

CURRICULUM VITAE

Xin Chen, PhD

HHMI Investigator, Professor

The Johns Hopkins University, Department of Biology
137 Levi Hall, 3400 N. Charles Street, Baltimore, MD 21218

Phone: 410-516-4576; Fax: 410-516-5213

Email: xchen32@jhu.edu; Website: <https://bio.jhu.edu/directory/xin-chen/>

Google scholar website: <http://scholar.google.com/citations?hl=en&user=vSjk9e8AAAAJ>

MyBibliography: <https://www.ncbi.nlm.nih.gov/sites/myncbi/xin.chen.2/bibliography/40605388/public/?sort=date&direction=ascending>

Education and Professional Experience

HHMI Investigator (Oct. 1, 2021-)

Professor (July 1, 2020-)

Department of Biology

The Johns Hopkins University, Baltimore, MD

Epigenetics Center

Johns Hopkins School of Medicine, Baltimore, MD

Associate Professor (2015- 2020)

Department of Biology

The Johns Hopkins University, Baltimore, MD

Assistant Professor (2008- 2014)

Department of Biology

The Johns Hopkins University, Baltimore, MD

Postdoctoral Fellow (2002–2007)

Laboratory of Dr. Margaret T. Fuller

Dept. of Developmental Biology

Stanford University School of Medicine, Stanford, CA

Tissue-specific TAFs (TATA Binding Protein Associated Factors) regulate germ cell differentiation

Ph.D. in Molecular, Cell and Developmental Biology (1996-2001)

Laboratory of Dr. Janice A. Fischer

University of Texas at Austin, TX

Structure/Function analysis of the *Drosophila* Fat facets deubiquitinating enzyme and analysis of the *fat facets*-dependent signaling pathway

B.S. in Molecular and Cellular Biology (1991-1996)

University of Science & Technology, Hefei, China

Honors and Awards

2021 Finalist of the HHMI 2021 Investigator Competition

2019 SCBA (Society of Chinese Bioscientists in America) Kenneth Fong Young Investigator Award,
Co-recipient

2018 Semi-finalist of the HHMI 2018 Investigator Competition

- 2017 Johns Hopkins Discovery Award with Drs. Jie Xiao and Taekjip Ha
 2017 Finalist of the President's Frontier Award, Johns Hopkins University
 2016 Finalist for the 2016 Blavatnik National Awards for Young Scientists
 2016 Howard Hughes Medical Institute, Bill & Melinda Gates Foundation,
 and the Simons Foundation Faculty Scholar
 2016 Finalist of the President's Frontier Award, Johns Hopkins University
 2015 Inaugural Catalyst Award, Zanvyl Krieger School of Arts and Sciences,
 Johns Hopkins University
 2009- 2014 David and Lucile Packard Fellowship for Science and Engineering
 2011- 2012 Dean's Award for Excellence in Scholarship, Zanvyl Krieger School of Arts and
 Sciences, Johns Hopkins University
 2009- 2011 Basil O'Connor Starter Scholar Research Award, March of Dimes
 2008- 2011 The 49th Mallinckrodt Scholar, Edward Mallinckrodt Jr. Foundation
 2006 – 2010 NIH Pathway to Independence (PI) Award (K99/R00)
 2005 – 2006 Leukemia and Lymphoma Society Special Fellow, Stanford, CA
 2005 NIH NRSA Postdoctoral Fellowship, NICHD (declined)
 2002 Outstanding Dissertation award from Graduate School, University of Texas, Austin. One
 of four awardees for academic years 2001 –2002, UT, Austin
 1996 – 1998 Molecular Biology Institute Fellowship for Predoctoral Studies, UT, Austin
 1995 The Eighth Zhang Zhong-Zhi Technology Scholarship, USTC, China
 1991 The Fourth Zhang Zhong-Zhi Technology Scholarship in honor of First Place in the
 National-wide College Entrance Examination in Anhui province, USTC, China

Grants**Current:**

Principle Investigator (PI):

- 2018- 2023 National Institutes of Health, NIGMS, MIRA R35 GM127075-01, Chen (PI)
Study epigenetic inheritance during development and across generations using multiple model organisms
 Total Award: \$1,103,540 Annual direct cost: \$220,708
- 2020- 2025 National Institutes of Health, NICHD, R01 HD102474-01, Chen (PI)
Epigenetic Regulation of Germ Cell Differentiation from a Stem Cell Lineage
 Total Award: \$1,075,000 Annual direct cost: \$215,000
- 2021- 2028 Howard Hughes Medical Institute, Investigator, Chen (PI)
Deciphering dynamic epigenetic regulation in cell fate determination using multiple model organisms

Completed:

- 2016- 2021 Howard Hughes Medical Institute, Bill & Melinda Gates Foundation, and the Simons Foundation
 Faculty Scholars
- 2009- 2014 The David and Lucile Packard Foundation, No cost extension 2014- 2021
Single-cell analyses of gene expression and chromatin structure in programming germline stem cells
- 2014- 2018 National Institutes of Health, NIGMS
 R01GM112008
Molecular and cellular mechanisms underlying asymmetric histone inheritance
 Co-PI: Dr. Jie Xiao, JHMI
- 2015- 2017 National Institutes of Health, NICHD

R21HD084959, No cost extension 2017- 2018
Study the generality of asymmetric histone inheritance

- 2011-2016 National Institutes of Health, NICHD
 R01 HD065816
Epigenetic regulation of germ cell differentiation in a stem cell lineage
- 2010-2013 National Institutes of Health, NICHD
 R21HD065089
Epigenetic inheritance in germline stem cell lineage
- 2008-2012 Edward Mallinckrodt Jr. Foundation Young Investigator Award
Characterization of single-cell transcriptome in an adult stem cell lineage
- 2009-2011 American Federation for Aging Research Grant
Histone turnover during stem cell homeostasis and aging
- 2009-2011 March of Dimes, Basil O'Connor Starter Scholar Research Award
Dissection of germ cell terminal differentiation program
- 2008-2011 National Institutes of Health, NICHD
 R00HD055052
Epigenetic Regulation of Germ Cell Differentiation from a Stem Cell Lineage

Publications

Independent stage:

Peer-reviewed Research Papers:

1. Ranjan, R.^{#,*}, Snedeker, J.[#], Wooten, M.[#], Chu, C., Bracero, S., Mouton, T. and **Chen, X.**^{*} (2022) Differential condensation of sister chromatids coordinates with Cdc6 to ensure distinct cell cycle progression in *Drosophila* male germline stem cell lineage, Developmental Cell, [https://authors.elsevier.com/sd/article/S1534-5807\(22\)00247-7](https://authors.elsevier.com/sd/article/S1534-5807(22)00247-7) ([#]: equal contribution; ^{*}: co-corresponding)
2. Kahney, E.W., Zion, E. H., Sohn, L., Viets-Layng, K., Johnston, R. and **Chen, X.** (2021) Characterization of histone inheritance patterns in the *Drosophila* female germline, EMBO Reports, 22(7): e51530, PMID: PMC8406404.
3. Ranjan, R.* and **Chen, X.*** (2021) Super-resolution live cell imaging of subcellular structures. Journal of Visualized Experiments (JoVE), doi: 10.3791/61563, video at: <https://www.jove.com/v/61563>, PMID: PMC8197282. (* co-corresponding authors)
 Note: this is a peer-reviewed method paper.
4. Bohrer, C.H., Yang, X-X, Weng, X., Tenner, B., Thakur, S., McQuillen, R., Ross, B., Wooten, M., **Chen, X.**, Lakadamyali, M., Zhang, J., Roberts, E., and Xiao, J. (2021) A Pairwise Distance Distribution Correction (DDC) algorithm to eliminate blinking-caused artifacts in super-resolution microscopy, Nature Methods, 18, 669–677. PMID: PMC9040192.
5. Ma, B. Trieu, T., Habib, S. and **Chen, X.** (2020) Establishing mouse embryonic stem cells as a system to study histone inheritance pattern at single-cell resolution, STAR Protocols, 1,100178, <https://doi.org/10.1016/j.xpro.2020.100178>. PMID: PMC7757403
 Note: this is a peer-reviewed protocol paper.

