

## CURRICULUM VITAE

### 1. Name: Erica Nicole Larschan

### 2. Home address:

1246 Central Ave  
Needham, MA  
02492

### 3. Education:

Undergraduate: Wellesley College, Wellesley, MA  
1998 B.A. Biochemistry, Summa cum laude, GPA 4.0

Graduate: Harvard Medical School, Boston, MA  
Mentor: Fred M. Winston, Ph.D

2004 Ph.D., Genetics  
Dissertation Title: Genetic and biochemical characterization of  
*S.cerevisiae* SAGA complex as a coactivator for transcriptional activation  
by Gal4

Postgraduate: Brigham and Women's Hospital, Boston, MA  
2004-2009 Postdoctoral Fellow, Department of Medicine, Division of Genetics  
Mentor: Mitzi Kuroda, Ph.D

### 4. Professional appointments:

2010-present Brown University, Providence, RI  
Richard and Edna Salomon Assistant Professor of Biology (tenure-track)  
Department of Molecular Biology, Cell Biology, and Biochemistry

### 5. Completed Publications:

#### ***Refereed journal articles***

- 1) **Larschan, E** and Winston, F. 2001. The *S. cerevisiae* SAGA complex functions *in vivo* as a coactivator for transcriptional activation by Gal4. *Genes Dev.*15:1946-56.

This paper provided the first demonstration of how the SAGA coactivator functions *in vivo* as a link between gene-specific activators and general transcription factors.

- 2) **Larschan, E** and Winston, F. 2005. The *Saccharomyces cerevisiae* Srb8-Srb11 complex functions with the SAGA complex during Gal4-activated transcription. *Mol Cell Biol.* 25:114-23.

In this study, we conducted a genetic screen that identified a previously unknown link between the SAGA and Mediator coactivator complexes.

- 3) Prather, DM, **Larschan, E**, and Winston, F. 2005. Evidence that the elongation factor TFIIS plays a role in transcription initiation at *GAL1* in *Saccharomyces cerevisiae*. *Mol Cell Biol.* 25:2650-9.

This study defined a previously unknown role for the elongation factor TFIIS during transcription initiation.

- 4) Alekseyenko, AA, **Larschan, E**, Lai, WR, Park, PJ, and Kuroda, MI. 2006. High-resolution ChIP-chip analysis reveals that the *Drosophila* MSL complex selectively identifies active genes on the male X chromosome. *Genes Dev.* 20:848-57.

**Faculty of 1000.** Must read rating.

**Highlighted in:** Schubeler D. 2006. Dosage compensation in high resolution: global up-regulation through local recruitment. *Genes Dev.* 20:749-53.

This paper demonstrated for the first time that MSL complex binds to the bodies of active genes, changing our view of MSL complex recruitment and function.

- 5) Bai, XB\*, **Larschan, E\***, Kwon, SY, Badenhorst, P, and Kuroda, MI. 2007. Regional control of chromatin organization by noncoding roX RNAs and the NURF remodeling complex in *Drosophila melanogaster*. *Genetics.* 176:1491-9.

\*these authors contributed equally to this work

This paper described how *roX* genes are regulated by chromatin remodeling factors.

- 6) Peng, S, Alekseyenko, AA, **Larschan, E**, Kuroda, MI, and Park, PJ. 2007. Normalization and experimental design for ChIP-chip data. *BMC Bioinformatics.* 8:219.

In this study, our ChIP-chip data sets were used to develop a novel and widely implemented approach to their normalization.

- 7) **Larschan, E\***, Alekseyenko, AA\*, Gortchakov, A, Li, B, Lai, WR, Peng, SY, Yang, P, Workman, JR, Park, PJ, and Kuroda, MI. 2007. MSL complex is attracted to genes marked by H3K36 trimethylation using a sequence-independent mechanism. *Mol. Cell* 28:121-33.

\*these authors contributed equally to this work

This study identified the first *trans*-acting factor involved in recruitment of MSL complex to active genes, the Set2 H3K36me3 histone methyltransferase. This work demonstrates that regulators of MSL recruitment can have additional essential functions.

