Curriculum Vitae Laura Gene Vallier

Current Address:

Work:

Department of Biology Hofstra University 114 Hofstra University Hempstead, NY 11549



Education:

Doctor of Philosophy.

Columbia University. Department of Genetics and Development. New York City, NY. May

1993. Field: Genetics.

Thesis title:

Genetic studies on the mechanisms of glucose repression in Saccharomyces cerevisiae.

Columbia University. Field: Genetics. October 1988.

Bachelor of Science.

Master of Arts.

University of Texas at San Antonio. San Antonio, TX. May 1976.

Professional Experience:

2007 - present

Associate Professor of Biology, Hofstra University. Hempstead, NY. Assistant Professor of Biology. Hofstra University. Hempstead, NY.

2002 – 2007 Carina 2002

Adjunct Assistant Professor of Biology. CUNY Queens College. New York, NY.

Spring 2002

Adjunct Assistant Professor of Blology. Colvin Queens College. New York, NY.

1997 - 2002

Research specialist with Dr. Iva Greenwald. Howard Hughes Medical Institute at Columbia University. New

York City, NY.

1993 – 1997

Postdoctoral fellow with Dr. Michael Snyder. Yale University. New Haven, CT.

1987 - 1993

Graduate Student with Dr. Marian Carlson. Columbia University. New York City, NY.

1984 - 1987

Research Assistant with Dr. Michael Douglas. University of Texas Health Science Centers at San Antonio

and Dallas. San Antonio and Dallas, TX.

Fellowships and Grants:

2003 - 2015

Faculty Research and Development Grant. Hofstra University. ~\$13,500.

Presidential Research Award. Hofstra University. ~\$4800.

1993 - 1996

Postdoctoral Fellow. National Research Service Award (GM15937-01). NIH.

1989 - 1990

Predoctoral Fellow. National Cancer Institute Predoctoral Training Grant (CA09503).

Professional Memberships:

Genetics Society of America. 1988 to current.

Laura Vallier - Curriculum Vitae

Undergraduate Teaching Experience:

Hofstra University

Bio 135 Genetics (upper level core, pre-health track majors)

Bio 136 Genetics Laboratory (optional, majors)

Bio 001 General Biology (laboratory only) (core, majors)

Bio 011 Introduction to Cell Biology and Genetics lecture and lab courses (core, majors and other pre-health track students)

Bio 080A Biology Seminar (Spring 2006)

Bio 160* Human Genetics (Optional, upper level majors)

*In preparation

Graduate Teaching Experience:

Hofstra University

Biology 210 Advanced Genetics (Lecture) Biology 212 Chromosome Biology (Lecture) Biology 251 Special Topics in Biology (Tutorial) Biology 255 Current Topics in Genetics (Seminar)

Masters Students Mentored (essay and research):

Michael Matthews (MS 2008) Carolyn Yasso (MS 2008) Amanda Cozza (MS 2009)

Seema Thomas (MS 2010) Michael Kiedrowski (MS 2012) Vandana Patil (essay, current)

Tomasz Jodlowski (research; current) Grace Famodimu (research; current)

Undergraduates Mentored (Bio 090/091 or 092 or Bio093/094 Undergraduate research):

Monika Piwowarska (Fall 2003/Spring 2004) Bio 090/092 Lindsay Eisemann (Fall 2003/Spring 2004) Bio 090/091 Mauro Maietta (Fall 2004) Bio 090 Tiffany Pica (Spring 2005/Fall 2005) Bio 090/091 Tara Spencer (Spring 2005/Fall 2005) Bio 090/091 Tracy Concepcion (Spring 2005) Bio 090 Alina Duvall (Fall 2005) Bio 090 Ryan Keating (Fall 2006) Bio 090

Kostas Ballantinos (Spring 2007) Bio 090

Margarita Katz (Spring 2007/Fall 2007) Bio 090/091 Gina DeStefano (Fall 2008/Spring 2009) Bio 090/091 Andrumedia Persaud (Fall 2008/Spring 2009) Bio 090/091 Mitchell Alexis (Fall 2008/Spring 2009) Bio 090/091 **Emanuel Rodriguez** (Fall 2010/Spring 2011) Bio 090/091 Michelle Greico (Fall 2010/Spring 2011) Bio 093/094 Nicole Vigh Fall 2010/Spring 2011) Bio 093/094 Venessa Campbell Spring 2011 Bio90

Kathryn Athanasiou Spring 2011/Fall 2011 Bio 093/094 Eric Jodlowski Fall 2011/Spring 2012 Bio 090/091 John Coppola

Spring 2012/Fall 2012 Bio093/094 Andrew Barbarino Spring 2013 Bio090 Kelly Conner Spring 2013/Fall 2013 Bio090/091 Avipreet Kaur Fall 2013/Spring 2014 Bio090/091 Arnold Mahabir Fall 2014/Spring 2015 Bio090/091 Manpreet Saini Spring 2015/Fall 2015

Vrunda Tailor Spring 2015/Fall 2015 Nikita Ramhit Volunteer Summer 2015

> Fall 2015/Fall2016 Bio93/Bio94

Bio93/Bio94

Bio93/Bio94

Vidia Ramadin Volunteer Summer 2014-present Summer Fellowship Award (2008)

Summer Fellowship Award (2006)

Summer Fellowship Award (2012)

Laura Vallier - Curriculum Vitae

Additional Professional Activities:

Judge 20th International *C. elegans* Meeting June 24-28, 2015. Undergraduate posters.