6. Ma, B., Trieu, T., Cheng, J., Zhou, S., Tang, Q., Xie, J., Liu, J., Zhao, K., Habib, S. and **Chen, X.** (2020) Differential histone distribution patterns in induced asymmetrically dividing mouse embryonic stem cells, Cell Reports, 32, 108003. Recommended in Faculty Opinions. PMID: PMC7962874
7. Shi, Z.* , Lim, C.* , Tran, V., Cui, K., Zhao, K. and **Chen, X.** (2020) Single-cyst transcriptome analysis of *Drosophila* male germline stem cell lineage, Development, 147 (8): dev184259. PMID: PMC7174844 (* equal contribution).
8. Wooten, M., Li, Y.* , Snedeker, J.* , Nizami, Z., Gall, J., and **Chen, X.** (2020) Superresolution imaging of chromatin fibers to visualize epigenetic information on replicative DNA, Nature Protocols, 15:1188-1208. PMID: PMC7255620 (* equal contribution).
Note: this is a peer-reviewed protocol paper.
9. Ranjan, R., Snedeker, J., and **Chen, X.** (2019) Asymmetric centromeres differentially coordinate with mitotic machinery to ensure biased sister chromatid segregation in germline stem cells, Cell Stem Cell, 25:666-681 e665. PMID: PMC6842444. Featured in Faculty of 1000 Biology.
10. Wooten, M., Snedeker, J.* , Nizami, Z.* , Yang, X-X* , Ranjan, R., Urban, E., Kim, J-M., Gall, J., Xiao, J. and **Chen, X.** (2019) Asymmetric histone inheritance *via* strand specific incorporation and biased replication fork movement, Nature Structural & Molecular Biology, 26: 732–743. PMID: PMC6684448. (* equal contribution) Featured in Faculty of 1000 Biology.
11. Feng, L., Shi, Z.* , Xie, J.* , Ma, B.* and **Chen, X.** (2018) Enhancer of Polycomb maintains germline activity and genome integrity in *Drosophila* testis, Cell Death & Differentiation, 25(8):1486-1502, PMID: PMC6113212 (* equal contribution).
12. Phatarphekar, A., Su, Q., Eun, S., **Chen, X.** and Rokita, S. (2018) The importance of a halotyrosine dehalogenase for *Drosophila* fertility, Journal of Biological Chemistry 293:10314-10321, PMID: PMC6028978.
13. Feng, L., Shi, Z. and **Chen, X.** (2017) Enhancer of Polycomb coordinates multiple signaling pathways to promote both cyst and germline stem cell differentiation in *Drosophila* adult testis, PLoS Genetics 13:e1006571. PMID: PMC5308785.
14. Eun, S.* , Feng, L.* , Cedeno-Rosario, L., Gan, Q., Wei, G., Cui, K., Zhao, K., and **Chen, X.** (2017) Polycomb group gene E(z) is required for spermatogonial dedifferentiation in *Drosophila* adult testis, Journal of Molecular Biology, 429:2030-2041, PMID: PMC5516936 (* equal contribution).
15. Lim, C., Gandhi, S., Binossek, M., Feng, L., Schilling, O., Urban, S. and **Chen, X.** (2015) An aminopeptidase acts in the *Drosophila* testicular niche for germline stem cell maintenance and spermatogonial dedifferentiation, Cell Reports, 13(2):315-325. PMID: PMC4607668.
16. Xie, J., Wooten, M., Tran, V., Chen, B-C., Pozmanter, C., Simbolon, C., Betzig, E. and **Chen, X.** (2015) Histone H3 Threonine phosphorylation regulates asymmetric histone inheritance in the *Drosophila* male germline, Cell, 163(4): 920–933. PMID: PMC4636931. Featured in Faculty of 1000 Biology. Previewed by Pirrotta, V. (2015) Histone Marks Direct Chromosome Segregation, Cell, 163(4): 792–793. Highlighted by Strzyz, P. (2015) Stem cells: Histone mark of stemness. Nat Rev Mol Cell Biol., 16(12):703.
17. Tarayrah, L.*# , Li, Y.* , Eun, S., Shi, Z., Gan, Q. and **Chen, X.**# (2015) Histone demethylase Lid maintains germline stem cells through regulating JAK-STAT signaling pathway activity, Biology Open, 4(11):1518-1527 (* equal contribution; # co-corresponding authors). PMID: PMC4728359.
18. Eun, S., Shi, Z., Cui, K., Zhao, K. and **Chen, X.** (2014) A non-cell autonomous role of E(z) to prevent germ cells from turning on a somatic cell marker. Science, 343(6178):1513-1516, PMID: PMC4040133. Featured in Faculty of 1000 Biology.

19. Eun, S., Stoiber, P.M., Wright, H. J., McMurdie, K.E., Choi, C.H., Gan, Q., Lim, C., **Chen, X.** (2013) MicroRNAs downregulate Bag of marbles to ensure proper terminal differentiation in *Drosophila* male germline lineage. Development, 140: 23-30, PMID: PMC3513990.
20. Tarayrah, L., Herz, H-M., Shilatifard, A. and **Chen, X.** (2013) Histone demethylase dUTX directly antagonizes JAK-STAT signaling to maintain the *Drosophila* testis niche architecture. Development, 140: 1014-1023, PMID: PMC3583039. Featured article "In this issue".
21. Chen, H-Y., **Chen, X.** and Zheng, Y-X. (2013) The nuclear lamina regulates germline stem cell niche organization via modulation of EGFR signaling. Cell Stem Cell, 13 (1):73–86, PMID: PMC3703100.
22. Tran, V.*, Lim, C.*, Xie, J. and **Chen, X.** (2012) Asymmetric division of *Drosophila* male germline stem cell shows asymmetric histone distribution. Science, 338(6107): 679-682, PMID: PMC3532436 (* equal contribution). Featured in Faculty of 1000 Biology.
23. Tran, V., Gan, Q. and **Chen, X.** (2012) Chromatin immunoprecipitation (ChIP) using *Drosophila* tissue. Journal of Visualized Experiments (JoVE), PMID: PMC3460569. Note: this is a peer-reviewed method paper.
24. Cuddapah, S.*, Roh, T-Y., Cui, K., Fuller, M.T., Zhao, K. and **Chen, X.*** (2012) A novel human polycomb binding site acts as a functional polycomb response element in *Drosophila*, PLoS One 7(5):e36365, PMID: PMC3343078. (* co-corresponding authors).
25. **Chen, X.***, Lu, C., Morillo Prado, J. R., Eun, S. and Fuller, M.T.* (2011) Sequential changes at differentiation gene promoters as they become active in a stem cell lineage. Development 138: 2441-2450, PMID: PMC3100706. Featured article "In this issue".
- *: I am the co-corresponding author of this paper; a postdoc Suk Ho Eun in my lab contributed to this work and is a co-author of this paper.
26. Gan, Q*, Chepelev, I*, Wei, G, Tarayrah, L, Cui, K, Zhao, K and **Chen, X.** (2010) Dynamic regulation of alternative splicing and chromatin structure in *Drosophila* gonads revealed by RNA-seq. Cell Research 20(7): 763-783. PMID: PMC2919574 (* equal contribution).
27. Gan, Q, Schones, DE, Eun, S, Wei, G, Cui, K, Zhao, K and **Chen, X.** (2010) Monovalent and unpoised status of most genes in undifferentiated cell-enriched *Drosophila* testis. Genome Biology 11(4):R42. PMID: PMC2884545.

