D disease-based cellular models Bioprinting Drug testing and toxicity screening Immunocytochemistry, Immunohistochemistry, ELISA Transfection techniques, Lentiviral transduction Target gene knockdown by siRNA
<b>Molecular Biology</b>	PCR, qRT-PCR, Cloning, Bacterial transformation Plasmid preparation, Restriction digest analysis, Agarose gel electrophoresis RNA isolation, Microarray analysis In situ hybridization probe preparation
<b>Biochemistry</b>	SDS-PAGE, Western blot, Immunoprecipitation Radiochemical usage and handling, Protein-Crosslinking Lipid raft membranes fractionation Glycosylation/Sumoylation analysis
<b>Animal handling</b>	Brain dissection and cryosection (Holder of the LTK module 1)
<b>Microscopy</b>	Optical, epifluorescent and confocal microscopy and image processing

## Publications

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- 2012** Baranek C., Dittrich M., Parthasarathy S., **Gaiser Bonnon C.**, Britanova O., Lanshakov D., Boukhtouche F., Sommer J.E., Colmenares C., Tarabykin V. and Atanasoski S. Protooncogene Ski cooperates with the chromatin-remodeling factor Satb2 in specifying callosal neurons. Proc Natl Acad Sci U S A. 2012;109(9):3546-51.
- 2012** **Bonnon C.** and Atanasoski S. c-Ski in health and disease. Cell Tissue Res. 2012; 347(1):51-64.
- 2010** **Bonnon C.**, Wendeler M., Paccaud J.P. and Hauri H.P. Selective export of GPI-anchored proteins from the endoplasmic reticulum. J. Cell. Sci. 2010. 123(Pt 10):1705-15.
- 2010** Koegler E., **Bonnon C.**, Walmeier L., Mitrovic S., Halbeisen R. and Hauri H.P. P28, a novel ERGIC/cis-Golgi protein required for golgi ribbon formation. Traffic J. 2010. 11(1):70-89.
- 2007** **Bonnon C.**, Bel C., Goutebroze L., Girault J.A., Faivre-Sarrailh C. PGY repeats and N-glycans govern the trafficking of paranodin and its selective association with contactin and neurofascin-155. Mol.Biol.Cell. 2007; 18(1):229-41.
- 2003** **Bonnon C.**, Goutebroze L., Denisenko-Nehrbass N., Girault J.A., Faivre-Sarrailh C. The paranodal complex of F3/contactin and Caspr/paranodin traffics to the cell surface via a non-conventional pathway. J. Biol. Chem. 2003; 278(48):48339-47.
- 2003** Denisenko-Nehrbass N., Goutebroze L., Galvez T., **Bonnon C.**, Faivre-Sarrailh C., Giovanini M. and J-A Girault. Association of paranodin/caspr, a neuronal protein of paranodal junctions, with tumor suppressor schwannomin/merlin and  $\beta$ 1 integrin in the CNS. J. Neurochem 2003; 84(2): 209-21.
- 2002** Falk J., **Bonnon C.**, Girault J.A., Faivre-Sarrailh C. F3/contactin, a neuronal cell adhesion molecule implicated in axogenesis and myelination. Biol Cell. 2002; 94(6):327-34.

## Teaching / Student supervision

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- 2015-now** Supervision of semester works, Bachelor and Master thesis, FHNW, Basel, Switzerland  
Organization of the Summerschool "Advanced cell culture" 2016, 2017, FHNW, Basel, Switzerland
- 2012** Histology course for medical students  
University of Freiburg, Freiburg, Germany
- 2001-2004** Lecturer in Neuro-psycho-pharmacology, undergraduate students  
Aix-Marseille University, Marseille, France

## Languages

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- French** Mother tongue
- English** Fluent
- German** Excellent knowledge