

# Curriculum Vitae

## Prof. Dr. Stefan Schuster

Born 14.11.1966 (Stuttgart, Germany)

University of Bayreuth, Germany  
Chair of Animal Physiology

## Scientific career

1986-1993	Studied Physics, Mathematics and Biology at the University of Tübingen (Germany) and Stony Brook (USA; MA, 1991)
1993	Diplom "with distinction" (physics), University of Tübingen Topic: Electrical transport at grain boundaries of the high-temperature superconductor $YBa_2Cu_3O_{7-d}$ (Prof. Dr. Rudolph P. Hübener)
1996	PhD (Biology), University of Tübingen Thesis: Virtual reality in freely walking <i>Drosophila</i> (Prof. Dr. Karl-Georg Götz, Max-Planck Institute for Biological Cybernetics, Tübingen)
1997-2003	'Wissenschaftlicher Assistent', University of Freiburg, Dept. of Animal Physiology (Prof. Dr. Klaus Vogt),
2003	Habilitation and <i>Venia legendi</i> (Animal Physiology and Neurobiology)
2003-2007	'Oberassistent' at the Institute of Zoologie II, University of Erlangen-Nürnberg (Prof. Dr. Otto von Helversen)
2007-2009	Heisenberg-Scholarship of the DFG
Since 2009	Chair of Animal Physiology, University of Bayreuth

## Some Awards and Service

1984	First prize in the national German science contest "Jugend forscht". Topic: Bioacoustics of the dwarf gourami
1986-1993	Scholarship of the Studienstiftung des deutschen Volkes
1990-1991	Fulbright Scholarship
1994	Various Scholarships to attend 'Neural Systems and Behavior' (Woods Hole, USA)
2008	Reinhart Koselleck Award of the DFG
2013-2015	Served as Vice-Dean Faculty of Biology, Chemistry and Geosciences, University of Bayreuth
2013-2015	Served as Vice to the President at the Senate of the University Bayreuth
2015-2017	Served as (elected) Dean of the Faculty of Biology, Chemistry, Geosciences, University of Bayreuth
2021	Faculty Teaching Award

## Ten selected publications

- Hecker, A., Schulze, W., Oster, J., Richter, D. O., **Schuster, S.** (2020). Removing a single neuron in a vertebrate brain abolishes an essential behavior. PNAS 117, 3254-3260.
- Hecker, A., Anger, P., Braaker, P. N., Schulze, W., **Schuster, S.** (2020). High-resolution mapping of injury-site dependent functional recovery in a single axon in zebrafish. Commun. Biol. 3, 307.
- Welzel, G., **Schuster, S.** (2018). Long-term potentiation in an innexin-based electrical synapse. Sci. Rep. 8, 12579.
- Rischawy, I., Blum, M., **Schuster, S.** (2015). Competition drives sophisticated hunting skills of archerfish in the wild. Curr. Biol. 25, R595-R597.
- Welzel, G., Seitz, D., **Schuster, S.** (2015). Magnetic-activated cell sorting (MACS) can be used as a large-scale method for establishing zebrafish neuronal cell cultures. Sci. Rep., srep07959
- Gerullis, P., **Schuster, S.** (2014). Archerfish actively control the hydrodynamics of their jets. Curr. Biol. 24, 2156-2160.
- Schlegel, T., **Schuster, S.** (2008). Small circuits for large tasks: highspeed decision-making in archerfish. Science 319, 104-106.
- Schuster, S.**, Wöhl, S., Griebisch, M., Klostermeier, I. (2006). Animal cognition: how archer fish learn to down rapidly moving targets. Curr. Biol. 16, 378-383.
- Schuster, S.**, Strauss, R., Götz, K. G. (2002). Virtual-reality techniques resolve the visual cues used by fruitflies to evaluate object distances. Curr. Biol. 12, 1591-1594.
- Schuster, S.**, Gross, R., Mayer, B., Hübener, R. P. (1993). Thermal-noise-induced resistance and supercurrent correlation function in  $\text{YBa}_2\text{Cu}_3\text{O}_{7-d}$  grain-boundary Josephson junctions. Phys. Rev. B 48, 16172-16175.