Reviewer Life: The science of biology, 10th Edition (Textbook). Sadava, Hillis, Heller, and Berenbaum. Sinauer/

Macmillan Publishers (Summer 2014)

Invited speaker St. Johns University. Seminar series. (Spring 2011)

Judge Syosset High School Eighteenth Annual Research Fair (May 2008)

Invited speaker Adelphi University. Guest lecturer for Honors Colloquium. Title: Identification of genes involved in gonadal

sheath development using RNAi. (May 5, 2006)

Invited speaker Bishop Kearney High School. Topic: Women in Scientific Research. (March 29, 2004)

Judge 2003 New York Academy of Sciences New York City Science & Engineering Fair (February 9, 2003)

Invited panelist Teaching Workshop at the 14th International C. elegans Conference (June 2003)

Judge Syosset High School Sixteenth Annual Research Fair. (May 23, 2006)

Invited speaker NY Area Yeast Meeting. Title: Maintenance of polarized cell growth during mating in yeast. (May 1995)

Works in progress:

Vallier, L. G., H. Lehrer¹, T. Spencer² and L. Eisemann². A global analysis of the genes on Chromosomes I and II necessary for gonadal sheath development in *C. elegans* using double stranded RNA interference.

McGovern, M., Vallier, L. G. and E. J. A. Hubbard. APX-1/DSL and LIN-12/Notch are required continuously for normal ovulation in *C. elegans*

Publications:

Voutev, R., R. Keating², E. J. A. Hubbard, and **L. G. Vallier** 2009. Characterization of the *C. elegans Islet* LIM-homeodomain ortholog, *lim-7*. FEBS Letters. **583**:456-464.

de Sousa, N., L. G. Vallier, H. Fares, and I. Greenwald. 2007. SEL-2, the *C. elegans* Neurobeachin ortholog, is a negative regulator of *lin-12/Notch* activity in polarized epithelial cells and affects endosomal traffic. Development. **134**:691-702.

Katic, I., **L. G. Vallier** and I. Greenwald. 2005. New positive regulators of *lin-12* activity in *Caenorhabditis elegans* include the BRE-5/Brainiac glycosphingolipid biosynthesis enzyme. Genetics **171**:1605–1615.

Follenzi, A. and L. G. Vallier. 2005. Gene therapy for Hemophilia. J. Medicine and Person. 3:57-63.

Vallier, L. G., J. Segall and M. Snyder. 2002. The Alpha Factor Receptor C-terminus is Important for Mating Projection Formation and Orientation in Saccharomyces cerevisiae. Cell Motil. Cytoskeleton 53:251-266.

Roemer, T., L. G. Vallier, and M. Snyder. 1998. The Spa2-related protein, Sph1p, is important for polarized cell growth in yeast. J. Cell Sci. 111:479-494. See also cover.

Özcan, S., L. G. Vallier, J. S. Flick, M. Carlson, and M. Johnston. 1997. Expression of the SUC2 gene of Saccharomyces cerevisiae is induced by low levels of glucose. Yeast. 13:127-137.

Roemer, T., L. G. Vallier, and M. Snyder. 1996. Selection of polarized growth sites in yeast. Trends in Cell Biol. 6:436-443.

Vallier, L. G. and M. Carlson. 1994. Synergistic release from glucose repression by *mig1* and *ssn* mutations in *Saccharomyces cerevisiae*. Genetics. 137:49-54.

Yeghiayan, P., J. Tu, L. G. Vallier and M. Carlson. 1995. Molecular analysis of the SNF8 gene of Saccharomyces cerevisiae. Yeast. 11:219-224.

Vallier, L. G., D. Coons, L. F. Bisson, and M. Carlson. 1994. Altered regulatory responses to glucose are associated with a glucose transport defect in *grr1* mutants of *Saccharomyces cerevisiae*. Genetics. **136**:1279-1285.

Tu, J., L. G. Vallier and M. Carlson. 1993. Molecular and genetic analysis of the SNF7 gene in Saccharomyces cerevisiae. Genetics. 135:17-23.

Vallier, L. G. and M. Carlson. 1991. New SNF genes, GAL11, and GRR1 affect SUC2 expression in Saccharomyces cerevisiae. Genetics. 129:675-684.

