

Jared T. Nordman, Ph.D.

Vanderbilt University
Department of Biological Sciences
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Education:

- 2008 Doctor of Philosophy
 Tufts University School of Medicine, Boston, MA
 Department of Molecular Biology and Microbiology
 Laboratory of Andrew Wright
- 2002 Bachelor of Science (*Cum Laude*)
 University of Massachusetts, Amherst, MA
 College of Natural Resources and the Environment

Employment:

- 2015-present Assistant Professor
 Department of Biological Sciences, Vanderbilt University
 Secondary Appointment: Department of Cell and Developmental Biology
 Member, Vanderbilt-Ingram Cancer Center (VICC, Genome Maintenance)
- 2008 – 2015 Post-doctoral Research Fellow: Whitehead Institute for Biomedical Research
 Supervisor: Terry Orr-Weaver Ph.D.
- 2002 Research Technician: University of Massachusetts at Amherst
 Advisor: Steven Sandler, Ph.D.

Awards and Fellowships

- 2018 NIGMS Maximizing Investigators' Research Award (MIRA)
- 2014 Whitehead Institute Spirit Award – “Go To” Person Award
- 2013 NIH Pathways to Independence Award (K99) 1K99GM104151-01A1
- 2013 Whitehead Postdoc Association Travel Award
- 2011 Harvey Lodish Service Award - Awarded for excellence as a high school teacher mentor
- 2010 Margaret and Herman Sokol Postdoctoral Award - Awarded for research excellence
- 2009-2012 HHMI Fellow of the Damon Runyon Cancer Research Foundation
- 2008 Sackler Deans Award - For outstanding thesis work by a graduating Ph.D. student.
- 2006 Tufts University Biomedical Travel Award
- 2006 EMBO Travel Award
- 2005-2006 The Alla Korjagin Fellowship - Awarded by department faculty based on the following criteria:
 Ability to achieve in research and personal qualities of collegiality, dedication and cooperation.
- 2002 *Honorable Mention* National Science Foundation Pre-Doctoral Fellowship

Research

Working papers

1. Tirgar R, Amodeo A and **Nordman JT**, 2022 CG8223/NASP buffers maternally deposited H3/H4 in the early *Drosophila* embryo. (Anticipate submission in summer 2022)

Role: Conceived the project. Supervised Reyhaneh Tirgar (graduate student). Assisted in manuscript writing, revising and editing. This work was supported by my NIH NIGMS R35 grant.

2. Richards L, Lord C, Benton ML, Capra JA and **Nordman JT**, 2022 Nucleoporins facilitate ORC loading onto chromatin. (Anticipated submission in April 2022)

Role: Conceived the project. Supervised Logan Richards (graduate student) and Christopher Lord (Research Assistant Professor). Assisted in manuscript writing, revising and editing. This work was supported from my NSF grant and partially supported by my NIH NIGMS R35 grant.

3. Munden A, Wright M, Han D, Tirgar R, Plate L and **Nordman JT**, 2022 Identification of replication fork-associated proteins in *Drosophila* embryos and cultured cells using iPOND coupled to quantitative mass spectrometry. *bioRxiv* - <https://www.biorxiv.org/content/10.1101/2022.01.18.476773v1> (Under revision at *Scientific Reports*)

Role: Supervised Alex Munden, Dongsheng Han and Reyhaneh Tirgar (graduate students). Performed experiments. Wrote manuscript with input from authors. This work was supported from my NIH NIGMS R35 grant.

4. Munden A, Benton ML, Capra JA, **Nordman JT**, 2021 R-loop mapping and characterization during *Drosophila* embryogenesis reveals developmental plasticity in R-loop signatures. *bioRxiv* - <https://doi.org/10.1101/2021.10.29.465954> (Under revision at *NAR*)

Role: Conceived project with Alex Munden (graduate student). Supervised Alex Munden. Assisted in manuscript writing, revising and editing. This work was supported from my NIH NIGMS R35 grant.