Research Papers Submitted or In Revision:

28. Zion, E. and **Chen, X.** Asymmetric histone inheritance regulates stem cell fate in *Drosophila* midgut, submitted to Cell Reports, biorxiv, doi: <https://doi.org/10.1101/2020.08.15.252403>.
29. Gleason, R.J.*, Semancik, C.S., Lakshminarayanan, G. and **Chen, X.*** Developmentally programmed epigenome regulates cellular plasticity at the parental-to-zygote transition, under revision at Science Advances, bioRxiv: <https://biorxiv.org/cgi/content/short/2022.03.01.482564v1>. (*: co-corresponding)
Preprint highlighted at Prelights: <https://prelights.biologists.com/highlights/developmentally-programmed-epigenome-regulates-cellular-plasticity-at-the-parental-to-zygote-transition/>

Reviews and Book Chapters:

30. Urban, J.*, Ranjan, R.* and **Chen, X.** (2022) Asymmetric Inheritance of Histones/Chromatin, Annual Review of Genetics, Volume 56, in press, <https://doi.org/10.1146/annurev-genet-072920-125226>. (* equal contribution)

31. Ranjan, R. * and **Chen, X.*** (2021) Mitotic drive in asymmetric epigenetic inheritance, Biochemical Society Transactions, Portland Press, in press. (* equal contribution as co-corresponding authors)
32. Vidaurre, V. and **Chen, X.** (2021) Epigenetic regulation in *Drosophila* female and male germline, Developmental Biology, 473:105-118. PMID: PMC7992187.
33. Zion, E. * and **Chen, X.*** (2021) Asymmetric Epigenetic Inheritance, The Biochemist, 43 (1): 14–19. (* co-corresponding authors), PMID: PMC8330550.
34. Zion, E. *, Chandrasekhara, C.* and **Chen, X.** (2020) Asymmetric inheritance of epigenetic states in asymmetrically dividing stem cells, Current Opinion in Cell Biology, 67: 27-36, PMID: PMC7736099 (* equal contribution)
35. Urban, J. and **Chen, X.** (2020) Stem cells and their niches in *Drosophila*, invited review for eLS (the premier online reference in the life sciences published by Wiley), In: eLS. John Wiley & Sons, Ltd: Chichester. doi: 10.1002/9780470015902.a0021854.pub2.
36. Wooten, M.*, Ranjan, R.* and **Chen, X.** (2020) Asymmetric histone distribution in stem cells. Invited review to Trends in Genetics, 36(1): 30-43. (* equal contribution) PMID: PMC6925335.
37. Kahney, E.*, Snedeker, J.* and **Chen, X.** (2019) Regulation of *Drosophila* germline stem cells. Current Opinion in Cell Biology 60:27-35. PMID: PMC6756965.
38. Gleason, R.J.*, Anand, A.*, Kai T.§ and **Chen, X.**§ (2018) Protecting and diversifying the germline, invited review to FlyBook Genetics, 208 (2): 435-471, PMID: PMC5788515 (* equal contribution; § co-corresponding authors).
39. Kahney, E.*, Ranjan, R.*, Gleason, R.J. * and **Chen, X.** (2017) Symmetry from asymmetry or asymmetry from symmetry? Cold Spring Harb Symp Quant Biol. 82:305-318, PMC6245645 (* equal contribution).
40. Xie, J.*, Wooten, M.*, Tran, V. and **Chen, X.** (2017) Breaking symmetry — asymmetry histone inheritance in stem cells, invited review to Trends in Cell Biology, 27:527-540, PMID: PMC5476491 (* equal contribution).
41. Snedeker, J.*#, Wooten, M.*# and **Chen, X.**# (2017) The inherent asymmetry of DNA replication, Annual Review of Cell and Developmental Biology, 33:291-318, PMID: PMC5695668 (* equal contribution; # co-corresponding authors).
42. Feng, L.J. and **Chen, X.** (2015) Epigenetic Regulation of Germ Cells— Remember or Forget? Invited review to Current Opinion in Genes and Development 31:20-27. PMID: PMC4470759.
43. Chepelev, I. and **Chen, X.** (2013) Alternative splicing switching in stem cell lineages. Invited review to Frontiers in Biology 8(1):50-59. PMID: PMC3566875.
44. Tran, V. *, Feng, L.J.* and **Chen, X.** (2013) Asymmetric distribution of histones during *Drosophila* male germline stem cell asymmetric divisions. Invited review to Chromosome Research 21(3):255-269, PMID: PMC4008969 (* equal contribution).
45. Tarayrah, L.* and **Chen, X.*** (2013) Epigenetic regulation in adult stem cells and cancers. Invited review to Cell and Bioscience, 3:41. PMID: PMC3852361 (* equal contribution)
46. Lim, C.*, Tarayrah, L.* and **Chen, X.** (2012) Transcriptional regulation during *Drosophila* spermatogenesis. Invited review to Spermatogenesis 2(3):158-166, PMID: PMC3469439. (* equal contribution)
47. Eun, S*, Gan, Q* and **Chen, X.** (2010) Epigenetic regulation of germ cell differentiation. Invited review to Current Opinion in Cell Biology 22, 737-743. PMID: PMC2993805. (* equal contribution)

48. **Chen, X.** (2008) Stem cells- what can we learn from flies? Invited review to Fly 2-1: 19- 28.

Review Papers Submitted:

49. Gleason, R.J. **Chen, X.** Epigenetic inheritance in animals and plants: Roles in buffering genetic and environmental perturbations during germ-cell and totipotency cycles. Current Opinion in Genetics & Development, in preparation for submission by Aug. 15, 2022.

Postdoc stages (all research papers):

50. Barckmann, B., **Chen, X.**, Jayaramaiah-Raja, S., Kaiser, S., Rathke, C., Fuller, M.T., Renkawitz-Pohl, R. (2013) Three levels of regulation lead to protamine and Mst77F expression in *Drosophila*. Developmental Biology 377:33-45, PMID: PMC4154633.

51. Morillo Prado, J. R., **Chen, X.** and Fuller, M.T. (2012) Polycomb group genes *Psc* and *Su(z)2* maintain somatic stem cell identity and activity in *Drosophila*. PLoS One 7(12):e52892, PMID: PMC3528704.