- 8) Alekseyenko, AA\*, Peng, SY\*, **Larschan, E**, Gortchakov, A, Lee, OK, Karchenko, P, McGrath, SD, Wang, CI, Mardis, ER, Park, PJ, and Kuroda, MI. 2008. A sequence motif within chromatin entry sites directs MSL establishment on the *Drosophila* X chromosome. *Cell* 134:599-609. \*these authors contributed equally to this work

**Highlighted in:** Muers, M. 2008. Sequence guided entry for MSL. *Nat. Rev. Genetics* 9:732.

This paper defined the first high affinity sites and *cis*-acting DNA sequences (MREs) that are involved in MSL complex recruitment.

- 9) Gelbart, M, **Larschan, E**, Peng, S, Park, PJ, and Kuroda, MI. 2009. Broad domains of histone acetylation characterize the *Drosophila* male X chromosome. *Nat. Struc. & Mol. Biology*. 16:825-32.

**Highlighted in:** Weake, VM and Workman, JL. 2009. Hit and run: X marks the spot! *Nat Struc. & Mol. Biology* 16:801-3.

This paper described how the male X-chromosome is characterized by broad domains of MSL-dependent histone acetylation.

- 10) Kharchenko, PV, Alekseyenko, AA, Schwartz, YB, Minoda, A, Riddle, NC, Ernst, J, Sabo, PJ, **Larschan, E**, Gorchakov, AA, Gu, T, Linder-Basso, D, Plachetka, A, Shanower, G, Tolstorukov, MY, Luquette, LJ, Xi, R, Jung, YL, Park, R, Bishop, EP, Canfield, TP, Sandstrom, R, Thurman, RE, MacAlpine, DM, Stamatoyannopoulos, J, Kellis, M, Elgin, SCR, Kuroda, MI, Pirrotta, V, Karpen, G, and Park, PJ. 2010. Comprehensive analysis of the chromatin landscape in *Drosophila melanogaster*. *Nature*, 471(7339):480-5.

This is a landmark paper describing a series of novel chromatin states discovered by the *Drosophila* ENCODE project to which I contributed several key data sets. I also made many intellectual contributions to this study.

- 11) **Larschan, E\***, Bishop E\*, Kharchenko, P, Park, PJ, and Kuroda, MI. 2011. X chromosome dosage compensation via enhanced transcription elongation in *Drosophila* males. *Nature*, 471(7336):115-8.

\*these authors contributed equally to this work

The mechanism by which a large number of diversely regulated genes are precisely up-regulated two-fold was a critical gap in our understanding of dosage compensation. Our work provides the first insights into this mechanism. We used Global Run-on sequencing (GRO-seq) to determine that the MSL complex increases the entry of RNA Polymerase II into gene bodies, thereby producing higher transcript levels. This mechanism occurs downstream of gene-specific control, thereby explaining how a broad array of diversely regulated genes are precisely upregulated.

- 12) Alekseyenko AA\*, Ho JWK\*, Peng S\*, Gelbart M, Tolstorukov M, Plachetka A, Kharchenko PV, Jung YL, Gorchakov AA, **Larschan E**, Gu T, Minoda A, Riddle NC, Schwartz YB, Elgin SCR, Karpen GH, Pirrotta V, Kuroda MI\*\*, Park PJ\*\*. 2012. Sequence-specific targeting of dosage compensation in *Drosophila* favors an active chromatin context. *PLoS Genetics*, 2012 8(4). epub. \* and\*\*these authors contributed equally

- 13) Bateman, J.R.\*, **Larschan, E\***, Marshall, L., Dempsey, K.E., Johnson, J.E., D'Souza, R, Mellone, B.G., and Kuroda, M.I. 2012. A genome-wide screen identifies genes that affect somatic homolog pairing in *Drosophila* cell culture. in press, *G3*. \*these authors contributed equally to this work

- 14) **Larschan, E**, Soruco, M, Lee, O-K, Peng, S, Bishop E, Chery, J, Goebel, K, Feng, J, Park, PJ, and Kuroda, MI. 2012. Identification of chromatin-associated regulators of MSL complex targeting in *Drosophila* dosage compensation. in press, *PLoS Genetics*.

My laboratory contributed significantly to this paper and generated half of the data presented. Two graduate students and one undergraduate student from my lab (underlined) are authors on this manuscript.