Articles in refereed journals

Nordman Lab publications (Vanderbilt)

16. *Richards L, *Das S and **Nordman JT**, 2022 Rif1-dependent control of replication timing. *Genes* **13**(3): 550

*Role: Conceived and co-wrote review with Logan Richards and Souradip Das (graduate students). *Indicates co-first authorship.*

15. Das S, Caballero M, Kolesnikova T, Zhimulev I, Koren A and **Nordman JT**, 2021 Replication timing analysis in polyploid cells reveals Rif1 uses multiple mechanisms to promote underreplication in *Drosophila*. *Genetics* **219**: iyab147

Role: Conceived of the project. Supervised Souradip Das (graduate student). Computational analysis of replication timing was carried out by Amon Koren's lab. Polytene squashes were performed by T. Kolesnikova in the Zhimulev lab. Assisted in manuscript writing, revising and editing. This work was supported from my NSF grant.

**Featured article in November issue*

14. *Armstrong RL, *Das S, Hill CA Duronio RJ and **Nordman JT**, 2020 Rif1 functions in a tissue-specific manner to control replication timing through its PP1-binding motif. *Genetics* **215**: 75-87

*Role: Conceived of the project. Supervised Souradip Das (graduate student). S. Das generated and analyzed replication timing in ovarian follicle cells. Replication timing measurement of wing disc tissue and analysis was performed by R. Armstrong in the Duronio lab. Assisted in manuscript writing, revising and editing. This work was supported from my NSF grant. *Indicates co-first authorship.*

13. Munden A, Rong Z, Sun A, Gangula R, Mallal S and **Nordman JT**, 2018 Rif1 inhibits replication fork progression and controls DNA copy number in *Drosophila*. *eLife*. 7. pii: e39140. doi: 10.7554/eLife.39140.

Role: Conceived of the project. Supervised Alex Munden (graduate student), Z Rong and A. Sun (undergraduate students). I performed the mass spec, copy number analysis and cytological experiments. This work was supported from my NIH R00 grant. I wrote the manuscript with input from all authors.

Postdoctoral, graduate & undergraduate publications

12. **Nordman JT** and Orr-Weaver T.L., 2015 Understanding replication fork progression, stability, and chromosome fragility by exploiting the Suppressor of Underreplication protein. *Bioessays* **37**: 856-61

Role: I wrote this review with input from TL Orr-Weaver

11. **Nordman JT**, Kozhevnikova E, Verrijzer P, Pindyurin A, Andreyeva E, Shloma V, Zhimulev I, and Orr-Weaver T.L., 2014 DNA Copy Number Control Through Inhibition of Replication Fork Progression. *Cell Reports*. **9**:841–849

Role: I found that SUUR localizes to replication forks and inhibits their progression. Performed copy number analysis, immunofluorescence and ChIP-seq experiments. Wrote manuscript with supervision from TL Orr-Weaver.

10. **Nordman JT** and Orr-Weaver T.L., 2012 Developmental Control of Metazoan DNA Replication. *Development*. **139**:455-464

Role: I wrote this review with input from TL Orr-Weaver

9. Sher, N., Bell, G.W., Li, S., **Nordman JT**, Eng, T., Eaton, M.L, MacAlpine, D.M. and Orr-Weaver, T.L. 2012 Developmental Control of Gene Copy Number by Repression of Replication Initiation and Fork Progression. *Genome Research*. **22**:64-75

Role: I performed copy number measurements. Helped with manuscript writing and figure assembly.

8. **Nordman J** and Wright A, 2011 *E. coli* NDP Kinase mutants depend on translesion DNA synthesis to prevent mutagenesis. *J. of Bacteriology* **193**:4531-4533

Role: I performed all the experiments and wrote the manuscript under the supervision of A. Wright

7. Kim, J. C., **Nordman, J.**, Xie, F., Kashevsky, H., Eng, T., Li, S., MacAlpine, D.M. and Orr-Weaver, T.L., 2011. Integrative analysis of gene amplification in *Drosophila* follicle cells: Parameters of origin activation and repression. *Genes and Development* **25**:1384-1398

Role: I performed RNA-seq of follicle cells. Provided feedback on manuscript.

6. **Nordman J**, Li S, Eng T, MacAlpine D and Orr-Weaver T, 2011 Developmental Control of the Relationship Between Replication and Transcription. *Genome Research* **21**:175-181

Role: I performed all experiments and generated all the figures in the manuscript. I wrote the manuscript with feedback from all authors and under the supervision of TL Orr-Weaver.

