

# SALLY HORNE-BADOVINAC

The University of Chicago  
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## EDUCATION

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University of California, San Francisco - Ph.D., Biochemistry 2003  
University of Oregon - B.S., Chemistry 1996

## RESEARCH POSITIONS

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Assistant Professor of Molecular Genetics and Cell Biology – University of Chicago 2008-pres  
*Epithelial morphogenesis and basement membrane dynamics in Drosophila*

Postdoctoral fellow with Dr. David Bilder - U.C. Berkeley 2003-2008  
*Genetic regulation of epithelial morphogenesis in Drosophila*

Graduate student with Dr. Didier Y.R. Stainier - U.C. San Francisco 1997-2003  
*Cellular mechanisms of left-right organ morphogenesis in zebrafish*

Undergraduate researcher with Dr. John H. Postlethwait - University of Oregon 1993-1996  
*Construction and syntenic analysis of the first zebrafish genetic linkage map*

## OTHER APPOINTMENTS

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Committee on Development, Regeneration and Stem Cell Biology – University of Chicago 2008-pres  
Committee on Genetics, Genomics and Systems Biology – University of Chicago 2008-pres

## HONORS AND AWARDS

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Basil O'Connor Starter Scholar Research Award, The March of Dimes Foundation 2010-2012  
Edward Mallinckrodt, Jr. Foundation Young Investigator Award 2009-2012  
Best Postdoctoral Presentation Award, West Coast Regional SDB Meeting 2007  
Jane Coffin Childs Postdoctoral Fellowship 2003-2006  
Harold C. Weintraub Graduate Student Award, FHCRC 2003  
American Heart Association Predoctoral Fellowship 2001-2003  
National Science Foundation Predoctoral Fellowship 1998-2001  
American Foundation of Chemists Award, University of Oregon 1996  
Graduated *summa cum laude* and with Departmental Honors, University of Oregon 1996  
Women in the Physical Sciences Scholarship, University of Oregon 1995-1996  
Summer Undergraduate Research Fellowship, HHMI 1994

## PUBLICATIONS

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Cetera, M., Ramirez-San Juan, G.R., Oakes, P.W., Lewellyn, L., Fairchild, M.J., Tanentzapf, G., Gardel, M.L. and **Horne-Badovinac, S.** (2014). Epithelial rotation promotes the global alignment of contractile actin bundles during *Drosophila* egg chamber elongation. *Nature Communications* (in press)

**Horne-Badovinac, S.** (2014). The *Drosophila* egg chamber – a new spin on how tissues elongate. *Integrative and Comparative Biology*, 54(4), 667-676.

**Horne-Badovinac, S.** (2014). ASCB Annual Meeting Highlight: Cell-cell and cell-matrix interactions. *Molecular Biology of the Cell*, 25(6), 731.

Lewellyn, L., Cetera, M. and **Horne-Badovinac, S.** (2013). Misshapen decreases integrin levels to promote epithelial motility and planar polarity in *Drosophila*. *Journal of Cell Biology*, 200(6) 721-729.

*\*\*cover article - highlighted in J. Cell Biol., 200(6) p.84*

Lerner, D.W., McCoy, D., Isabella, A.J., Mahowald, A.P., Gerlach, G.F., Chaudhry, T.A. and **Horne-Badovinac, S.** (2013). A Rab10-dependent mechanism for polarized basement membrane secretion during organ morphogenesis. *Developmental Cell* 24, 159-168.

*\*\*cover article - recommended by Faculty of 1000*

**Horne-Badovinac, S.** Hill, J.J., Gerlach, G., Menegas, W., and Bilder, D. (2012). A screen for round egg mutants in *Drosophila* identifies Tricornered, Furry and Misshapen as regulators of egg chamber elongation. *Genes|Genomes|Genetics*, 2(3), 371-378.

**Horne-Badovinac, S.** and Munro, E. (2011). Developmental Biology: Tubular Transformations. *Science*, 333(6040), 294-295.