52. Kracklauer, M.P., Wiora, H.M., Deery, W.J., **Chen, X.**, Bolival, B., Romanowicz, D., Simonette, R.A., Fuller, M.T., Fischer, J.A. and Beckingham, K.M. (2010) The *Drosophila* SUN protein Spag4 cooperates with the coiled-coil protein Turi Gagarin to maintain association of the basal body and spermatid nucleus. Journal of Cell Science 123 (16): 2763- 2772. PMID: PMC2915878.

53. Krishnamoorthy, T., **Chen, X.**, Govin, J., Cheung, W.L., Dorsey, J., Schindler, K., Winter, E., Allis, C. D., Khochbin, S., Fuller, M. T., and Berger, S. L. (2006) Phosphorylation of histone H4 Ser1 regulates sporulation in yeast and is conserved in fly and mouse spermatogenesis. Genes and Development, 20: 2580–2592. One of the cover stories.
- This paper was commented by Wendt K.D. and Shilatifard in *Genes and Development* (2006) 20: 2487–2491.

54. **Chen, X.**, Hiller, M., Sancak, Y. and Fuller, M. T. (2005) Tissue specific TAFs counteract Polycomb to turn on terminal differentiation. Science 310: 869- 872.
- This paper was reviewed by Ringrose, L. in BioEssays (2006) 28:330-334; and featured in Faculty of 1000 Biology.

55. Hiller, M., **Chen, X.**, Pringle, M.J., Suchorolski, M., Sancak, Y., Viswanathan, S., Bolival, B., Marino, S. and Fuller, M.T. (2004) Testis-specific TAF homologs collaborate to control a tissue-specific transcription program. Development 131: 5297-5308.

Graduate student stages (all research papers):

56. Overstreet, E., **Chen, X.**, Wendland, B., and Fischer, J. A. (2003) Either part of a *Drosophila* Epsin protein, divided after the ENTH domain, functions in endocytosis of Delta in the developing eye. Current Biology 13: 854-860.

57. **Chen, X.** and Fischer, J. A. (2002) A P element transformation vector for high levels of gene expression in germline cells of the ovary and undifferentiated cells in the developing eye of *Drosophila*. Plasmid 47: 61- 65.

58. **Chen, X.**, Zhang, B. and Fischer, J. A. (2002) A specific protein substrate for deubiquitinating enzyme: Liquid facets is the substrate of Fat facets. Genes and Development 16: 289-294.
- One of the cover stories.

59. **Chen, X.**, Overstreet, E., Wood, S. A. and Fischer, J. A. (2000) On the conservation of function of the *Drosophila* Fat facets deubiquitinating enzyme and Fam, its mouse homolog. Dev. Genes Evol. 210: 603-610.

60. **Chen, X.***, Li, Q.* and Fischer, J. A. (2000) Genetic analysis of the *Drosophila* DNAPrim gene: The function of the 60-kD primase subunit of DNA polymerase opposes the fat facets signaling pathway in the developing eye. Genetics 156: 1787-1795. (* indicating authors of equal contribution.)

61. **Chen, X.** and Fischer, J. A. (2000) In vivo structure/function analysis of the *Drosophila* fat facets deubiquitinating enzyme gene. Genetics 156: 1829-1836

Presentations

Meetings:

- 2022** Invited speaker at the International Society for Stem Cell Research (ISSCR) workshop “Understanding Stem Cells Through Imaging”, “Imaging in the Nervous System” section.
- 2022** Invited speaker at the EMBO workshop on new advances towards EVOCHROMO field, Vienna or Aarhus/Copenhagen in Denmark.
- 2022** Invited speaker, Cell Polarity Signaling Gordon Research Conference, New London, New Hampshire.
- 2022** Invited speaker, The 13th CSHL Meeting on Germ Cells, Cold Spring Harbor.
- 2021** Invited speaker at the Keystone Symposia on Epigenetics, Chromatin, Development and Disease / Chromatin Architecture in Development and Human Health. Fairmont Banff Springs in Banff, AB, Canada, postponed due to COVID-19.
- 2021** Eukaryotic DNA Replication & Genome Maintenance Conference, Sep. 8-12, Cold Spring Harbor Laboratory.
- 2020** Invited speaker at the Annual Retreat for NIH T32 Developmental Biology Training Grant, University of Utah School of Medicine, Salt Lake City, Utah.
- 2020** Invited speaker at ‘genetic puzzles’ workshop at the Allied Genetics Conference (GSA/TAGC), Washington, DC. Online due to COVID-19.
- 2020** The Socially Distant Centromere” (TSDC) seminar series as part of the Gordon Research Conference
- 2020** Invited speaker, Swedish Epigenetics and Chromatin (Epichrom) meeting, Umeå, Sweden. Cancelled trip due to COVID-19.
- 2020** Invited speaker, 1st International Meeting of “Replication of non-genomic codes”, Kyoto, Japan, rescheduled.
- 2020** Invited guest speaker at University of Tokyo institutional retreat, Hakone, Japan, rescheduled.
- 2019** Invited speaker, Keystone Symposia on Leveraging the Revolution in Resolution: Imaging across Scales, Snowbird, Utah.
- 2019** Invited speaker, Gordon Research Conference on Germinal Stem Cell Biology, Hong Kong, China.
- 2019** Award seminar at the 2019 SCBA (Society of Chinese Bioscientists in America) Symposium “Scientific Discovery for Human Health”, Kunming, China.
- 2018** Invited speaker, Cold Spring Harbor Asia (CSHA) meeting for “Chromatin, Epigenetics & Transcription”, Suzhou, China.
- 2017** Invited speaker, SCBA (Society of Chinese Bioscientists in America) Scientific Symposium at Washington D. C., Mechanistic Insight and Disease Targeting.
- 2017** Invited speaker, 82nd Cold Spring Harbor Laboratory Symposium on Quantitative Biology - Chromosome Segregation & Structure, Cold Spring Harbor.
- 2017** Invited speaker, The 50th Anniversary meeting of the Society for the Study of Reproduction, “50 Years of SSR Research, Looking Back and Moving Forward”, in a Symposium entitled “Epigenetics in the Germline”, Washington, D.C.
- 2017** Invited speaker, Gordon Research Conference (GRC) on Epigenetics titled “Epigenetics in action: from mechanisms to biological impacts”, Holderness School, Holderness, New Hampshire.
- 2017** Invited speaker, The Second International Symposium of Epigenetic Mechanism and Human Health, Wuhan, China.
- 2017** Invited speaker, Ray Wu Symposium, The Institute of Biophysics, Chinese Academy of Sciences in Beijing, China.
- 2016** Invited speaker, The International Society for Stem Cell Research (ISSCR) annual meeting, Mechanisms of asymmetric cellular division” session, San Francisco, California.
- 2016** Invited speaker, The 10th CSHL Meeting on Germ Cells, Cold Spring Harbor.