¹ High School research student

² Undergraduate research student

Laura Vallier - Curriculum Vitae

Poster presentations at conferences:

- L. G. Vallier, V. Ramadin² and A. Mahabir² 2015 Life and death: discerning the role of the essential gene, *lim*-7. 20th International *C. elegans* Meeting June 24-28, 2015.
- A. Mahabir² and **L. G. Vallier** 2015 Life and death: What is the role of the LIM homeodomain protein, LIM-7? NE Regional Meeting of the Society for Developmental Biology April 10-12, 2015.
- L. G. Vallier 2014 A web of genes necessary for the identity or specification of the gonadal sheath. Northeast Society for Developmental Biology. April 11-13, 2014
- L. G. Vallier 2013 In search of genes necessary for the identity or specification of the gonadal sheath. 19th International C. elegans meeting June 26-30, 2013.
- L. G. Vallier and J. Coppola² 2012 A new attempt to elicit an RNAi phenotype with the LIM-homeodomain transcription factor, LIM-7.

 C. elegans Development, Cell Biology, & Gene Expression Meeting, June 7-10, 2012.
- L. G. Vallier 2011 Detachment of the pharynx in *lim-7(tm674)* mutants occurs embryonically. 18th International *C. elegans* meeting June 22-26, 2011.
- L. Vallier 2010 Most regulatory elements of the C. elegans Islet ortholog lim-7 may lie within its introns Northeast Society for Developmental Biology April 23-25, 2010.
- M. Kiedrowski³ and **L. G. Vallier** 2009 Transcription factors binding the gonadal sheath enhancer in lim-7 intron 1. 17th International *C. elegans* meeting June 22-26, 2009
- H. Skop¹, L. Eisemann², T. Spencer², T. Pica², K. Ballas², A. Persaud², R. Amin² and L. G. Vallier 2009 Global analysis of the genes necessary for gonadal sheath development using RNAi. 17th International *C. elegans* meeting June 22-26, 2009
- R. Labiento³, G. Destefano², and **L. G. Vallier** Global analysis of suppressors of the lethality of *lim-7(tm674)* by RNAi17th International *C. elegans* meeting June 22-26, 2009
- Voutev, R., R. Keating², E. J. A. Hubbard, and **L. G. Vallier** 2008 Characterization of the *Islet* LIM-homeodomain ortholog, *Iim-7 C. elegans* Developmental and Evolution topics meeting. June 25-29, 2008.
- Keating, R.² and **L. G. Vallier** 2007 Initial Analysis of the LIM-homeodomain-encoding gene, *lim-7* 17th International *C. elegans* Conference June, 2007
- Yasso, C.³ and **L. G. Vallier** 2006 Mapping of the *tnls5* and *tnls6 lim-7::GFP* insertion sites. *C. elegans* topics meeting, 2006. June 22 25, 2006.
- Vallier, L. G. 2006 Initial characterization of the *lim-*7∆ mutation and assessment of its role in gonadal sheath development. *C. elegans* topics meeting, 2006. June 22 25, 2006.
- Pica, T.² and **L. G. Vallier** 2006 Identification of genes necessary for gonadal sheath development using RNAi. *C. elegans* topics meeting, 2006. June 22 25, 2006.
- Vallier, L. G. and C. Yasso³. 2005. Determination of the genes necessary for gonadal sheath formation using RNAi. 16th International *C. elegans* Conference. June 25 29, 2005.
- **Vallier, L. G.**, H. Skop¹ and L. Eisemann². 2004. Identification of genes involved in cell fate specification of the gonadal sheath cells in *Caenorhabditis elegans*. East Coast Worm Meeting. June 11 13, 2004.
- de Souza, N., L. G. Vallier, H. Fares and I. Greenwald. 2004. Analysis of *sel-2*, an enhancer of *lin-12* activity in vulval precursor cells. East Coast Worm Meeting. June 11 13, 2004.
- **Vallier, L. G.** 2003. Introduction to *C. elegans* genetics using RNA interference (RNAi) in an undergraduate laboratory classroom. 14th International *C. elegans* Conference. June 29 July 3, 2003.
- Vallier, L. G., X. Karp, N. Chen, I. Katic, and I. Greenwald. 1999. A genetic screen for recessive mutations that suppress the egglaying defect of *lin-12* gain-of-function mutations. 12th International *C. elegans* Conference. June 2 6, 1999.
- Vallier, L., J. Segall and M. Snyder. 1996. The role of the cytoplasmic tail of the Ste2p receptor in mating projection orientation.

 Genetics Society of America. August 6 11, 1996.
- Vallier, L., J. Segall and M. Snyder. 1995. Truncation of the pheromone receptor in yeast results in altered morphogenesis in response to pheromone. Northeast Regional Meeting of the Society for Developmental Biology. Fall, 1995.
- Vallier, L., J. Segall and M. Snyder. 1995. The cytoplasmic tail of the Ste2 receptor is required for projection orientation during shmoo formation. Cold Spring Harbor Yeast Cell Biology Conference. August 15 20, 1995.

¹ High school student

² Undergraduate student

³ Masters student