- 15) Soruco, M.\*, Chery, J\*, Bishop, E.P\*, Siggers, T, Tolstorukov, M, Leydon, A.R., Sugden, A, Goebel, K, Feng, J, Xia, P, Vendenko, A, Bulyk, M.L., Park, P.J., and **Larschan, E.** 2013. Synergistic interactions between MSL complex and the CLAMP protein promote chromosome-specificity during *Drosophila* dosage compensation. *Genes and Development*: 27: 1551-6. \*these authors contributed equally to this work

\*these authors contributed equally to this work

This is a major senior author manuscript in which we describe the first direct link between the dosage compensation complex and the X-chromosome. This is a major mechanistic advance in our understanding of how transcriptional regulators identify their targets within a complex genome.

- 16) Wisdom from the fly. Rieder LE, **Larschan EN.** Trends Genet. 2014 Nov;30(11):479-81.
- 17) A new player in X identification: the CLAMP protein is a key factor in *Drosophila* dosage compensation. Soruco MM, **Larschan E.** Chromosome Res. 2014 Dec;22(4):505-15.
- 18) X-marks the spot: X-chromosome identification during dosage compensation. Chery J, **Larschan E.** Biochim Biophys Acta. 2014 Mar;1839(3):234-40.
- 19) Under review paper at

**Non-refereed journal article:**

**Larschan, E,** Alekseyenko, AA, Lai, WR, Park, PJ, and Kuroda, MI. 2006. MSL complex associates with clusters of actively transcribed genes along the *Drosophila* male X chromosome. *Cold Spring Harb Symp Quant Biol.* 71:385-94.

**Abstracts:**

- 1) **Larschan, E.** and Winston, FM. 2000. SAGA complex functions as a coactivator for Gal4 in vivo. Cold Spring Harbor Meeting: Mechanism of Eukaryotic Transcription. Cold Spring Harbor, NY.
- 2) **Larschan, E** and Winston, FM. 2001. SAGA complex functions as a coactivator for Gal4 in vivo. FASEB Chromatin and Transcription. Snowmass, CO.
- 3) Alekseyenko, AA, **Larschan, E,** Lai, WR, Park, PJ, and Kuroda, MI. 2006. High-resolution ChIP-chip analysis reveals that the *Drosophila* MSL complex selectively identifies active genes on the male X chromosome. Gordon Conference: Chromatin structure and function. Ciocco, Italy.
- 4) **Larschan, E,** Alekseyenko, AA, Gortchakov, A, Li, B, Lai, WR, Peng, SY, Yang, P, Workman, JR, Park, PJ, and Kuroda, MI. 2007. MSL complex is attracted to genes marked by H3K36 trimethylation using a sequence-independent mechanism. FASEB: Chromatin and Transcription. Snowmass, CO.

- 5) Chery, J, Goebel, K and **Larschan, E.** 2011. Identifying the function of the CLAMP protein. International *Drosophila* meeting, San Diego, CA.
- 6) Soruco, M, Bishop, E, Goebel, K, Feng, J, Park, PJ, and **Larschan, E.** 2011. Identification of the X chromosome during dosage compensation in *Drosophila*. International *Drosophila* Meeting, San Diego, CA.
- 7) Chery, J, Goebel, K, and **Larschan, E.** 2011. Identifying the function of the CLAMP protein. Penn State Chromatin Symposium, State College, PA.
- 8) Soruco, M, Bishop, E, Goebel, K, Feng, J, Park, PJ, and **Larschan, E.** 2011. Identification of the X chromosome during dosage compensation in *Drosophila*. Penn State Chromatin Symposium, State College, PA.
- 9) Soruco, M, Chery, J, Bishop, E, Goebel, K, Feng, J, Xia, T, Bulyk, M, Park, PJ, and **Larschan, E.** 2011. Essential proteins regulate *Drosophila* dosage compensation. *Cell* Epigenetics conference, Boston, MA.
- 10) Chery, J, Soruco, M, Bishop, E, Goebel, K, Feng, J, Xia, T, Bulyk, M, Park, PJ, and **Larschan, E.** 2012. The CLAMP protein interacts with both DNA and RNA. Keystone symposium on Chromatin and Epigenetics, Keystone, CO.  
This abstract was selected for a talk.
- 11) Soruco, M, Chery, J, Bishop, E, Goebel, K, Feng, J, Xia, T, Bulyk, M, Park, PJ, and **Larschan, E.** 2012. Synergistic interactions between the CLAMP protein and MSL complex regulate *Drosophila* dosage compensation. Gordon Conference on Chromatin structure and function. Il Ciocco, Italy.
- 12) Chery, J, Soruco, M, Bishop, E, Goebel, K, Feng, J, Xia, T, Bulyk, M, Park, PJ, and **Larschan, E.** 2012. The CLAMP protein interacts with both DNA and RNA. NIH Frontiers in Genomics summer course. Bethesda, MD
- 13) Soruco, M, Chery, J, Bishop, E, Goebel, K, Feng, J, Xia, T, Bulyk, M, Park, PJ, and **Larschan, E.** 2012. Synergistic interactions between the CLAMP protein and MSL complex regulate *Drosophila* dosage compensation. National SACNAS Research Conference. Seattle, WA. **This abstract was selected for a talk.**
- 14) Chery, J, Soruco, M, Bishop, E, Goebel, K, Feng, J, Xia, T, Bulyk, M, Park, PJ, and **Larschan, E.** 2012. The CLAMP protein interacts with both DNA and RNA. ABRCMS national meeting.
- 15) Chery, J, Soruco, M, Bishop, E, Goebel, K, Feng, J, Xia, T, Bulyk, M, Park, PJ, and **Larschan, E.** 2012. The CLAMP protein interacts with both DNA and RNA. New England Science Symposium, Boston, MA.
- 16) Soruco, M, Chery, J, Bishop, E, Goebel, K, Feng, J, Xia, T, Bulyk, M, Park, PJ, and **Larschan, E.** 2013. Synergistic interactions between the CLAMP protein and MSL complex regulate *Drosophila* dosage compensation. NIH Chromatin Symposium.