- 2016** Invited speaker, The Stem Cell Society Singapore (SCSS) symposium with the theme of “Modeling Cell Fate & Development”, Singapore.
- 2016** Invited Keynote speaker, The Royal Society Theo Murphy meetings on “Mechanisms of Asymmetric Cell Division”, Chicheley Hall, Chicheley Buckinghamshire, UK.
- 2015** Invited speaker, The 3rd Asia-Pacific Drosophila Research Conference (APDRC3), Beijing, China.
- 2015** Invited speaker, The Onassis Foundation Science Lecture Series 2015 in Biology, Stem Cells: From basic biology to translational research, Heraklion, Crete, Greece.
- 2015** Invited speaker, The 3rd International Symposium of the TRR81 “Chromatin changes in differentiation and malignancy”, University of Marburg, Germany.
- 2014** Invited speaker, The 55th Annual Drosophila Research Conference, San Diego, CA.
- 2014** Invited speaker, The Mid-Atlantic Society for Developmental Biology Meeting, Baltimore, MD.
- 2014** Platform presentation selected from abstracts, Crete Drosophila Meeting, Crete, Greece.
- 2014** Invited speaker, Symposium on regenerative medicine, JHMI, Baltimore, MD.
- 2013** Invited speaker, The Key mechanisms in the regulation of testis function, Justus-Liebig-University Giessen, Germany.
- 2013** Invited speaker, Genome Instability and Stem Cell Biology Mini-Symposium, Montreal, Canada.
- 2013** Invited speaker, The 14th International Symposium, Society of Chinese Bioscientists in America, Xi’an, China.
- 2013** Invited speaker, The CBIS (Chinese Bioscience Investigator Society) meeting, Cancun, Mexico.
- 2012** Platform presentation selected from abstracts, The 53rd Annual Drosophila Conference, Chicago, IL.
- 2012** Platform presentation selected from abstracts, Crete Drosophila Meeting, Crete, Greece.
- 2012** Platform presentation selected from abstracts, FASEB meeting: Transcriptional Regulation during Cell Growth, Differentiation and Development, Snowmass Village, Colorado.
- 2012** Platform presentation selected from abstracts, Germ Cell meeting at Cold Spring Harbor.
- 2012** Platform presentation selected from abstracts, The Stem Cells and Developmental Mechanisms conference at Cold Spring Harbor Conferences Asia, Suzhou Industrial Park.
- 2011** Invited speaker, The XXIst North American Testis Workshop, Montreal, Canada.
- 2011** Platform presentation selected from abstracts, The 13th International Symposium, Society of Chinese Bioscientists in America, Guangzhou, China.
- 2011** Platform presentation selected from abstracts, The Stem Cell Biology meeting at Cold Spring Harbor.
- 2011** Platform presentation selected from abstracts, FASEB meeting: Transcriptional Regulation during Cell Growth, Differentiation and Development, Snowmass Village, Colorado.
- 2011** Platform presentation selected from abstracts, Germ Cell meeting at Cold Spring Harbor.
- 2008** Platform presentation selected from abstracts, The 49th Annual Drosophila Conference, San Diego, CA.
- 2008** Platform presentation selected from abstracts, International Developmental Systems Biology, Beijing, China.
- 2008** Platform presentation selected from abstracts, FASEB meeting: Transcriptional Regulation during Cell Growth, Differentiation, and Development, Snowmass Village, Colorado.
- 2007** Platform presentation selected from abstracts, The 48th Annual Drosophila Conference, Philadelphia, PA.
- 2007** Platform presentation selected from abstracts, The 10th Mechanisms of Eukaryotic Transcription meeting at Cold Spring Harbor.

Meeting Organizer:

- 2021** Session chair for Eukaryotic DNA Replication & Genome Maintenance Conference, Cold Spring Harbor Laboratory.
- 2021** Reviewer of abstracts for the International Society for Stem Cell Research (ISSCR) Virtual Annual Meeting, June 21-26, 2021.
- 2020** Reviewer of abstracts for the International Society for Stem Cell Research (ISSCR) annual meeting, Boston, MA—changed to virtual.
- 2019** Session Co-Chair for the “Chromatin, epigenetics and genomics” session at the 60th Annual Drosophila Research Conference, Dallas, TX.
- 2016** Reviewer for abstracts for the International Society for Stem Cell Research (ISSCR) annual meeting, San Francisco, CA.

- 2016** Co-chair for the Multicellular Interactions, Tissues, and Development minisymposium topic at the 2016 ASCB Annual Meeting, San Francisco, CA.
- 2015** Session Chair on Chromatin and Epigenetics, The 55th Annual Drosophila Conference, Chicago, IL.
- 2014** Session chair, Gene Regulation/Epigenetics Session, The Mid-Atlantic Society for Developmental Biology Meeting, Baltimore, MD.
- 2014** Session chair, Cold Spring Harbor Germ Cell Meeting, Cold Spring Harbor, NY.
- 2013** Session co-chair, Stem Cell Session, The 14th International Symposium, Society of Chinese Bioscientists in America, Xi'an, China.
- 2008** Session Chair, The 49th Annual Drosophila Conference, San Diego, CA.

Departmental Seminars:

- 2022** Yale School of Medicine Stem Cell Center, New Haven, CT
- 2022** A general seminar series covering all areas of biology organized by Research Institute of Molecular Pathology (IMP), University institutes (Max Perutz Labs), the Institute of Molecular Biotechnology of the Austrian Academy of Sciences (IMBA), the Gregor Mendel Institute (GMI) and Valneva, Vienna Biocenter, Austria
- 2022** Department of Biological Sciences, Vanderbilt University
- 2022** Genome, Cell, and Developmental Biology seminar series at Indiana University, Bloomington, Indiana
- 2022** Department of Genome Sciences, University of Washington, Seattle
- 2021** Department of Biochemistry and Molecular Genetics, University of Colorado School of Medicine, virtual seminar.
- 2021** Andre Nussenzweig - Wei Yang Virtual Seminar Series, NCI/NIH, virtual seminar.
- 2021** Distinguished Scientist lecture series, University of Montreal, virtual seminar.
- 2021** DNA Dynamics Webinar Series, "Social DNAing", Columbia University Medical Center, virtual seminar.
- 2021** Stem Cells @ Lunch, postdoc invited seminar at the Centre for Stem Cells and Regenerative Medicine at King's College London, virtual seminar.
- 2021** Molecular Biosciences, University of Texas at Austin, postponed due to COVID-19.
- 2021** Department of Human Genetics, University of Michigan Medical School, virtual seminar.
- 2021** International webinar series at Kumamoto University, Japan, virtual seminar.
- 2020** Department of Molecular and Human Genetics, Baylor College of Medicine
- 2020** Department of Chromosome Biology, Institute of Molecular Embryology and Genetics, Kumamoto University, Japan, rescheduled.
- 2020** Barry Berman Memorial Lecture, The George Washington University, Washington, D.C., virtual seminar.
- 2020** Biology Department, Emory University, virtual seminar.
- 2019** Cell Regulation and Development (CRD) and Cell and Structural Biology Group (CSBG) of the Eunice Kennedy Shriver National Institute of Child Health and Human Development at the National Institutes of Health, invited by post-doc seminar committee
- 2019** Shanghai Technology University, Shanghai, China
- 2019** Tong Ji Medical School, Shanghai, China
- 2019** Department of Molecular Biology, Princeton University, Princeton, NJ
- 2018** Cell and Developmental Biology Department, University of Michigan, MI
- 2018** Department of Biochemistry and Molecular Biology, Johns Hopkins University Bloomberg School of Public Health, MD
- 2018** Morgridge Institute for Research, University of Wisconsin–Madison, WI, Madison
- 2018** Department of Genetics, Harvard Medical School, Boston, MA
- 2018** Anderson Center for Cancer Research lecture, Rockefeller University, NY
- 2018** Department of Biology, University of Texas at San Antonio, San Antonio, TX
- 2017** Department of Molecular Biology and Genetics, Cornell University, Ithaca, NY
- 2017** The Biochemistry & Biophysics Department, UCSF, San Francisco, CA
- 2017** Division of Basic Sciences, Fred Hutchinson Cancer Research Center, Seattle, WA
- 2017** Institute of Genetics and Cytology, Northeast Normal University, Changchun, China
- 2017** School of Life Sciences, Peking-Tsinghua Center for Life Sciences, Beijing, China

