Curriculum Vitae **Prof. Dr. Ulrich Eberhard Matthias Schweizer**

Born in Backnang, Germany, on 15.02.1971

Married, 2 children (15 and 13 years).

Address:

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Education:

1990	"Abitur", maturity, grade 1.5
Military service	1.7.1990-30.6.1992 , reserve officer

Professional training:

1992-1998	Study of Biochemistry at University of Bayreuth, Germany
Summer 1996	6 months internship at the Institute for Biopolymers, Prof. Paul Rösch: Molecular dynamics calculations and protein-NMR
Nov.1996-Nov.1997	Special volunteer at the National Institutes of Health in Bethesda, MD, USA, Stroke Branch, NINDS under guidance of Dr. John Hallenbeck Stipends from Siemens Med-GT, Erlangen, und Hans-Krüger-Stiftung, Berlin
May 1998-Dec.1998	Diploma thesis, Institute for Biochemistry, Prof. Gerhard Krauss, Bayreuth, grade 1.0 (hons)
Jan.1999-Apr.2002	Ph.D. thesis in the laboratory of Prof. Michael Sendtner, Würzburg, under the supervision of Prof. Martin Heisenberg (Genetics). Grade 1.11 (hons)
May 2002-Oct. 2002	Postdoc in Dept. Molecular Internal Medicine in Würzburg, Prof. Josef Köhrle
Nov. 2002-	Postdoc (DFG) at Institute for Experimental Endocrinology, Charité Berlin, Prof. Köhrle
2004-	Established a Junior group "Neurobiology of Selenium", at the Neuroscience Research Center, Charité
Aug. 2004-2012	Staff Scientist/group leader at the Institute for Exp. Endocrinology, Charité-Universitätsmedizin Berlin
July 2005-2013	Project leader Collaborative Research Center 665, TP A7, extended 2009: A7-2
June 2010	Habilitation for Biochemistry at Charité-Universitätsmedizin Berlin. *Venia legendi* for biochemistry
January 2013	Professor of biochemistry, Rheinische Friedrich-Wilhelms-Universität Bonn

Research interests: Function of selenoproteins within the brain; biosynthesis of selenoproteins and their catalysis; influence of transfer RNA modifications on translation; thyroid hormone transport and metabolism

Memberships in academic societies:
Gesellschaft für Biochemie und Molekularbiologie (GBM), Deutsche Gesellschaft für Endokrinologie (DGE), and Gesellschaft für Mineralstoffe und Spurenelemente (GMS), American Society for Biochemistry and Molecular Biology (ASBMB), European Society for Endocrinology (ESE), European Thyroid Association (ETA).

Board member and congress president 2018 of 61. German Congress on Endocrinology (DGE) to be held in Bonn March 14-16, 2018

Membership on editorial board: Journal of Trace Elements in Medicine and Biology; Frontiers in Endocrinology

Ad-hoc reviewer: Biochimie, ChemMedChem, Dalton Transactions, Faseb J, Free Rad Biol Med, Journal of Neurochemistry, Glia, EMBO Journal, Angewandte Chemie, Genesis, Journal of Trace Elements in Medicine and Biology, Experimental Brain Research, Acta Biochimica Polonica, British Journal of Nutrition, Biochimican Biophysica Acta, International Journal of Endocrinology, Molecular and Cellular Endocrinology, Endocrinology, Nucleic Acids Research, PLoS Genetics, PLoS ONE, Scientific Reports, European Thyroid J. etc.. Funding agencies, incl. DFG, DAAD, GIF, Telethon, Welcome Trust, Academia Sinica…

Awards:

2006 Merck European Thyroid von Basedow Research Prize
2006 Young Investigator Award "Selenium in Biology and Medicine", Madison, WI
2007 Schrauzer Prize for research on selenium, German Society for Minerals and Trace Elements
2008 Young Investigator Award “Trace Elements in Man and Animals13“, Pucon, Chile
2009 Travel grant to American Thyroid Association Meeting at Palm Beach, FL.

Academic job offers/list positions:

2009 Assistant professorship. University of Nebraska, Lincoln, NE, USA. Redox Biology Center. Joint appointment by Biomedical and Veterinary Sciences Department and Biochemistry Department
Turned down.

