

BIOGRAPHICAL SKETCH

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NAME Julia Anna Kaltschmidt	POSITION TITLE <i>Assistant Member</i> , Developmental Biology Program, Sloan-Kettering Institute and Memorial Sloan-Kettering Cancer Center		
eRA COMMONS USER NAME	<i>Assistant Professor</i> , Molecular Biology Program, Weill Cornell Graduate School of Medical Sciences		
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Wisconsin-Madison, Wisconsin	B.Sc. with Honors	1993-1997	Molecular Biology and Biochemistry
Wellcome/CRC Institute, Cambridge, U.K.	Ph.D.	1997-2001	Developmental Biology
Columbia University, New York		2001-2008	Post-doctoral, Neurobiology

A. Positions and Honors

Positions and Employment:

- 1996-1997 *Undergraduate Thesis—Supervisor: Prof. Dr. F. Michael Hoffmann*
Using the two-hybrid system to assay for Fax-interacting proteins.
McArdle Laboratory for Cancer Research, University of Wisconsin-Madison, WI
- 1997-2001 *Ph.D. Thesis—Supervisor: Prof. Dr. Andrea H. Brand*
Generating asymmetry in the developing *Drosophila* CNS.
Wellcome/CRC Institute and Department of Genetics, University of Cambridge, U.K.
- 2001 *Guest Research Fellow—Supervisor: Prof. Dr. Alfonso Martinez Arias*
Planar polarity and actin dynamics in the epidermis of *Drosophila*.
Department of Genetics, University of Cambridge, U.K.
- 2001-2008 *Post-doctoral Fellow—Supervisor: Prof. Dr. Thomas M. Jessell*
Understanding the mechanisms of synaptic specificity underlying sensory-motor connectivity.
Department of Biochemistry and Molecular Biophysics, Columbia University College of Physicians and Surgeons/HHMI, New York, NY
- 2008-present *Assistant Member*
Developmental Biology Program, Sloan-Kettering Institute and Memorial Sloan-Kettering Cancer Center, New York, NY
Assistant Professor
Molecular Biology Program, Weill Cornell Graduate School of Medical Sciences, New York, NY

Honors:

- 1997-2000 Wellcome Prize Studentship: The Wellcome Trust, U.K.
- 2000-2001 King's College Studentship: King's College Cambridge, U.K.
- 2001-2003 Wellcome Prize Travelling Research Fellowship: The Wellcome Trust, U.K.
- 2008-present Member of the Society of Neuroscience
- 2009-2012 Louis V. Gerstner, Jr. Young Investigators Award

B. Selected Peer-Reviewed Publications

- Kaltschmidt J. A., Davidson C. M., Brown N. H. & Brand A. H. (2000) Rotation and asymmetry of the mitotic spindle direct asymmetric cell division in the developing central nervous system. *Nature Cell Biol.* 2(1), 7-12.
- Bellaïche Y., Gho M., Kaltschmidt J. A., Brand A. H. & Schweisguth F. (2001) Frizzled regulates localization of cell-fate determinants and mitotic spindle rotation during asymmetric cell division. *Nature Cell Biol.* 3(1), 50-57.

- Kaltschmidt J.A. (2001) Generating Asymmetry in the Developing *Drosophila* CNS. Dissertation to the University of Cambridge for the Degree of Doctor of Philosophy.
- Kaltschmidt J. A. & Brand A. H. (2002) Asymmetric cell division: microtubule dynamics and spindle asymmetry. *J Cell Sci.* 115(Pt 11), 2257-2264.
- Kaltschmidt J. A. & Martinez Arias A. (2002) A new dawn for an old connection: development meets the cell. *TCB* 12(7), 316-320.
- Kaltschmidt J. A., Lawrence N., Morel V., Balayo T., Garcia Fernandez B., Pelissier A., Jacinto A. & Martinez Arias A. (2002) Planar polarity and actin dynamics in the epidermis of *Drosophila*. *Nature Cell Biol.* 4(12), 937-944.
- Januschke J., Gervais L., Dass S., Kaltschmidt J. A., Lopez-Schier H., St Johnston D., Brand A. H., Roth S. & Guichet A. (2002) Polar transport in the *Drosophila* oocyte requires dynein and kinesin I cooperation. *Curr Biol.* 12(23), 1971-1981.
- Wilson J. M., Hartley R., Maxwell D. J., Todd A. J., Lieberam I., Kaltschmidt J. A., Yoshida Y., Jessell T. M. & Brownstone R. M. (2005) Conditional rhythmicity of ventral spinal interneurons defined by expression of the Hb9 homeodomain protein. *J Neurosci.* 25(24), 5710-5719.
- Friese A., Kaltschmidt J. A., Ladle D. R., Sigrist M., Jessell T. M., & Arber S. (2009) Gamma and alpha motor neurons distinguished by expression of transcription factor Err3. *PNAS USA* 106(32):13588-13593.
- Betley J. N., Wright C. V., Kawaguchi Y., Erdelyi F., Szabo G., Jessell T. M., Kaltschmidt J. A. (2009) Stringent specificity in the assembly of GABAergic pre-synaptic inhibitory circuit. *Cell* 139(1):161-174.

C. Research and Support

Ongoing Research and Support

Three Year Research Grant 12/2009 – 12/2012

Louis V. Gerstner, Jr. Young Investigators Fund

Understanding the mechanisms of synaptic specificity underlying neuronal circuit formation:

Role: Lab head

Three Year Research Grant 09/2009 – 09/2012

Whitehall Foundation, Inc.

Molecular control of interneuron connectivity and locomotor behavior:

Role: Lab head

Startup Funding 03/2008 – present

Developmental Biology Program, Sloan-Kettering Institute and Memorial Sloan-Kettering Cancer Center, New York, NY

Understanding the mechanisms of synaptic specificity underlying neuronal circuit formation:

Role: Lab head

Research Support Completed During the Last Three Years

Associate Research Scientist 09/2007 – 02/2008

Department of Biochemistry and Molecular Biophysics at Columbia University College of Physicians and Surgeons/HHMI, New York

HHMI Associate 10/2003 – 09/2007

Howard Hughes Medical Institute

The emergence of specificity at sensory-motor synapses:

Role: Post-doctoral Research Scientist (Laboratory of Prof. Thomas M. Jessell, Columbia University College of Physicians and Surgeons/HHMI, New York)

Wellcome Prize Travelling Research Fellowship 10/2001 – 09/2003

The Wellcome Trust, U.K.

Visualizing connectivity in the developing mouse spinal cord:

Role: Post-doctoral Research Scientist (Laboratory of Prof. Dr. Thomas M. Jessell, Columbia University College of Physicians and Surgeons/HHMI, New York)

King's College Studentship 10/2000 – 04/2001

King's College Cambridge, U.K.

Wellcome Prize Studentship

10/1997 – 09/2000

The Wellcome Trust, U.K.

Generating asymmetry in the developing Drosophila CNS:

Role: Ph.D. student (Laboratory of Prof. Dr. Andrea H. Brand, Wellcome/CRC Institute and Department of Genetics, University of Cambridge, U.K.