- 2017** Department of Molecular Biology, Cell Biology and Biochemistry, Brown University BioMed Division, Providence, RI
- 2016** Department of Orthopedic Surgery and Neuroscience, Johns Hopkins University School of Medicine, Baltimore, MD
- 2016** Department of Molecular and Cellular Biology, Harvard University, Cambridge, MA
- 2016** The Children's Hospital of Philadelphia Developmental Biology, Philadelphia, PA
- 2016** Yale School of Medicine Stem Cell Center, New Haven, CT
- 2016** University of Texas M.D. Anderson Cancer Center, Department of Epigenetics & Molecular Carcinogenesis, Keynote speaker at the Center for Cancer Epigenetics (CCE) retreat, Smithville, TX
- 2016** MCD Biology, University of California at Santa Cruz, Santa Cruz, CA
- 2016** Frontiers in Biology Seminar Series, Departments of Developmental Biology, Genetics and Biochemistry, Stanford University, Palo Alto, CA
- 2016** Temasek Life Sciences Laboratory (TLL), Singapore
- 2015** NIDA IRP, NIH, Baltimore, MD
- 2015** Departments of Cell and Developmental Biology, Pediatrics, and Craniofacial Biology, University of Colorado School of Medicine, Denver, CO
- 2015** UT Southwestern, Department of Developmental Biology, Dallas, TX
- 2015** Rutgers University, Department of Molecular Biology and Biochemistry, Piscataway, NJ
- 2014** Genetics and Genomics program, Duke University, NC
- 2014** Southern Agriculture University in China, Guangzhou, China
- 2014** University of Pennsylvania, Philadelphia, PA
- 2014** NIDDK, NIH, Bethesda, MD
- 2013** Mayo Clinic Cancer Center, Rochester, MN
- 2013** Department of Biomedical Sciences, Cornell University, NY
- 2013** University of Illinois, Urbana-Champaign, IL
- 2012** The Southeast University, Nanjing, China
- 2012** The Reproductive Sciences Program, University of Michigan, MI
- 2011** Institute of Biochemistry and Cell Biology, Shanghai Institutes for Biological Sciences (SIBS), Chinese Academy of Sciences, Shanghai, China
- 2011** Department of Biochemistry and Molecular Biology, Johns Hopkins University Bloomberg School of Public Health, MD
- 2011** The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), NIH, MD
- 2010** Department of Embryology, Carnegie Institution for Science, the 29th Carnegie Symposium: Journey of the germ cell, invited by postdocs
- 2009** Epigenetics Center, Johns Hopkins Medical Institute (JHMI), MD
- 2009** The Cleveland Clinic Foundation, OH
- 2008** Department of Cell Biology, Johns Hopkins Medical Institute (JHMI), MD
- 2008** National Institute of Genetics and Developmental Biology, Beijing, China

Professional Activities:

Journal Editor: Board of Reviewing Editors (BRE) member of eLife
Editor, Journal of Genetics and Genomics

Journal Reviews: Science, Nature Genetics, Developmental Cell, PLoS Biology, PLoS Genetics, Genome Biology, Science Advances, eLife, Cell Reports, Oncogene, Development, PNAS, Molecular Biology of the Cell, Aging Cell, Developmental Biology, Nucleic Acids Research, Journal of Cell Science, Chromosome Research, Journal of Molecular Cell Biology, Nature Communications, BMC Biology, BMC Genomics, BMC Developmental Biology, PLoS Genetics, PLoS One, Fly, Biology of Reproduction, Cell Biology International, Cellular and Molecular Bioengineering, Trends in Genetics, Biochimica et Biophysica Acta (BBA) Gene Regulatory Mechanisms, Journal of Genetics and Genomics, Scientific Reports, iScience, Nature Review Genetics

Grant Reviews: NIGMS Established Investigator R35/MIRA study section (2020 and 2021), Consolidator Grant of the Swedish Research Council (2020), NSF grant reviewer (2011, 2015), U.S.-Israel Binational Science Foundation (2020), The French National Research Agency (ANR, 2011), AFAR (American Federation of Aging Research)'s National Scientific Advisory Council (NSAC, 2012), NIH DEV1 study section *Ad hoc* reviewer (2012), NIH Special Emphasis Panel/Scientific Review Group 2013/05 ZES1 SET-J (TG) 1 (Transgenerational Effects from Environmental Exposures, 2013), Israel Science Foundation (2013), European Research Council (ERC) Starting Grant (2014)

Other Services:

2022- 2023: Chair of the Membership Committee, member of the SCBA (Society of Chinese Bioscientists in America) Council

2022: Board of Scientific Counselors (BSC) Site Visit review for the Division of Intramural Research (DIR) at NHLBI/NIH

Membership: American Society of Genetics, American Society of Cell Biology, Society of Chinese Bioscientists in America, Faculty of 1000 member

Trainees:

Postdoctoral fellows

2020-	Binbin Ma	
2020-	Jason Palladino	
2017-present	Jennifer Urban	
2015-present	Ryan Gleason	
2014-present	Rajesh Ranjan	
2016-2020	Chinmayi Chandrasekhara	
2012-2017	Jing Xie	Current Position: Assistant Professor, Tong Ji Medical School, China
2011-2015	Zhen Shi	Current Position: co-founder of H2Clab Co., Ltd., China
2008-2015	Suk Ho Eun	Current Position: Staff Scientist at Genomic Research, Inc., Austin, TX
2008-2011	Qiang Gan	Current Position: Scientist for cancer diagnosis at the DiaCarta, Inc., Richmond, CA
2008	Dongfen Zhang	Current Position: Postdoc at University of California, San Diego
2008-2009	Selena Kremer-Caldwell	Current Position: FDA

Ph.D. Graduate Students

2019- present	Jonathan Snedeker	
2018- present	Emily Zion	
2018- present	Velinda Vidaurre, co-mentorship with Dr. Sua Myong	
2015-2020	Elizabeth Kahney	Current position: Consultant at a consulting company
2014-2020	Matthew Wooten	Current position: Postdoctoral researcher, Fred Hutchinson Cancer Research Center
2011-2016	Lijuan Feng	Current position: Postdoctoral researcher, Rockefeller University
2009-2014	Lama Tarayrah	Current position: Postdoctoral researcher, Weizmann Institute
2009-2014	Vuong Tran	Current position: Scientist, Split Biosciences, Inc.
2008-2013	Cindy Lim	Current position: Senior Staff Scientist, FDA