5. modENCODE Consortium, Roy S, Ernst J, Kharchenko PV, Kheradpour P, Negre N, Eaton ML, Landolin JM, Bristow CA, Ma L, Lin MF, Washietl S, Arshinoff BI, Ay F, Meyer PE, Robine N, Washington NL, Di Stefano L, Berezikov E, Brown CD, Candeias R, Carlson JW, Carr A, Jungreis I, Marbach D, Sealfon R, Tolstorukov MY, Will S, Alekseyenko AA, Artieri C, Booth BW, Brooks AN, Dai Q, Davis CA, Duff MO, Feng X, Gorchakov AA, Gu T, Henikoff JG, Kapranov P, Li R, MacAlpine HK, Malone J, Minoda A, **Nordman J**, Okamura K, Perry M, Powell SK, Riddle NC, Sakai A, Samsonova A, Sandler JE, Schwartz YB, Sher N, Spokony R, Sturgill D, van Baren M, Wan KH, Yang L, Yu C, Feingold E, Good P, Guyer M, Lowdon R, Ahmad K, Andrews J, Berger B, Brenner SE, Brent MR, Cherbas L, Elgin SC, Gingeras TR, Grossman R, Hoskins RA, Kaufman TC, Kent W, Kuroda MI, Orr-Weaver T, Perrimon N, Pirrotta V, Posakony JW, Ren B, Russell S, Cherbas P, Graveley BR, Lewis S, Micklem G, Oliver B, Park PJ, Celniker SE, Henikoff S, Karpen GH, Lai EC, MacAlpine DM, Stein LD, White KP and Kellis M., 2010 Identification of functional elements and regulatory circuits by Drosophila modENCODE. *Science* **330**:1787-1797

Role: I performed copy number analysis used in this consortium. I provided feedback on manuscript.

4. **Nordman J** and Wright A, 2008 The relationship between dNTP pool levels and mutagenesis in an *Escherichia coli* NDP kinase mutant. *Proc. Natl. Acad. Sci. USA* **105**:10197-202

Role: I performed all the experiments and wrote the manuscript under the supervision of A Wright.

3. **Nordman JT**, Skovgaard O and Wright A, 2007 A novel class of mutations that affect DNA replication in *E. coli*. *Molecular Microbiology*. **64**:125-38

Role: I performed all the experiments in this paper with the exception of the flow cytometry. I wrote the manuscript with feedback from all authors under the supervision of A Wright.

2. Dineen SS, Villapakkam AV, **Nordman JT** and Sonenshein AL, 2007 Repression of *Clostridium difficile* toxin gene expression by CodY. *Molecular Microbiology*. **66**: 206-19

Role: I purified CodY and showed that it binds to the promoters of toxin genes. I provided feedback on the manuscript

1. *Renzette N, *Gumlaw N, ***Nordman JT**, Krieger M, Yeh SP, Long E, Centore R, Boonsombat R and Sandler SJ. 2005. Localization of RecA in *Escherichia coli* K-12 using RecA-GFP. *Molecular Microbiology* **57**:1074-85 *Contributed equally to work.

Role: I generated a functional RecA-GFP fusion used in the manuscript. I performed the initial localization experiments in this manuscript. I provided feedback on the manuscript.

Fellowships and research grants

Current research grants

1. NIH/NIGMS 1R35GM128650 (PI: Nordman)
'Developmental control of replication fork progression and stability'

Jared T. Nordman, PhD

Role: Principal Investigator

9/01/2018 – 8/31/2023

\$ 1,961,016 total cost; \$250,000 direct cost (annually); \$142,261 indirect cost (annually)

Administrative Supplement

1A. NIH/NIGMS R35 GM128650-02S1

Role: Co-Principal Investigator (together with David Cortez in Biochemistry)

09/01/2019 – 08/31/2020

\$119,297 total (\$45,719 to PI: Nordman)

2. NSF/ MCB Division of Molecular and Cellular Bioscience - 1818019

Mechanisms Governing DNA Replication Timing and Copy Number Control During Development

\$742,799 total cost; \$162,528 direct cost (annually); \$85,141 indirect cost (annually)

09/1/2018 - 08/31/2022 (NCE)

Completed research grants

1. NIH/NIGMS 5R00GM104151 (PI: Nordman)

'Regulation of metazoan replication fork progression, stability and composition'