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17) Soruco, M, Chery, J, Bishop, E, Goebel, K, Feng, J, Xia, T, Bulyk, M, Park, PJ, and **Larschan, E.** 2013. Synergistic interactions between the CLAMP protein and MSL complex regulate *Drosophila* dosage compensation. International *Drosophila* Meeting. Washington, Dc. **This abstract was selected for a talk.**

18) Soruco, M, Chery, J, Bishop, E, Goebel, K, Feng, J, Xia, T, Bulyk, M, Park, PJ, and **Larschan, E.** 2013. Synergistic interactions between the CLAMP protein and MSL complex regulate *Drosophila* dosage compensation. FASEB Chromatin Meeting. Nassau, Bahamas. **This abstract was selected for a talk.**

19) Chery, J, Dobson, J, Siggers, T, Bulyk, M, and **Larschan, E.** 2013. A conserved zinc finger protein targets the *Drosophila* dosage compensation complex to the X-chromosome. Cold Spring Harbor Transcription Meeting. **This abstract was selected for a talk.**

20) Dobson, J, Chery, Siggers, T Bulyk, M and **Larschan, E.** 2013. A conserved zinc finger protein targets the *Drosophila* dosage compensation complex to clusters of binding sites that are enriched on the male X-chromosome. ABCAM Chromatin and Transcription meeting.

21) Soruco, M, Chery, J, Bishop, E, Siggers, T, Tolstorukov, M, Leydon, A, Sugden, A, Goebel, K, Feng, J, Xia, P, Bulyk, Park, PJ, and **Larschan, E.** 2014. Synergistic interactions promote chromosome-specificity during *Drosophila* dosage compensation. Gordon Conference on Chromatin and Epigenetics, Waltham, MA.

22) Rieder, L, Zeidman, A, **Larschan, E.** 2014. The function of the dosage compensation protein, CLAMP, at the histone locus body. International *Drosophila* Meeting, San Diego, CA.

23) Johnson, J, Doherty, C, and **Larschan, E.** 2014. Determining general and male-specific functions of the essential protein CLAMP in *Drosophila melanogaster*. International *Drosophila* meeting, San Diego, CA.

24) Johnson, J, Doherty, C, and **Larschan, E.** 2014. Determining general and male-specific functions of the essential protein CLAMP in *Drosophila melanogaster*. Cell Symposia on Transcription and Development.

25) Dobson, J, Chery, J, Rohs, R, Bulyk, M, **Larschan, E.** 2014. Evolution of Dosage Compensation in *Drosophila* increased the occupancy of the CLAMP protein on the X chromosome. Keystone Symposium, Santa Fe, NM.

26) Kaye, E, Kuzu, G, Kurland, J, Bulyk, ML, Tolstorukov, M and **Larschan, E.** 2015. Competition between the essential transcription factors GAF and CLAMP for GA-repeats defines their binding patterns in *Drosophila melanogaster*. Penn State Chromatin and Epigenetic regulation of Transcription symposium.