**Horne-Badovinac, S.** and Bilder, D. (2008). Dynein regulates epithelial polarity and the apical localization of *stardust A* mRNA. *PLoS Genetics*, 4(1), 40-51.

**Horne-Badovinac, S.** and Bilder, D. (2005). Mass Transit: epithelial morphogenesis in the *Drosophila* egg chamber. *Developmental Dynamics*, 232(3), 559-574.

**Horne-Badovinac, S.**, Rebagliati, M. and Stainier, D.Y. (2003). A cellular framework for gut looping morphogenesis in zebrafish. *Science*, 302(5645), 662-665.

**Horne-Badovinac, S.**, Lin, D., Waldron, S., Schwarz, M., Mbamalu, G., Pawson, T., Jan, Y.N., Stainier, D.Y.R., Abdelilah-Seyfried, S. (2001). Positional cloning of *heart and soul* reveals multiple roles for PKC $\lambda$  in zebrafish organogenesis. *Current Biology* 11, 1492-1502.

Yelon, D., **Horne, S.A.**, and Stainier, D.Y. (1999). Restricted expression of cardiac myosin genes reveals regulated aspects of heart tube assembly in zebrafish. *Developmental Biology* 18(4), 23-37

Postlethwait, J.H., Yan, Y.L., Gates, M.A., **Horne, S.**, Amores, A., Brownlie, A., Donovan, A., Egan, E.S., Force, A., Gong, Z., Goutel, C., Fritz, A., Kelsh, R., Knapik, E., Liao, E., Paw, B., Ransom, D., Singer, A., Thomson, M., Abduljabbar, T.S., Beier, D., Joly, J.S., Larhammar, D., Rosa, F., (1998). Vertebrate genome evolution and the zebrafish gene map. *Nature Genetics*, 18(4), 345-349.

Johnson, S.L., Gates, M.A., Johnson, M., Talbot, W.S., **Horne, S.**, Baik, K., Rude, S., Wong, J.R., Postlethwait, J.H. (1996). Centromere-linkage analysis and consolidation of the zebrafish genetic map. *Genetics*, 142(4), 1277-1288.

Johnson, S.L., Africa, D., **Horne, S.**, Postlethwait, J.H., (1995). Half-tetrad analysis in zebrafish: mapping the *ros* mutation and the centromere of linkage group I. *Genetics*, 139(4), 1727-1735.

Postlethwait, J.H., Johnson, S.L., Midson, C.N., Talbot, W.S., Gate M., Ballinger E.W., Africa, D., Carl, T., Eisen, J.S., **Horne, S.**, Kimmel, C.B., Hutchinson, M., Johnson, M., and Rodriguez, A. (1994). A genetic linkage map for the zebrafish. *Science*, 264(5159), 699-703.

