

## DARIA SIEKHAUS, Ph.D.

### EDUCATION:

**Stanford University**, Department of Biochemistry, Stanford, CA, Ph.D. 1998

**Harvard and Radcliffe Colleges**, Cambridge, MA, B.A. in Biology, *magna cum laude*, 1987

### RESEARCH EXPERIENCE:

Assistant Professor - IST Austria. *Jan 2012- present*

Research Scientist – New York University Medical Center, Skirball Institute, Dept. of Developmental Genetics

Advisor: Ruth Lehmann, Ph.D. *Understanding the mechanism of invasive migration in Drosophila immune cells. 2003-2011*

Post-doctoral Fellow – University of California Berkeley, Dept. of Molecular Cell Biology

Advisor: David Drubin, Ph.D. *Understanding the interpretation of chemotropic gradients in S. cerevisiae through cell biological and genetic analyses. 1999-2003*

Graduate Student – Stanford University, Dept. of Biochemistry

Advisors: Robert S. Fuller, Ph.D., Mark A. Krasnow, M.D. Ph.D. *Identification, and genetic and functional characterization of the neuropeptide and prohormone processing proteases in Drosophila involved in hatching behavior at the end of embryogenesis. 1989-1998*

Deutsche Akademische Austausch Dienst Fellow – Max Planck Institute for Biophysical Chemistry, Göttingen, Germany

Advisor: Peter Gruss, Ph.D. *Expression, purification and biochemical characterization of the murine neuron specific zinc finger gene, Zfp-2. 1987-1989*

Undergraduate Research – Harvard Medical School, Dept. of Microbiology

Advisor: Roberto Kolter, Ph.D. *Deletion analysis of a stationary phase promoter in E. coli. 1986-1987*

### HONORS AND AWARDS:

- Lennart Philipson Prize for Outstanding Post-doctoral Talk, Skirball Institute Retreat (2009)
- Lennart Philipson Prize for Outstanding Poster, Skirball Institute Retreat (2005-2008)
- BIOMASS Community Service Award (1997)
- Hormonal and Neuropeptide Biosynthesis Gordon Conference Award for 10 best posters (1996)
- National Science Foundation Graduate Fellowship Finalist (1989)
- Elizabeth Cary Agassiz Scholar (1984-1986)
- Harvard College Scholarship (1984-1986)
- Bank of America Liberal Arts Scholar (1983)

#### RESEARCH GRANTS:

- NIH Fellowship for Scientists with Disabilities (2003-2005)
- National Research Service Award Post-doctoral Grant (2000-2003)
- Max Planck Gesellschaft Fellowship (1988)
- Deutsche Akademische Austausch Dienst Fellowship (1987)

#### PUBLICATIONS:

DeGennaro, M.\*, Hurd, T.\*, **Siekhaus, D.**, Biteau, B., Jasper, H. and R. Lehmann. Peroxiredoxin stabilization of E-cadherin promotes primordial germ cell adhesion. (2011) *Developmental Cell* 20(2):233-243  
*\* authors contributed equally*

**Siekhaus, D.**, Haesemeyer, M., Moffitt, O. and Lehmann, R. (2010). RhoL controls invasion and Rap1 localization during immune cell transmigration in *Drosophila*. *Nature Cell Biology* 12(6):605-610

Kunwar, P.S., **Siekhaus, D. E.** and Lehmann, R. (2006). In vivo migration: a germ cell perspective. *Ann Rev of Cell and Develop Biology* 22:237-65

**Siekhaus, D.E.** and Drubin, D.G. (2003). Spontaneous receptor-independent heterotrimeric G protein signaling in an RGS mutant. *Nature Cell Biology* 5(3):231-5

Rayburn, L.Y.M., Gooding, H.C. Choksi, S.P., Maloney, D., Kidd, A.R., **Siekhaus, D.E.** and Bender, M. (2003). *amontillado*, the *Drosophila* homolog of the prohormone processing protease PC2, is required during embryogenesis and early larval development. *Genetics* 163(1):227-237

Hwang J.R., **Siekhaus D.E.**, Fuller R.S., Taghert P.H. and Lindberg I. (2000). Interaction of *Drosophila melanogaster* Prohormone Convertase 2 and 7B2. *Insect Cell-Specific Processing and Secretion. J Biological Chemistry* 275(23):17886-17893

**Siekhaus, D.E.** and Fuller, R.S. (1999). A role for *amontillado*, the *Drosophila* homolog of the neuropeptide precursor processing protease PC2, in hatching behavior. *J Neurosci* 19: 6942-6954

#### INVITED TALKS:

*European Drosophila Research Conference, Lisbon, Portugal, 2011*  
RhoL controls invasion and Rap1 localization during immune cell transmigration in *Drosophila*

*Institute of Science and Technology, Vienna, Austria, 2011*  
Studying invasion with *Drosophila* immune cells.

*Experimental Immunology Branch, National Cancer Institute, NIH, Bethesda, MD 2011*  
Studying invasion with *Drosophila* macrophages.

*Department of Biology, Emory University, Atlanta, GA, 2011*  
Studying invasion with *Drosophila* immune cells.

*Department of Human Genetics, University of Utah School of Medicine, Salt Lake City, UT 2011*  
Studying invasion with *Drosophila* immune cells.

*Section of Cell and Developmental Biology, UC San Diego, La Jolla, CA 2011*  
The invasive migration of *Drosophila* immune cells.

*American Society of Cell Biology, Philadelphia, 2010*  
RhoL controls invasion and Rap1 localization during immune cell transmigration in *Drosophila*

Daria Siekhaus, Ph.D.

*Drosophila Research Conference, Chicago, 2009*

The RhoL GTPase modulates Rap1 function and permits the epithelial invasion of immune cells

*Gordon Research Conference on Developmental Biology, Andover, NH, 2007*

RhoL mediates invasive migration of hemocytes

*Drosophila Research Conference, Washington D.C., 2004*

Investigating the role of GPCR signaling in germ cells and hemocytes

*Yeast Cell Biology Conference, Cold Spring Harbor, 2001*

Sst2 prevents spontaneous activation of the mating response pathway

#### **TEACHING EXPERIENCE:**

- Teaching assistant for Innate Immunology section of Intro to Immunology, NYUSOM, 2009
- Teaching assistant for Genetics section of Foundations, NYUSOM, 2005-2009
- Initiated and supervised Drubin Lab Cell Biology Journal Club, 1999-2002
- Teaching Assistant Graduate Biochemistry, Stanford University, 1989-1990
- Tutored high school student with Upward Bound who then was accepted at Stanford, 1992-1995

#### **SUPERVISED STUDENTS:**

Olivia Moffitt, Undergraduate student, August 2008-2011

Doris-Lou Demy, Summer student, April-August 2007

Martin Haesemeyer, Masters (Diplom) student, 2005-2006

Sophia Wang, Graduate Rotation Student, April-June 2004

Anna-Maria Sudarov, Graduate Rotation Student, Jan-March 2004