Role: Principal investigator

9/01/15- 08/31/18

\$747,000 total cost; \$498,469 direct cost; \$248,531 indirect cost

2. Vanderbilt-Ingram Cancer Center Support Grant - P30CA068485 (PI: Nordman)

'Oligopainting to measure genome replication in 3D'

6/21/2021 – 9/21/2021

\$3,000 direct cost

Invited Presentations

Dept. of Biology, Hofstra University. Hempstead, NY October 2021

Support: honorarium

Title: Understanding DNA replication and copy number control during development

Dept. of Genetics and Development, Columbia University School of Medicine. NY, NY. October 2021

Support: honorarium and travel

Title: Understanding DNA replication and copy number control during development

Dept. of Biochemistry and Molecular Genetics, University of Alabama School of Medicine at Birmingham. Birmingham, AL. April 2021

Support: honorarium

Title: Understanding DNA replication and copy number control during development

Dept. of Biological Sciences, University of Southern California. Los Angeles, CA. January 2021

Support: none

Title: Understanding DNA replication and copy number control during development

Interdisciplinary Genetics Program, Texas A+M. College Station, TX. March 2019

Support: honorarium and travel

Title: Understanding DNA replication and copy number control during development

Dept. of Biology, University of Rochester. Rochester, NY. November 2018

Support: honorarium and travel

Title: Rif1 inhibits replication fork progression and controls copy number in *Drosophila*

SuperFly Interest Group, Vanderbilt University. Nashville, TN. 2017

Title: Developmentally programmed changes in gene copy number: Insights into chromosomal fragility and DNA replication control

Genome Maintenance Group, Vanderbilt University. Nashville, TN. 2016

Title: Developmentally programmed changes in gene copy number: Insights into chromosomal fragility and DNA replication control

Department of Cell and Developmental Biology, Vanderbilt University. Nashville, TN. 2016

Title: Developmentally programmed changes in gene copy number: Insights into chromosomal fragility and DNA replication control

Laboratory of Biochemistry and Molecular Biology, NIH. Bethesda, MD. 2015 (Job seminar)

Support: travel

Title: Developmentally programmed changes in gene copy number: Insights into chromosomal fragility and DNA replication control

Dept. of Biological Sciences, Vanderbilt University. Nashville, TN. 2015 (Job seminar)

Support: travel

Title: Developmentally programmed changes in gene copy number: Insights into chromosomal fragility and DNA replication control

Dept. of Molecular Biosciences, Northwestern University (Job seminar)

Support: travel

Title: Developmentally programmed changes in gene copy number: Insights into chromosomal fragility and DNA replication control

Dept. of Biological Sciences, SUNY, Buffalo. Amherst, NY. 2015 (Job seminar)

Support: travel

Title: Developmentally programmed changes in gene copy number: Insights into chromosomal fragility and DNA replication control

Dept. of Biochemistry and Molecular Biology, University of Massachusetts at Amherst. Amherst MA 2015 (Job seminar)

Support: travel

Title: Developmentally programmed changes in gene copy number: Insights into chromosomal fragility and DNA replication control

Stadtman symposium, Chromosome Biology/Epigenetics, NIH. Bethesda, MD. 2015 (Job seminar)

Support: travel

Title: Developmentally programmed changes in gene copy number: Insights into chromosomal fragility and DNA replication control

Department of Microbiology, University of Massachusetts at Amherst. Amherst, MA. 2014

Support: travel

Title: Developmentally programmed changes in gene copy number: Insights into chromosomal fragility and DNA replication control

Conference Presentations

Eukaryotic DNA Replication and Genome Maintenance. Cold Spring Harbor, NY. September 2021
(Meeting moved to virtual format due to COVID; Invited as session chair)
Title: ORC and Rif1 associate with the Nup107-160 complex linking nucleoporins to replication initiation.

The Allied Genetics Conference.

(Meeting moved to virtual format due to COVID; talk selected from abstracts)
Title: Rif1 functions in a tissue-specific manner to control replication timing through its PP1-binding motif. 2020

Eukaryotic DNA Replication and Genome Maintenance. Cold Spring Harbor, NY. September 2019
(Talk selected from abstract)

Title: Cell lineage is a major driver of DNA replication timing programs during development.

Keystone Symposium on DNA Replication and Recombination. Snowbird, UT. January 2019
(Talk selected from abstract)

Unable to attend due to teaching obligation

Polyplody in Organ Development, Repair, and Disease. Bar Harbor, ME October 2018
(Invited as session chair)

Title: Rif1 inhibits replication fork progression and controls copy number in *Drosophila*.