### INVITED TALKS (last 5 years)

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Invited Speaker, Quantitative Biology of Signaling Conference – Cargèse, Corsica, France	2015
Seminar, Development and Stem Cell Biology Colloquium, Duke University – Durham, NC	2015
Invited Speaker, Dev. Mechanics Workshop, 56 <sup>th</sup> <i>Drosophila</i> Research Conference – Chicago, IL	2015
Seminar, Dept. of Pathology, The University of Chicago – Chicago, IL	2015
Seminar, Dept. of Cell Biology and Physiology, Washington University - St. Louis, MO	2015
Seminar, Dept. of Biochemistry, University of Iowa - Iowa City, IA	2015
Seminar, Dept. of Cell and Developmental Biology, University of Illinois - Urbana-Champaign, IL	2014
Seminar, Dept. of Genetics, Case Western Reserve University - Cleveland, OH	2014
Invited Plenary Speaker, American Society for Matrix Biology Biennial Meeting – Cleveland, OH	2014
Invited Speaker, EMBO Conference, Mol and Dev Biol of <i>Drosophila</i> – Kolymbari, Crete, Greece	2014
Seminar, Dept. of Life Sciences, University of Nevada, Las Vegas – Las Vegas, NV	2014
Invited Speaker, Chicago Cytoskeleton Meeting – Chicago, IL	2014
Seminar, Dept. of Cell Biology, University of Virginia – Charlottesville, VA	2014
Seminar, Inst. for Research in Immunology and Cancer, Université de Montréal, QC, Canada	2014
Invited Speaker, Society for Integrative and Comparative Biology Annual Meeting – Austin, TX	2014
Seminar, Dept. of Biological Sciences, Columbia University – New York, NY	2013
Seminar, Dept. of Cell and Dev. Biology, Vanderbilt University Medical Center – Nashville, TN	2013
Seminar, Dept. of Cell and Dev. Biology, University of Pennsylvania – Philadelphia, PA	2013
Invited Speaker, Gordon Research Conference on Molecular Membrane Biology – Andover, NH	2013
Seminar, School of Life Sciences, Tsinghua University, Beijing, People's Republic of China	2013
Seminar, Dept. of Molecular Biology, Princeton University – Princeton, NJ	2012
Seminar, Dept. of Cell and Molecular Biology, Feinberg School of Medicine – Chicago, IL	2012
Seminar, Biosciences Dept., Western Michigan University – Kalamazoo, MI	2012
Seminar, CBC Scholars Loop Connection Seminar Series – Chicago, IL	2012
Platform talk, 53 <sup>rd</sup> Annual <i>Drosophila</i> Research Conference – Chicago, IL	2012
Platform talk, 70 <sup>th</sup> Annual Society for Developmental Biology Meeting – Chicago, IL	2011
Platform talk, Collagen Gordon Research Conference – New London, NH	2011
Invited speaker, Chicago Cytoskeleton Meeting – Chicago, IL	2009

## INVITED EXTRAMURAL SERVICE

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### Manuscript Reviewer

*Development, Developmental Biology, Fly, Journal of Cell Biology, Journal of Visualized Experiments, Molecular Biology of the Cell, Nature Protocols*

### Grant Reviewer

NSF Division of Integrative Organismal Systems preliminary proposal evaluation panel ( <i>animal developmental mechanisms</i> )	2014
Ad Hoc reviewer for Agence Nationale de la Recherche, France	2013
Ad Hoc reviewer for the National Science Foundation, USA	2012

### Service to Professional Organizations

Invited Discussion Leader, Women Mentoring Women Breakfast American Society for Matrix Biology Biennial Meeting, Cleveland, OH	2014
Co-Chair (with Clare Waterman), Cell-Cell and Cell-Matrix Interactions Minisymposium American Society for Cell Biology Meeting, New Orleans, LA	2013
Co-Chair (with Mark Peifer), Cell Biology and Cytoskeleton Platform Session, 52 <sup>nd</sup> Annual <i>Drosophila</i> Research Conference, Chicago, IL	2012
Poster Judge, 70 <sup>th</sup> Annual Society for Developmental Biology Meeting, Chicago, IL	2011
Invited panelist for a symposium on academic job searches, BSD PDA, Chicago, IL	2011
Invited panelist for a symposium on academic job negotiations, AWIS Chicago Chapter	2010

## UNIVERSITY OF CHICAGO SERVICE

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MGCB Faculty Search Committee	2014-pres
Interviewer of BPHYS Graduate Program Applicants	2014-pres
ISTP Graduate Program Curriculum Committee	2012-pres
Faculty Advisory Panel to the BSD Postdoctoral Association	2012-pres
Faculty Advisor for Developmental Biology Journal Club	2011-pres
Developmental Biology Training Grant Steering Committee	2011-pres
Interviewer of ISTP MD/PhD Program Applicants	2011-pres
Interviewer of PREP Program Applicants	2010-pres
Interviewer of Molecular Biosciences Graduate Program Applicants	2009-pres
DRSB Graduate Program Curriculum Committee	2009-pres
Molecular Biosciences Graduate Admissions Committee (DRSB)	2009-2011

## SOCIETY MEMBERSHIPS

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American Society for Matrix Biology	2014-pres
Society for Developmental Biology	2007-pres
Genetics Society of America	2003-pres
American Society for Cell Biology	2002-pres