27) Rieder, L, Zeidman, A, Curry, K, Duronio, R, and **Larschan, E.** 2015. The dosage compensation protein CLAMP is involved in non sex-specific histone transcript misprocessing. 2015 *Drosophila* Research Conference, Chicago, IL.

**\*This poster won best poster out of 2000 posters at The International *Drosophila***

**Research Conference**

28) Rieder, L, Curry, K, Boltz, K, Bowman, S, Duronio, R, and **Larschan, E.** 2015. Dual roles for the *Drosophila* dosage compensation protein CLAMP in two diverse nuclear bodies: the male X-chromosome and the histone locus body. 2015 EMBO Meeting. Birmingham, UK.

**\*This poster won best poster out of 800 posters at this international meeting**

29) Kaye, E, Kuzu, G, Kurland, J, Bulyk, ML, Tolstorukov, M and **Larschan, E.** 2015. Expansion of GA repeats promotes dosage compensation across species. Gordon Conference on Epigenetics

***Invited Lectures:***

2010 Gordon Conference on Chromatin and Transcription, Bryant College, RI

2010 New York University, Department of Biology

2010 North East Society for Developmental Biology, Wood's Hole, MA

2009 Brown University, Department of Molecular Biology, Cell Biology, and Biochemistry

2009 Memorial Sloan Kettering Cancer Center, Program in Molecular Biology

2009 University of Rochester, Department of Biology

2009 Wesleyan University, Department of Molecular Biology and Biochemistry

2009 Bowdoin College, Department of Biology

2011 Harvard Medical School, Department of Genetics

2011 UConn, Department of Biology

2011 Penn State Chromatin Symposium

2011 FASEB Meeting on Chromatin and Transcription

2012 Center for Computational and Molecular Biology, Brown University

2012 Wellesley College, Department of Biochemistry

2013 International *Drosophila* Meeting, Washington DC

2013 Gordon Conference on Epigenetics, Bryant College, RI

2013 Brandeis University, Waltham, MA

2013 Universite Laval, Quebec, CA

- 2013 Keynote speaker for American Cancer Society 100<sup>th</sup> anniversary celebration
- 2013 Speaker at Epigenomics Conference, Harvard Medical School, Boston, MA
- 2013 UMass Medical School, Worcester, MA
- 2014 Plenary speaker at the International *Drosophila* meeting in San Diego, CA (audience of 3,000 participants)
- 2014 Invited speaker at UMass Medical School
- 2014 Invited speaker at NIH
- 2014 Invited speaker at Brandeis University
- 2015 Invited speaker at UNC Chapel Hill
- 2015 Invited speaker Abcam chromatin meeting, Harvard Medical School
- 2015 Invited speaker UMass Amherst

**Work Submitted**

**Guray Kuzu, Emily Kaye, Jessica Chery,** Trevor Siggers, Lin Yang, **Jason Dobson, Sonia Boor,** Jacob Bliss, Wei Lu, Gerwald Jogl, Remo Rohs, Nadia Singh, Martha Bulyk, Michael Tolstorukov, and **Erica Larschan.** 2015 Expansion of GA dinucleotide repeats on the X chromosome promotes the evolution of *Drosophila* dosage compensation. Under review at *PLoS Genetics*.

Brown graduate students and/or postdocs (Bold) and Brown undergraduate (Bold Italics).

**Work in progress with goals for submission listed**

- 1) **Jennifer Johnson, Caroline Doherty, Will Jordan, Jacob Bliss,** and **Erica Larschan.** The CLAMP protein mediates both activation of dosage compensation in males and repression in females (Submission January 2016 to *Genetics*).
- 2) **Leila Reider,** Kara Boltz, **Emily Kaye,** Guray Kuzu, Michael Tolstorukov, Robert Duronio and **Erica Larschan.** The CLAMP protein changes chromatin architecture to nucleate the formation of the histone locus body. (March 2015 submission to *Developmental Cell*).
- 3) **Jennifer Johnson,** Guray Kuzu, Michael Tolstorukov, and **Erica Larschan.** Pausing of RNA Polymerase II is linked to changes in chromatin architecture by the CLAMP protein. (April 2015 submission to *Nature Structure Molecular Biology*).
- 4) **Leila Reider,** Guray Kuzu, **Marcela Soruco,** Michael Tolstorukov, and **Erica Larschan.** Defining the mechanism of MSL complex spreading in real-time. (April 2015 submission date to *Nature*).