Eukaryotic DNA Replication and Genome Maintenance. Cold Spring Harbor, NY. September 2017
(Talk selected from abstract)

Title: Rif1 inhibits replication fork progression and controls copy number in *Drosophila*.

Drosophila Research Conference. San Diego, CA. April 2014
(Talk selected from abstract)

Title: The SUUR Chromatin Protein Promotes Underreplication Through Inhibition of Replication Fork Progression.

Eukaryotic DNA Replication and Genome Maintenance. Cold Spring Harbor, NY. September 2013
(Talk selected from abstract)

Title: Repression of DNA Replication Through Inhibition of Replication Fork Progression.

Eukaryotic DNA Replication and Genome Maintenance. Cold Spring Harbor, NY. September 2011
(Talk selected from abstract)

Title: Developmental Regulation of ORC Binding and Fork Progression.

Drosophila Research Conference. San Diego, CA. April 2011
(Talk selected from abstract)

Title: Developmental control of the DNA replication and transcription programs.

The 13th Annual Boston Bacterial Meeting. Boston, MA. June 2007
(Talk selected from abstract)

Title: The *in vivo* role of *E. coli* NDP kinase in DNA metabolism. Boston, MA. **Oral Presentation**.

Published abstracts and poster presentations

17. Logan Richards, Mary-Lauren Benton, John A. Capra, and **Jared T. Nordman**, 2021 Rif1 interacts with ORC and the Nup107-160 subcomplex coupling replication initiation to nucleoporins. *Eukaryotic DNA Replication and Genome Maintenance*. Cold Spring Harbor, NY(Virtual). **Poster Presentation**

16. Alexander Munden, Mary-Lauren Benton, John A. Capra and **Jared Nordman**, 2021 Mapping R-loops during *Drosophila* development reveals new paradigms for R-loop formation and genome stability. *Drosophila Research Conference* **Poster Presentation** (Virtual)
15. Reyhaneh Tirgar, Dongsheng Han and Jared Nordman, 2021 Replication in Context: Understanding replication through higher ordered chromatin. *Drosophila Research Conference* **Poster Presentation** (Virtual)
14. Alexander Munden, Mary Lauren Benton, Tony Capra, and **Jared Nordman**, 2019 Characterization of replication fork composition during development. *Eukaryotic DNA Replication and Genome Maintenance*. Cold Spring Harbor, NY. **Poster Presentation**
13. **Jared Nordman**, Alexander Munden, Rama Gangula and Simon Mallal, 2018 Rif1 inhibits replication fork progression and controls copy number in *Drosophila*. *Drosophila Research Conference*. Philadelphia PA. **Poster Presentation**
12. Alexander Munden and **Jared Nordman**, 2017 Characterization of Replication Fork Composition During Development. *Eukaryotic DNA Replication and Genome Maintenance*. Cold Spring Harbor, NY. **Poster Presentation**
11. Alexander Munden and **Jared Nordman**, 2017 Characterization of Replication Fork Composition During Development. *Keystone Symposium on DNA Replication and Recombination*. Santa Fe, NM. **Poster Presentation**
10. Alexander Munden and **Jared Nordman**, 2017 Regulation of metazoan DNA replication fork progression, stability and composition. *The Allied Genetics Conference, Orlando, FL*. **Poster Presentation**
9. **Nordman J** and Terry L. Orr-Weaver, 2016 Regulation of metazoan DNA replication fork progression, stability and composition. *Drosophila Research Conference*. Orlando, FL. **Poster Presentation**
8. **Nordman J** and Terry L. Orr-Weaver, 2015 Regulation of metazoan DNA replication fork progression, stability and composition. *Eukaryotic DNA Replication and Genome Maintenance*. Cold Spring Harbor, NY. **Poster Presentation**
7. **Jared Nordman** and Terry L. Orr-Weaver, 2012 Rbf dually controls follicle cell differentiation and the endocycle to amplification transition. *The Cell Cycle*. Cold Spring Harbor, NY. **Poster Presentation**
6. Helena Kashevsky, **Jared Nordman** and Terry L. Orr-Weaver, 2012 Regulation of DNA copy number during development. *Drosophila Research Conference*. Chicago, IL. **Poster presentation**
5. **Nordman J**, Bosco G, Park E and Orr-Weaver T, 2010 Regulation of DNA replication and fork progression. *Genetics 2010: Model Organisms to Human Biology*. Boston, MA. **Poster Presentation**
4. **Nordman J**, Bosco G, Park E and Orr-Weaver T, 2010 Regulation of DNA replication and fork progression. *The Cell Cycle*. Cold Spring Harbor, NY. **Poster Presentation**
3. **Nordman J**, Bosco G, Park E and Orr-Weaver T, 2009 Regulation of DNA replication and fork progression. *Drosophila Research Conference*. Chicago, IL. **Poster Presentation**
2. **Nordman JT**, Skovgaard O and Wright A, 2006. Integration of DNA replication and nucleotide metabolism in *E. coli*. EMBO Workshop. *Cell Cycle and Cytoskeletal Elements in Bacteria*. Copenhagen, Denmark. **Poster Presentation**

