

Curriculum Vitae Sebastian Schuck

Zentrum für Molekulare Biologie der Universität Heidelberg (ZMBH)
Im Neuenheimer Feld 282
69120 Heidelberg
Germany

Phone: +49-6221-54-6745
Fax: +49-6221-54-5894
E-mail: s.schuck@zmbh.uni-heidelberg.de

EDUCATION

- Vordiplom (Bachelor's) in Biochemistry, University of Hannover, Germany 1997
- Diplom (Master's) in Biochemistry, University of Tübingen, Germany
2000
Thesis: Immediate-early gene activation in mouse embryonic stem cells
Advisor: Alfred Nordheim
- Ph.D. in Biology, Technical University Dresden, Germany 2004
Thesis: Protein sorting to the apical membrane of epithelial cells
Advisor: Kai Simons

RESEARCH EXPERIENCE

- Master's student. Laboratory of Alfred Nordheim 2000
University of Tübingen
- Graduate student. Laboratory of Kai Simons 2001 - 2004
Max Planck Institute of Molecular Cell Biology, Dresden
- Postdoctoral fellow. Laboratory of Kai Simons 2005 - 2006
Max Planck Institute of Molecular Cell Biology, Dresden
- Postdoctoral fellow. Laboratory of Peter Walter 2006 - 2013
University of California, San Francisco
- Junior group leader. CellNetworks junior group at the Zentrum für
Molekulare Biologie (ZMBH), Heidelberg University 2013 - present

FIELDS OF INTEREST

Cellular mechanisms of quality control and stress response; Organelle biogenesis and degradation; Autophagy of the endoplasmic reticulum

PUBLICATIONS

First-author Research Articles

Moreira KE*, **Schuck S***, Schrul B, Fröhlich F, Moseley JB, Walther, TC and Walter P.
Seg1 controls eisosome assembly and shape.

Journal of Cell Biology, 2011.

Schuck S, Prinz WA, Thorn KS, Voss C and Walter P.

Membrane expansion alleviates endoplasmic reticulum stress independently of the unfolded protein response.

Journal of Cell Biology, 2009.

Schuck S*, Gerl MJ*, Ang AL, Manninen A, Keller P, Mellman I and Simons K.

Rab10 is involved in basolateral transport in polarized MDCK cells.

Traffic, 2007.

Schuck S*, Manninen A*, Honsho M, Füllekrug J and Simons K.

Generation of single and double knockdowns in polarized epithelial cells by retrovirus-mediated RNA interference.

Proceedings of the National Academy of Sciences USA, 2004.

Schuck S*, Honsho M*, Ekroos K, Shevchenko A and Simons K.

Resistance of cell membranes to different detergents.

Proceedings of the National Academy of Sciences USA, 2003.

Schuck S, Soloaga A, Schrott G, Arthur JS and Nordheim A.

The kinase MSK1 is required for induction of c-fos by lysophosphatidic acid in mouse embryonic stem cells.

BMC Molecular Biology, 2003.

Co-author Research Articles

Castillo K, Rojas-Rivera D, Lisbona F, Caballero B, Nassif M, Court FA, **Schuck S**, Ibar C, Walter P, Sierralta, J, Glavic A and Hetz C.

BAX inhibitor-1 regulates autophagy by controlling the IRE1 α branch of the unfolded protein response.

EMBO Journal, 2011.

Rubio C, Pincus D, Korennykh A, **Schuck S**, El-Samad H and Walter P.

Homeostatic adaptation to endoplasmic reticulum stress depends on Ire1 kinase activity.

Journal of Cell Biology, 2011.

- Wolf J, Reimer T, **Schuck S**, Rüder C, Gerlach K, Müller EC, Otto A, Dörken B and Rehm A.
Role of EBAG9 protein in coat protein complex I-dependent glycoprotein maturation and secretion processes in tumor cells.
FASEB Journal, 2010.
- Lingwood D, **Schuck S**, Ferguson C, Gerl MJ and Simons K.
Generation of cubic membranes by controlled homotypic interaction of membrane proteins in the endoplasmic reticulum.
Journal of Biological Chemistry, 2009.
- Torkko JM, Manninen A, **Schuck S** and Simons K.
Depletion of apical transport proteins perturbs epithelial cyst formation and ciliogenesis.
Journal of Cell Science, 2008.
- Schratt G, Weinhold B, Lundberg A, **Schuck S**, Berger J, Schwarz H, Weinberg R, Ruther U and Nordheim A.
Serum response factor is required for immediate-early gene activation yet is dispensable for proliferation of embryonic stem cells.
Molecular and Cellular Biology, 2001.

Reviews and Commentaries

- Lingwood S, Schuck S, Ferguson C, Gerl M and Simons K.
Morphological homeostasis by autophagy.
Autophagy, 2009.
- Bernales S, **Schuck S** and Walter P.
ER-phagy: selective autophagy of the endoplasmic reticulum.
Autophagy, 2007.
- Schuck S** and Simons K.
Controversy fuels trafficking of GPI-anchored proteins.
Journal of Cell Biology, 2006.
- Schuck S**, Honsho M and Simons K.
Detergent-resistant membranes and the use of cholesterol depletion.
In *Cell Biology: A Laboratory Handbook, Volume 2*. J. E. Celis, editor, Elsevier Science, USA, 2006.
- Schuck S** and Simons K.
Polarized sorting: raft clustering and the biogenesis of the apical membrane.
Journal of Cell Science, 2004.

* = equal contributions