**6. Research grants:**



**Current grants:**

1) **NIH R01 GM098461-1** Effort: 4.5 months/37.5%  
**(proposal obtained top new investigator award score at 6<sup>th</sup> percentile)**  
“Establishing coordinate gene regulation during *Drosophila* dosage compensation”  
8/1/2011-7/31/2016 \$945,000 direct costs  
Role: PI

**Project Goals:** The proposed research will define how a novel zinc finger protein indentified in my lab contributes to the process of X identification during *Drosophila* dosage compensation.

This proposal was nominated for a Presidential Early Career Award in Science and Technology (PECASE). All past nominees have received the award. Therefore, an additional year of funding will be obtained at the same funding level.

**A competing supplement was awarded for this R01 in 2014 (\$80,000/year)**

2) **Pew Biomedical Scholars program** Effort: 0.84 months/7%  
“Establishing domains of coordinate gene regulation”  
7/1/2011-6/30/2015 \$220,812 direct costs  
Role: PI

**Project Goals:** The proposed research will examine how coordinate gene regulation is established in *Drosophila*. The Pew grant will provide funding for one graduate student and related supplies to work on high-risk aspects of understanding how dosage compensation is established in the early embryo.

3) **ACS Research Scholar Grant** Effort: 1.9 months/18%  
“Epigenetic targeting of histone acetylation”  
1/1/2013-12/31/2016 \$600,000 direct costs  
Role: PI

**Project Goals:** The proposed research will define the mechanisms by which histone acetylation is targeted within a complex genome. Histone acetylation modifications are key biomarkers for cancers such as breast cancer and medullablastoma.

**Past grants:**

1) **ADVANCE Grant from NSF through Brown University** Effort: 0 months/0%  
“Using Next Generation sequencing to study dosage compensation in *Drosophila*”  
4/01/2010-3/31/2011 \$15,000  
Role: PI

**Project Goals:** This grant provided key pilot funds for Next Generation sequencing experiments that provided preliminary data for my NIH R01 grant.

2) **RI-INBRE pilot award** Effort: 0.12 months/1.5%  
“Establishing sub-nuclear domains of coordinate gene regulation”

12/1/2010-4/30/2011 \$30,000  
Role: PI

**Project Goals:** This grant allowed us to begin established a real-time system for defining domains of coordinate gene regulation.

3) **Brown Salomon Award** Effort: 0 months/0%  
“Establishing sub-nuclear domains of coordinate gene regulation”  
2/28/2011-2/27/2012 \$15,000  
Role: PI

**Project Goals:** This grant provides internal seed funding to examine how coordinate gene regulation is established in *Drosophila* using a novel induction system.

4) **Rhode Island Foundation Research Grant** Effort: 0.3 Months/2.5%  
“Establishing domains of coordinate gene regulation”  
6/01/2011-5/31/2012 \$15,000  
Role: PI

**Project Goals:** This grant provides local seed funding to examine how coordinate gene regulation is established in *Drosophila* using a novel induction system.

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### Pending grants:

**NIH R01** Effort: 1.9 months/18%  
“Defining organizational principles that guide the formation of nuclear bodies”  
4/1/2016-3/31/2020 \$2,921,000 direct costs  
Role: Lead PI with two sub-contracts (Duronio and Tolstorukov)

**Project Goals:** This grant will define new principles for chromatin organization by comparing and contrasting two different nuclear bodies.

## 7. Service

### ***Service to the University***

2010-present Member of NextGen Sequencer Steering Committee led by Dean Hawrot and Dr. Gary Wessel

2010 Organizer of day-long NextGen sequencer symposium

2010-2015 Presenter of Career Center seminar “How to find a post-doc”