Master Graduate Students

2018- 2019	Carolina Chu	Defended in May, 2019
2013- 2014	Yuping (Derek) Li	Current position: Medical student at Northwestern Medical School

Undergraduate students**JHU Undergraduate students**

2021-	Luoyi Li
2020-	Annabelle Song
2019-	Kristina Rinaldi
2019- 2021	Jonathan Susilo
2018- 2021	Wingel Xue
2021	Tabor Roderiques
2019- 2021	Cindy Ow
2020- 2021	Si Man Ao leong
2019- 2020	Meletios Alex Tsantilas
2019- 2020	Alexandra Perez
2018- 2019	Isaiah Gao
2018- 2019	Erini Papas
2018	Zanzan Brink
2017- 2019	Carolina Chu
2016-2018	Gita Lakshminarayanan
2016-2018	Jasmin Johnson
2016-2018	Lydia Sohn
2016-2017	Roy Cheng
2015-2018	Jonathan Snedeker
2017	Sweta Sudhir
2016-2017	Monica Daubon
2015-2016	Aviana Duca
2013-2015	Katie Moosic
2010-2014	Yuping (Derek) Li
2013-2014	Kevin Son
2014	Alyssa Wenzel
2013	Wesley Wagers
2011-2013	Cindy Zhang
2011-2013	Michael Park
2011-2013	Patrick Stoiber
2011	Desty Muturi
2010	Dong Won Kim
2010	Julia Zhang
2009	Rodrigo Gacel Arzate Mejía, from Mexico Genome Institute
2009-2010	Michele Ly
2008-2009	Ankit Vartak
2008-2010	Caitlin Choi
2008	Esteban Escobar
2008-2009	Andrew Mo
2008-2009	Derek Ho
2008	Roxanne Radi
2008	Shamini Parameswaran

Summer Research non-Hopkins Undergraduate Students

2021	Christopher Semancik
2019	Anh Phan
2018	Rio Salazar
2017	Kailah Ortiz

2017	Sabrina Bracero
2016	Linda Yarfi
2015	Rebecca Tay
2014	Savannah Klein
2013	Aurelia Mapps
2012	Martha Newell
2012	Anthony Loder
2011	Heather Wright
2010	Tim Pierpont

Community Service: Research mentor to one high school student (Ben Henry) from Baltimore Polytechnic Institute (2011). Speaker in “Women Serious about Science” series, Baltimore Polytechnic Institute (2009)

Selected Talks by Lab Members:

- 2022** Rajesh Ranjan, Oral presentation selected from abstracts, the Genetics Society of America Research Conference.
- 2022** Emily Zion, Oral presentation selected from abstracts, Keystone Symposia on Epigenetic Mechanisms and the Treatment of Cancer, rescheduled due to COVID-19.
- 2021** Rajesh Ranjan, Platform presentation, ASCB Meeting. Online due to COVID-19.
- 2021** Ryan Gleason, Oral presentation, the Genetics Society of America Research Conference. Online due to COVID-19.
- 2021** Jennifer Urban, “Rising Star” at DNA Dynamics Webinar Series, “Social DNAing”, Columbia University Medical Center. Online due to COVID-19.
- 2020** Emily Zion, Oral presentation selected from abstracts, Keystone Symposia on Tissue Plasticity: Preservation and Alteration of Cellular Identity. Online due to COVID-19.
- 2020** Rajesh Ranjan, Oral presentation, Cold Spring Harbor Laboratory Virtual Meeting: Germ Cell Biology
- 2020** Rajesh Ranjan, Platform presentation, Invited speaker at ‘genetic puzzles’ workshop at the Allied Genetics Conference (GSA/TAGC), Washington, DC. Online due to COVID-19.
- 2020** Elizabeth Kahney, Platform presentation, the 2nd Epigenetics Conference, Fusion Conferences, Bahamas
- 2019** Rajesh Ranjan, Platform presentation, ASCB|EMBO Meeting, Washington, DC.
- 2019** Emily Zion, Platform presentation, Cold Spring Harbor Laboratory Meeting: Stem Cell Biology
- 2019** Matthew Wooten, Platform presentation, Epigenetics Gordon Research Conference (GRC), Holderness School, Holderness, New Hampshire.
- 2019** Matthew Wooten, Platform presentation, the 60th Annual Drosophila Research Conference, Dallas.
- 2019** Ryan Gleason, Platform presentation, the *C. elegans* Research Conference, Los Angeles, CA.
- 2018** Rajesh Ranjan, The Mid-Atlantic Mitosis and Meiosis Meeting, Baltimore, MD.
- 2018** Elizabeth Kahney, Platform presentation, Germ Cell meeting at Cold Spring Harbor.
- 2016** Matthew Wooten, Platform presentation, the 57th Annual Drosophila Research Conference, Florida.
- 2016** Lijuan Feng, Platform presentation, the 57th Annual Drosophila Research Conference, Florida.
- 2016** Rajesh Ranjan, Presentation at Minisymposium, 2016 ASCB Annual Meeting, San Francisco, CA.
- 2015** Lijuan Feng, Platform presentation, the 56th Annual Drosophila Research Conference, Chicago.
- 2015** Jing Xie, Platform presentation, The 3rd Asia-Pacific Drosophila Research Conference (APDRC3), Beijing, China.
- 2014** Vuong Tran, Platform presentation, Cold Spring Harbor Epigenetics & Chromatin Meeting.
- 2013** Lama Tarayrah, Platform presentation, The 3rd Palestinian Forum for Biomedical Research Symposium, Alquds University, Jerusalem, Israel.
- 2011** Cindy Lim, Platform presentation, International Proteolysis Society meeting, San Diego, CA.

Grants/Awards for Lab Members

Postdocs:

- 2022** Jennifer Urban, MOSAIC Scholar, NIGMS/NIH Pathway to Independence Award (K99/R00)
- 2021** Binbin Ma, Poster Prize, the first place, SCBA Winter Symposium
- 2020** Jennifer Urban, American Cancer Society Postdoc Fellowship
- 2019** Ryan Gleason, NIH Pathway to Independence Award (K99/R00)
- 2019** Chinmayi Chandrasekhara, Ruth L. Kirschstein National Research Service Award for Individual Postdoctoral Fellows (F32 NRSA).
- 2017** Jing Xie, The Young One Thousand Scientists Program in China
- 2016** Ryan Gleason, Ruth L. Kirschstein National Research Service Award for Individual Postdoctoral Fellows (F32 NRSA).
- 2013** Jing Xie, Poster Prize, Cell, Molecular, Developmental Biology and Biophysics (CMDB) Graduate Program JHU Retreat
- 2009** Suk Ho Eun, Poster Prize, CMDB retreat

Graduate students:

- 2021** Jonathan Snedeker, Ruth L. Kirschstein National Research Service Award for Individual Predoctoral Fellows (F31 NRSA).
- 2020** Emily Zion, Ruth L. Kirschstein National Research Service Award for Individual Predoctoral Fellows (F31 NRSA).
- 2019** Velinda Vidaurre, Ruth L. Kirschstein National Research Service Award for Individual Predoctoral Fellows (F31 NRSA).
- 2018** Elizabeth Kahney, Poster Prize, CMDB retreat.
- 2017** Elizabeth Kahney, Ruth L. Kirschstein National Research Service Award for Individual Predoctoral Fellows (F31 NRSA).
- 2017** Lijuan Feng, Oppenheimer Thesis Award, The CMDB Graduate Program
- 2016** Matthew Wooten, Poster Prize, CMDB retreat.
- 2016** Matthew Wooten, Ruth L. Kirschstein National Research Service Award for Individual Predoctoral Fellows (F31 NRSA).
- 2015** Matthew Wooten, Travel fellowship for The Onassis Foundation Science Lecture Series in Biology, Stem Cells: From basic biology to translational research, Heraklion, Crete, Greece, July 06 - 10, 2015.
- 2015** Matthew Wooten, Travel fellowship for The 3rd Asia-Pacific Drosophila Research Conference (APDRC3), Beijing, China, May 11-14, 2015.
- 2014** Vuong Tran as one of the ten finalist winners of the ASCB Kaluza Prize supported by Beckman-Coulter.
- 2013** Vuong Tran and Cindy Lim, the 54th Annual Drosophila Research Conference image award finalist.
- 2012** Vuong Tran, "Hot topic" oral presentation at CMDB retreat.
- 2011** Lama Tarayrah, Travel fellowship for CDB symposium on Epigenetic Landscape in Development and Disease, Mar. 14-16, Kobe, Japan.
- 2011** Cindy Lim, Outstanding Research Poster Award at the Regulated Proteolysis of Cell Surface Proteins Gordon conference (4 awards were given in total).
- 2011** Cindy Lim, Travel award selected by the International Proteolysis Society (IPS) Council to go to the 2011 IPS meeting at San Diego, CA
- 2011** Lama Tarayrah, Ruth L. Kirschstein National Research Service Award for Individual Predoctoral Fellows (F31 NRSA) fellowship.
- 2011** Cindy Lim, Poster Prize, CMDB retreat.
- 2010** Lama Tarayrah, Poster Prize, CMDB retreat.

Undergraduate students:

- 2020** Cindy Ow, the Beta Beta Beta Research Foundation Award
- 2018** Jonathan Snedeker, Owen Scholars Fellowship
- 2018** Jonathan Snedeker, The McElroy Award for meritorious research in the biological sciences
- 2017** Roy Cheng, Provost's Undergraduate Research Award (PURA)
- 2016** Jonathan Snedeker, Provost's Undergraduate Research Award (PURA)
- 2015** Jonathan Snedeker, The Woodrow Wilson Undergraduate Research Fellowship

- 2013** Derek Yuping Li, The Danny Lee Award for meritorious research in the biological sciences
2011 Heather Wright, the NSF SURE program student working in my lab in summer, 2011, Poster presentation at the SACNAS (San Jose, CA).
2010 Andrew Mo, The Danny Lee Award for meritorious research in the biological sciences.
2010 Dong Won Kim, The Woodrow Wilson Undergraduate Research Fellowship.

Teaching and University Service

Teaching:

- 2008-present Genomes & Development (020.637)
 Spring Graduate core course of approximately 15-25 students
 Co-teach with Mark Van Doren, Allan Spradling, Alex Bortvin, James Taylor, Cheng-Min Fan, Marnie Halpern, Joe Gall, William Ludington.
 I teach 1/3 of this 3-credit class and also am the director of the course from 2016
- 2016-present Epigenetics (020.385)
 Fall Upper level elective course for undergraduate students of approximately 20 students
 I teach 1/2 of this 3-credit class with John Kim
- 2012-2017 Stem Cell & the Biology of Aging and Disease (020.337)
 Spring Upper level elective course for undergraduate students of approximately 120-160 students
 I teach one 2-hour lecture as a team teaching course with Barry Zirkin and other faculty
- 2010-2014 Stem cell biology (020.620)
 Fall Upper level elective course for undergraduate students of approximately 15 students
 I teach 1/2 of this 2-credit class with Yixian Zheng in 2010, 2012 and 2014
- 2009-2012 Developmental Biology (020.363)
 Spring Undergraduate course of approximately 140-160 students
 I teach 1/3- 1/2 of this 3-credit class with Mark Van Doren and Carolyn Norris
- 2009-2012 Epigenetics (ME:260.710)
 Spring Graduate course of 20-30 students
 Co-teach with Andy Feinberg and other faculty at School of Medicine
- 2013 Stem Cells and the Biology of Aging and Disease (120.627)
 Fall Graduate class of 25-40 students
 Co-teach with Daniela Drummond-Barbosa and other faculty at School of Public Health

Support of Graduate Students:

- 2008-present Mentor for 10 Graduate Student Thesis Research (see Trainees)
 2008-present Mentor for 52 Graduate Student Rotations (≥ 4 students per year)
 2008-present Thesis committee member for 33 Graduate Students (including 6 students from JHMI, 1 student from JHSPH and 2 students from NIH)
 2008-present Administered Graduate Board Oral Exam for 60 Graduate Students

Support of Undergraduate Students:

- 2008-present Mentor for 32 Undergraduate Students' Research (see Trainees, including 1 visiting student from Mexico)

- 2008-present Hosted and trained 12 non-Hopkins undergraduate students for the NSF-BioREU summer research program (see Trainees)
- 2008-present Advisor for 35-40 Undergraduate Students
- 2016 Speaker at “Dean’s Dinner” event with undergraduate students
- 2019 Fall Tri-Beta Faculty Speaker, news at <https://www.jhunewsletter.com/article/2019/11/bio-professor-researches-dna-inheritance-patterns>
- 2020 Natural Sciences Meet the Faculty Panel for perspective undergraduate students

Departmental Committees/Activities:

- 2009- present Graduate Admission Committee for International Applicants
- 2017-2018 Chair of Biology Department Genetics & Genomics Faculty Search Committee
- 2015- present Internal faculty mentor for Assistant Professor Christian Kaiser in Biology Department
- 2011- present Faculty mentor and perform the Lecturer Annual Review with Dr. Carolyn Norris
- 2011-2012 Biology Department Faculty Search Committee
- 2013-2014 Biology Department Faculty Search Committee
- 2009-2014 Biology Department Website Committee
- 2014-2016 Biology Department Communications Committee
- 2008- 2012 Biology Department Seminar Series Committee

University Committees/Activities:

- 2019- 2022 Reviewer for Johns Hopkins Catalyst Award
- 2022, 2020 Reviewer for Johns Hopkins Discovery Award
- 2017- present Internal reviewer for Packard Fellowship
- 2020 Integrated Imaging Center (IIC) Steering Committee Member
- 2020 Integrated Imaging Center (IIC) Director Search Committee Member
- 2020 *Ad hoc* committee member for the promotion of an assistant professor in the Biomedical Engineering Department
- 2019 Reviewer for internal nomination of Edward Mallinckrodt Jr. Scholar Award
- 2019 Reviewer for Johnson & Johnson Women in STEM2D
- 2018 External faculty mentor for Maya Gomes' LAUNCH Committee Meeting
- 2018 Reviewer for Johns Hopkins Catalyst Award
- 2016 Internal reviewer for Graduate Student Fellowship nomination
- 2016- 2017 JHU Biomedical Workforce Committee
- 2017 Hopkins on the Hill Event Presenter