1. **Nordman JT** and Wright A, 2005. Integration of DNA Replication and Nucleotide Metabolism in *E. coli*. *The 11th Annual Boston Bacterial Meeting*. Cambridge, MA. Poster Presentation.

Teaching and Mentoring

New courses introduced

Biochemistry II (BSCI4265): Spring 2019, Spring 2020

- Role: Instructor
- I developed and introduced a mezzanine-level course focused on molecular biology

Undergraduate Seminar 'The Biology of the Nucleus in Development and Disease' (BSCI3965); Spring 2017

- Role: Instructor
- I developed and introduced a new undergraduate seminar

Additional courses taught

Biochemistry I (BSCI2520/5890): Spring 2017, Spring 2018, Fall 2018, Fall 2019, Fall 2020, Fall 2021

- Role: Co-instructor
- Fall 2020: developed modular online course due to COVID-19
- Fall 2021: converted course with enrollment of 160 to 'flipped' classroom course
- Enrollment: 90-160 students (undergraduate and graduate students)

Directed lab research (BSCI3861)

- Role: Instructor

Independent lab research (BSCI3961): Spring 2022

- Role: Instructor

Bioregulation I guest lecture (Interdisciplinary Graduate Program): Fall 2016, Fall 2017, Fall 2018, Fall 2019, Fall 2020, Fall 2021

- Role: Guest faculty lecturer (2 lectures)

Graduate Seminar in Biological Sciences (BSCI6320): Fall 2016, Spring 2016

- Role: Instructor

Postdoctoral trainees

Diana Balasubramanian, Ph.D. (2018-2019)

Graduate Students

Alexander Munden (2016-2022)

- Includes one year leave-of-absence

Souradip Das (2018-2022)

Logan Richards (2018-present)

- Awarded NIH/NIGMS F31 graduate fellowship
- Hickory Stick Award, Dept. of Biological Sciences (2019)

Reyhaneh Tirgar (2018-present)

Dongsheng Han (2019-present)

Undergraduate research projects supervised

- Tara O'Shea (Fall 2021-present)
- Amanda Sun (2017-2019); one co-authored publication; VUSRP fellowship 2017
- Zhan 'Jack' Rong (2016-2020); one co-authored publication
- Jinxuan (Jackie) Hao (2016-2018)
- Mihira Konda (2016-2017)

Graduate Rotation Students:

- Samantha Schaffner, Interdisciplinary Graduate Program (2022)
- Jillian Armenia, Interdisciplinary Graduate Program (2021)
- Nicholas Nelson, Biological Sciences (2021)
- David Gonzalez, Biological Sciences (2021)
- Dongsheng Han, Biological Sciences (2019)
- Kaitlyn Browning, Interdisciplinary Graduate Program (2019)
- Reyhaneh Tirgar, Biological Sciences (2018)
- Logan Richards, Interdisciplinary Graduate Program (2018)
- Souradip Das, Biological Sciences (2018)
- Kai Bracey, Interdisciplinary Graduate Program (2017)
- Alexander Munden, Interdisciplinary Graduate Program (2016)
- Mark Crowder, Interdisciplinary Graduate Program (2016)
- Cait Kirby, Biological Sciences (2015)

