

Prof. Dr. Thomas Söllner



29/05/1960, Munich

Biochemistry Center
University Heidelberg
D-69120 Heidelberg, Germany

Phone: +49-(0)6221-54 5342

Fax: +49-(0)6221-54 5341

E-mail: thomas.soellner@bzh.uni-heidelberg.de

Professor

SCIENTIFIC VITA

- 1980 - 1982 Study of Biology at University of Regensburg
- 1982 - 1986 Study of Biology at Ludwig-Maximilians University Munich
- 1987 - 1991 Ph.D. thesis work at Institute for Physiological Chemistry, Biochemistry and Cell Biology, Ludwig-Maximilians University Munich (Ph. D. August 1991)
- 1991 - 1993 Research Fellow, Cellular Biochemistry and Biophysics Program, Sloan-Kettering Institute, New York, USA
- 1994 - 1997 Assistant Laboratory Member, Cellular Biochemistry and Biophysics Program, Sloan-Kettering Institute, New York, USA
- 1998 - 2003 Assistant Member (Assistant Professor), Cellular Biochemistry and Biophysics Program, Sloan-Kettering Institute, New York, USA
- 2003 - 2004 Assistant Member (Assistant Professor), Cell Biology Program, Sloan-Kettering Institute, New York, USA
- 2004 - 2005 Associate Member (Associate Professor), Cell Biology Program, Sloan-Kettering Institute, New York, USA
- 2005 - now Full Professor, Biochemistry Center of University of Heidelberg

COORDINATING FUNCTIONS

- 2000 - 2003 Graduate Student Admission Committee, Neuroscience Program at Weill Medical College, Cornell University, New York, USA
- 2004 - 2005 Course Co-Director in Cell Biology & Genetics at Weill Medical College, Cornell University, New York, USA
- 2003 - 2005 Member of Cryo Electron Microscopy Operation Committee at the New York Structural Biology Center, USA
- 2001 - now Member of Faculty 1000

FIELDS OF INTEREST

Membrane trafficking, vesicle budding and fusion, regulated exocytosis, neurotransmitter release

CURRENTLY FUNDED PROJECTS

Graduierten Kolleg GRK 1188, NIH grant R01 transfer pending

PUBLICATIONS (10 selected publications since 2000):

Cosson, P., Ravazzola, M., Varlamov, O., **Söllner, T.H.**, Di Liberto, M., Volchuk, A., Rothman, J.E., Orci, L. 2005. Dynamic transport of SNARE proteins in the Golgi apparatus. *Proc. Natl. Acad. Sci. USA* **102**: 14647-52.

Cheng, Y. Sequeira, S.M., Malinina, L., Tereshko, V., **Söllner, T.H.**, and Patel, D.J. 2004. Crystallographic identification of Ca²⁺ and Sr²⁺ coordination sites in synaptotagmin I C₂B domain. *Protein Science* **13**: 2665-2672.

Varlamov, O., Volchuk, A., Rahimian, V., Doege, C.A. Paumet, F., Eng, W.S, Arango, N.C., Parlati, F., Ravazzola, M., Orci, L, **Söllner, T.H.**, and Rothman, J.E. 2004. i-SNAREs, inhibitory SNAREs that fine-tune the specificity of membrane fusion. *J. Cell Biol.* **164**: 79-88.

Burri, L., Varlamov, O., Doege, C., Hofman, K., Beilharz, T., Rothman, J.E., **Söllner, T.H.**, and Lithgow, T. 2003. A SNARE required for retrograde transport to the endoplasmic reticulum. *Proc. Natl. Acad. Sci. USA* **100**: 9873-9877.

Hu, C., Ahmed, M., Melia, T.J., **Söllner, T.H.**, Mayer, T., and Rothman, J.E. 2003. Fusion of cells by flipped SNAREs. *Science* **300**: 1745-1749.

Mahal, L.K., Sequeira, S.M., Gureasko, J., and **Söllner, T.H.** 2002. Calcium-independent stimulation of membrane fusion and SNAREpin formation by synaptotagmin I. *J. Cell Biol* **158**, 273-282.

Melia, T.J., Weber, T., McNew, J.A., Fisher, L.E., Johnston, R.J., Parlati, F., Mahal, L.K. **Söllner, T.H.**, and Rothman, J.E. 2002. Regulation of membrane fusion by the membrane-proximal coil of the t-SNARE during zippering of SNAREpins. *J. Cell Biol.* **158**: 929-940.

Fukuda, R., McNew, J.A., Weber, T., Parlati, F., Engel, T., Nickel, W., Rothman, J.E., and **Söllner, T.H.** 2000. Functional architecture of an intracellular membrane t-SNARE. *Nature* **407**: 198-202.

Parlati, F., McNew, J.E., Fukuda, R., Miller, R., **Söllner, T.H.**, and Rothman, J.E. 2000. Topological restriction of SNARE-dependent membrane fusion. *Nature* **407**: 194-198.

McNew, J.A., Parlati, F., Fukuda, R., Johnston, R.J., Paz, K., Paumet, F., **Söllner, T.H.**, and Rothman, J.E. 2000. Compartmental specificity of cellular membrane fusion encoded in SNARE proteins. *Nature* **407**: 153-159.