Publications

Metrics:

- 91 Papers printed or in press
- 3338 citations
- h-index 33

Most important **ten** papers:

Schomburg L*, Schweizer U*, Holtmann B, Flohé L, Sendtner M, Köhrle J (2003) Gene disruption discloses role of selenoprotein P in selenium delivery to target tissues. **Biochem J** 370: 397-402
243 citations

Seiler A, Schneider M, Förster H, Roth S, Wirth EK, Culmsee C, Plesnila N, Kremmer E, Rådmark O, Wurst W, Bornkamm GW, **Schweizer U***, Conrad M* (2008) Glutathione Peroxidase 4 Senses and Translates Oxidative Stress into 12/15-Lipoxygenase Dependent- and AIF-Mediated Cell Death. **Cell Metabolism** 8, 237–248
274 citations

Schweizer U, Gunnersen J, Karch C, Wiese S, Holtmann B, Takeda K, Akira S, Sendtner M (2002) Conditional gene ablation of Stat3 reveals differential signaling requirements for survival of motoneurons during development and after nerve injury in the adult. **J Cell Biol** 156 (2): 287-297
144 citations

Schweizer U, Bräuer AU, Köhrle J, Nitsch R, Savaskan NE. (2004) Selenium and brain function: a poorly recognized liaison. **Brain Res Brain Res Rev**. 45(3):164-78. Review.
181 citations

Götz, R., Wiese, S., Takayama, S., Camarero, C, Rossoll, W., **Schweizer, U**., Troppmeier, J., Jablonka, S., Holtmann, B., Reed, J., Rapp, U., Sendtner, M. (2005) Bag1 is essential for differentiation and survival of hematopoietic and neuronal cells **NATURE NEUROSCIENCE** 8(9): 1169-1178
87 citations

Wirth EK, Roth S, Blechschmidt C, Holter SM, Becker L, Racz I, Zimmer A, Klopstock T, Gailus-Durner V, Fuchs H, Wurst W, Naumann T, Bräuer A, de Angelis MH, Köhrle J, Grüters A, **Schweizer U** (2009) Neuronal 3 ',3,5-Triiodothyronine (T-3) Uptake and Behavioral Phenotype of Mice Deficient in Mct8, the Neuronal T-3 Transporter Mutated in Allan-Herndon-Dudley Syndrome. **J Neurosci** 29(30): 9439-9449
97 citations

Wirth EK, Conrad M, Winterer J, Wozny C, Carlson BA, Roth S, Schmitz D, Bornkamm GW, Coppola V, Tessarollo L, Schomburg L, Köhrle J, Hatfield DL, **Schweizer U**. (2010) Neuronal selenoprotein expression is required for interneuron development and prevents seizures and neurodegeneration. **Faseb J** 24(3):844-52
88 citations

Schweizer U, Schlicker C, Braun D, Köhrle, J, Steegborn C (2014) Crystal structure of mammalian selenocysteine-dependent iodothyronine deiodinase suggests a peroxiredoxin-like catalytic mechanism. **Proc Natl Acad Sci USA** 11(29):10526-31

Fradejas-Villar N, Seeher S, Anderson CB, Doengi M, Carlson BA, Hatfield DL, **Schweizer U**, Howard MT. (2017) The RNA-binding protein Secisbp2 differentially modulates UGA codon reassignment and RNA decay. **Nucleic Acids Res.** 45(7):4094-4107.

Irina Ingold, Carsten Berndt, Sabine Schmitt, Sebastian Doll, Gereon Poschmann, Katalin Buday, Antonella Roveri, Xiaoxiao Peng, Florencio Porto Freitas, Tobias Seibt, Lisa Mehr, Michaela Aichler, Axel Walch, Daniel Lamp, Martin Jastroch, Sayuri Miyamoto, Wolfgang Wurst, Fulvio Ursini, Elias S. J. Arnér, Noelia Fradejas-Villar, **Ulrich Schweizer**, Hans Zischka, José Pedro Friedmann Angeli, Marcus Conrad (2018) **Cell** Selenium utilization by GPX4 is required to prevent hydroperoxide-induced Ferroptosis. Jan 24 issue, accepted Nov 28, 2017.