Ph.D. dissertation committees

- Brian Gitschlag, Biological Sciences (Patel lab 2016-2021)
- Jessica Abner - Biological Sciences (Webb and Patton labs 2016-2021)
- Jessie Perlmutter - Biological Sciences (Bordenstein lab 2016-2021)
- Scott Hinger - Biological Sciences (Patton lab 2016-2021)
- Dylan Shropshire - Biological Sciences (Bordenstein lab 2017-2021)
- Swetha Narasimhan – Biological Sciences (2017-2018)
- Boyang (Betty) Xie - Biological Sciences (Jackson lab 2017-2021)
- Mary Dear – Biological Sciences (Broadie lab 2017)
- Kerri-Ann Anderson – Biological Sciences (Friedman lab 2017-2018)
- Noah Bradley - Biological Sciences (Eichman lab 2018-2022)
- Alyssa Rodriguez - Biological Sciences (Eichman lab 2018-2021)
- James O'Connor – Cell and Developmental Biology (Page-McCaw lab 2018-2022)
- Taha Mohamed – Biochemistry (Cortez lab 2018- present)
- Marilyn Holt – Chemical & Physical Biology (Chazin lab 2018)
- Katrina Ngo - Biological Sciences (Friedman lab 2019-present)
- Katherine Amidon - Biological Sciences (Eichman lab 2019-2021)
- Andrew Siladi - Cell and Developmental Biology (Tansey lab 2019-present)
- James White - Cell and Developmental Biology (Page-McCaw lab 2019-present)
- Jonathan Davies - Biological Sciences (Plate lab 2018-present)
- Yelena Perevalova - Biochemistry (Merrikh lab 2019-2021)
- Aubrie Stricker - Cell and Developmental Biology (Page-McCaw lab 2017-2022)
- Remington Hoerr - Biological Sciences (Friedman lab 2016-2021)

- Vincent Yao - Cell and Developmental Biology (Tansey lab 2022-present)
- Anna Johnson - Biochemistry (Merrikh lab 2019-2021)

Mentorship in research courses

- BSCI3861, Directed Laboratory Research
- BSIC3961, Directed Laboratory Research
- BCB3201, Undergraduate research
- BCB4999, Undergraduate honors research

Graduate and postdoctoral fellowship mentoring

- Logan Richards, NIH F31 Fellowship, Role: Mentor

Service

Service to the Department of Biological Sciences

- Curriculum committee (2021-present)
- Department representative – IGP Admissions committee (2019)
- Graduate Admissions Committee, Biological Sciences (2017-2018)
- Departmental faculty seminar committee (2016)
- Participated in all BSCI faculty searches (2016-present); includes seminars, chalk talks, dinners and 1-on-1 meetings
- Hosted seven departmental seminar speakers (2016-present)
- Undergraduate major advising: nine current students (MCB/BCB/BSCI majors)
- Undergraduate honors committees: Lauren White, Sam Erlinger, Arrush Choudhary, Esther Liu, Anoop Vemulapalli, Zhang Rong (Mentor), David Fei-Zhang, Robert Clark, Melissa Goldin, Tara O'Shea (Mentor)
- Letters of recommendation for ~50 undergraduate students (medical and graduate school)

Service to the College of Arts and Science

- *ad hoc* reviewer; Graduate Student Summer Research Awards (2018)
- Panelist: Center for the Integration of Research Teaching and Learning – Evidence Based Teaching (2017)

Service to Vanderbilt University

- IGP Curriculum Committee (2019-present)
- Co-host Vanderbilt Discover Lecture – Terry Orr-Weaver (Whitehead Institute/MIT)
- Organizer of the DNA Damage and Replication meeting, bi-weekly meeting of 7 core labs across the University with interest in DNA damage and DNA replication

Service to the profession

- NSF Reviewer 2020
- *ad hoc* reviewer: *PLoS Biology*, *PLoS Genetics*, *PLoS Computational Biology*, *PNAS*, *Genetics*, *Developmental Dynamics*, *Bioinformatics*, *Science Advances*, *Bio-Protocols*, *eLife*, *Nature*, *Molecular Cell*
- *ad hoc grant* reviewer: NSF CAREER, Wellcome Trust
- Session chair: Eukaryotic DNA Replication and Genome Maintenance (2021)
- Session chair: Polyploidy in Organ Development, Repair, and Disease (2018)
- Member, Genetics Society of America (GSA)
- Member, American Association for the Advancement of Science (AAAS)