2010 MCB Graduate Program Faculty Representative at ABRCMS student recruiting meeting

2011 Co-organizer of MCB Graduate Program annual Retreat

2011 Presenter of Summer UTRA Program Faculty Lunch Seminar

- 2011 Presenter of “How to negotiate a job offer” seminar through the Brown Bio-Med Division Office of Graduate and Postdoctoral Studies
- 2011 First-year undergraduate advisor (4 advisees)
- 2011 Host of three department seminar speakers:  
Dr. Fred Winston (March), Dr. Jack Bateman (May), Dr. Barbara Mellone (March)
- 2011 Participated in Bioinformatics faculty search (not formal committee member but interviewed and had lunch with all candidates and attended all chalk talks)
- 2011-2015 Junior Faculty representative to the MCB graduate program executive committee
- 2012 Hosted two department seminar speakers co-sponsored by the NSF ADVANCE distinguished women in science series: Dr. Barbara Meyer (May); Dr. Susan Mango (June)
- 2012 First-year undergraduate advisor (4 advisees)
- 2012 Sophomore undergraduate advisor (4 advisees)
- 2012 Presentation and tour for the staff of Senator Whitehouse from RI
- 2013-2014 CareerLab presentation on how to find a postdoc
- 2013 Host of Dr. John Lis, one of the leaders in the field of gene regulation, as a department seminar speaker
- 2013-2015 Member of Departmental Space Allocation Committee
- 2014 Hosted Dr. Nadia Signh and Dr. Robert Duronio as MCB department seminar speakers

***Service to the Profession***

- 2010-2012 Ad-hoc review of manuscripts for *Genetics*, *PLoS Genetics*, *Molecular and Cellular Biology*
- 2010 Session Chair at the North East Society for Developmental Biology meeting
- 2011 Ad hoc review of grants for the NSF
- 2012 Ad hoc member of the Molecular Genetics A study section
- 2014 Ad hoc member of the American Cancer Society Grant Review Panel: DNA Mechanisms in Cancer

***Service to the Community***

- 2005 Roxbury Latin High School Genomics Seminar
- 2005, 2007, 2011, 2013, 2015 Presenter of science career seminars at Wellesley College
- 2011 Initiator of Harvard Personalized Genome Project Education Initiative link to RI high schools
- 2012 Presenter at Wellesley High School Science Fair
- 2013-2015 Presenter at Wellesley College Pre-school and Newman Elementary school, Needham, MA

**8. Honors**

***Academic***

- 1994 Wellesley College: four-year full tuition scholarship
- 1995 NIH Research Experience for Undergraduates fellowship
- 1996 Staley Fellowship for cancer research
- 1997 American Cancer Society Undergraduate research fellowship
- 1998 National Barry M. Goldwater Scholarship in Science
- 1998 Mary F.C. Gross Prize for Academic Achievement
- 1998 Horton-Hallowell Fellowship for graduate study
- 1998 Wellesley College Valedictorian (summa cum laude)
- 2002 Albert J. Ryan Scholar at Harvard Medical School
- 2011 Pew Biomedical Scholar
- 2011 Ellison Foundation New Scholar in Aging (declined)
- 2012 Presidential Early Career Award in Science and Technology (PECASE) from President Obama
- 2014 Endowed Assistant Professor: Richard and Edna Salomon Professorship

***Fellowships***

- 2004 NIH F32 Postdoctoral Fellowship (declined)
- 2004 American Cancer Society Postdoctoral Fellowship (declined)

2004 Leukemia and Lymphoma Postdoctoral Fellow

2008 Medical Foundation Charles A. King Trust Postdoctoral Fellow

***Honorary Societies***

1997 Phi Beta Kappa, Wellesley College, Wellesley, MA

1998 Sigma Xi Science Honor Society, Wellesley College, Wellesley, MA

**9. Teaching:**

**BIOL2200D (Fall 2011): Current Topics in Biochemistry: Transcription and chromatin**

6 students enrolled: 2 undergraduates and 4 graduate students Co-taught with Dr. Gerwald Jogl

Received a teaching evaluation score of **1.0**

**BIOL1950/1960: Independent Study**

Fall 2010: Aneesha Tewari

Spring 2011: Jessica Feng, Aneesha Tewari, Peng Xia

Fall 2011: Jessica Feng, Mei Cao, Aneesha Tewari, Peng Xia

Spring 2012: Senior thesis: Jessica Feng, Mei Cao, Aneesha Tewari, Catherine McManus

Fall 2012: Catherine McManus, Peng Xia

Spring 2013: Sonia Boor, Catherine McManus

Fall 2013: Sonia Boor, Anna Zeidman

Spring 2014: Sonia Boor, Anna Zeidman, Caroline Doherty

Fall 2014: Sonia Boor, Anna Zeidman, Caroline Doherty

Spring 2015: Sonia Boor, Anna Zeidman, Caroline Doherty

Fall 2015: Lucy Xu

**BIOL2150 (Fall 2012): Scientific Communications**

8 students enrolled: 8 graduate students Co-taught with Dr. Judith Bender

Received a teaching evaluation score of **1.5**

**BIOL1540 (Spring 2013): Molecular Genetics**

18 students enrolled: 14 undergraduates, 4 graduate students Co-taught with Dr. Judith Bender, Dr. Eric Morrow

Received a teaching evaluation score of **1.6**

**BIOL2150 (Fall 2013): Scientific Communications**

9 students enrolled: 9 graduate students Cotaught with Dr. Kim Mowry and Dr. Richard Freiman

Received a teaching evaluation score of **1.5**

**BIOL1540 (Spring 2014): Molecular Genetics**

34 students enrolled: 30 undergraduates and 4 graduate students Co-taught with Dr. Eric Morrow

Received a teaching evaluation score of **1.5**

**BIOL1540 (Spring 2015): Molecular Genetics**

17 students enrolled: 9 undergraduates and 8 graduate students Co-taught with Dr. Eric Morrow

Received a teaching evaluation score of **1.33**

**BIOL2000F (Spring 2015): Current Topics in Biochemistry: From Kinases to Chromatin**

7 students enrolled: 5 undergraduates and 2 graduate students Co-taught with Dr. Art Salomon

Received a teaching evaluation score of **1.25**

**BIOL2150 (Fall 2015): Scientific Communications**

9 students enrolled: 9 graduate students Co-taught with Dr. Judith Bender

***Guest Lectures***

March 11, 2010      BIOL1540/2540 Molecular Genetics

March 14, 2012      Advanced Developmental Biology

March 10, 2013      Advanced Developmental Biology

November 2014      Biomolecular Interactions

October 2015      Biomolecular Interactions

**10. Advisees:**

***Research Technicians***

Karen Goebel (2010-2012)

Jessica Feng (2012-2014)

Jacob Bliss (2014-present)

***Graduate Students***

Jessica Chery and Marcela Soruco (2010-2014)

**Marcela Soruco won the Brown Joukowski Thesis Prize for Best Thesis in Biology**

Jennifer Johnson (2012-present)

Emily Kaye (2013-present)

William Jordan (2015-present)

Additional Rotation students

Feb-Apr 2010: Arthur Sugden

Feb-Apr 2011: Alexander Leydon

Feb-April 2012: Tara Fresques

Feb-April 2012: Max Leiserson (CCMB)

November-January 2015: Anastasia Vedenko

***Undergraduates (2010-present)***

Aneesha Tewari, Jessica Feng, Tina Xia, Mei Cao, Catherine MacManus, Anna Zeidman, Sonia Boor, Caroline Doherty, Alexander Hadik, Lucy Xu

***Thesis committees (2010- present)***

Leila Reider, Georges St. Laurent, Stephen (Zak) Swartz, Stephen Jones, Alexander Leydon, Christopher Neil, John Urban, Abbie Frederick, Jenna Kotak, Brian Jones

***First year advisees (2011-present)***

William Conway, Sonia Boor, Madeleine Borges, Michael Franklin

***Advisee Funding***

**Jessica Chery:** NIH F31-Diversity, Travel fellowship to Keystone chromatin meeting, NHGRI

Advances in Genomics week long-seminar course at NIH, represented the department at the ABRCMS meeting for minority students

**Marcela Soruco:** NIH F31-Diversity, Travel fellowship to SACNAS meeting where she was an invited speaker, Represented the department at SACNAS three times, Selected for funding on MCB training grant

**Jennifer Johnson:** Selected for IMSD funding, NIH F31-Diversity Grant

**Emily Kaye:** Selected for funding on the Aging Training Grant, NIH F31 narrowly missed funding at 26<sup>th</sup> percentile

**Dr. Leila Reider** Postdoctoral F32 grant funded at 3<sup>rd</sup> percentile. Travel award to the EMBL meeting in Birmingham, UK.

**Anna Zeidman (undergraduate):** National Victoria Finnerty travel award to attend the International Drosophila meeting in Chicago, IL (2015)

**William Jordan:** Selected for MCB training grant

**UTRA funding (12 total student slots funded)**

Summer 2010: Aneesha Tewari

Summer 2011: Aneesha Tewari (individual) Team: Mei Cao, Catherine MacManus, Jessica Feng, Tina Xia

Summer 2012: Tina Xia

Summer 2013: Alexander Hadik and Sonia Boor

Summer 2014: Sonia Boor, Anna Zeidman, Caroline Doherty

**10. Date:** September 22, 2015