

Deborah M. Thurtle-Schmidt, Ph.D.
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CURRENT POSITION

2018 – present Visiting Assistant Professor of Biology, Davidson College

POSTDOCTORAL FELLOWSHIP

2017 - 2018 LSRF Postdoctoral Teaching Fellow, Davidson College
Principle Investigator: A. Malcolm Campbell
Investigations into a first-year CURE experience

2014 - 2018 LSRF Postdoctoral Fellow, University of California, San Francisco
Principal Investigator: Keith Yamamoto
Identification and characterization of boundary effectors to insulate nuclear receptor transcriptional regulation.

EDUCATION

2008 - 2014 University of California, Berkeley
Ph.D. in Molecular and Cell Biology
Thesis Adviser: Jasper Rine
Graduation date: May 16th, 2014
Research: Investigation of the molecular mechanism of regional silencing in *S. cerevisiae*.

2004 - 2008 Santa Clara University
B.S. in Biology, Minors in Chemistry and Biotechnology
Summa cum laude, GPA: 3.96/4.0

GRANTS, FELLOWSHIPS, AND AWARDS

2018 – present Life Sciences Research Foundation startup grant (\$10,000) – Award allocated from the LSRF to supplement startup funds.

Summer 2018 NSF REU Supplement Award (\$6,000) – Award to support a summer undergraduate intern at Davidson College to conduct research and present findings at the University of California, San Francisco.

December 2017 Mentoring Academy Travel Award (\$1800) – Award to attend the 2017 ASCB | EMBO meeting to present a poster and participate in the Mentoring Affairs Committee (MAC) programming.

2015-2018 Life Sciences Research Foundation Gordon and Betty Moore Postdoctoral Fellow (\$170,000 awarded over three years)

April 2016 American Society for Cell Biology Local Meeting Grant (\$1000) – Award to host a 1-day meeting on Scientific Teaching Professional Development for Postdoctoral Researchers

Deborah Thurtle-Schmidt, Curriculum Vitae

August 2015	American Cancer Society Postdoctoral Fellowship (\$163,500 awarded over three years – Declined)
2010-2013	National Science Foundation Graduate Fellow (\$126,000 awarded over three years)
August 2012	Poster Award (\$500), Yeast Genetics and Molecular Biology Meeting, Princeton, New Jersey
2007-2008	ALZA Corporation Science Scholar (\$10,000 awarded over two years) - Scholarship awarded to three Science undergraduates at Santa Clara University to support independent research.
April 2008	Carl H. Hayn Physics Prize (\$250) - Prize awarded annually to the most outstanding student in the introductory Physics for Scientists and Engineers I, II, and III sequence as selected by the faculty who teach the sequence.

PUBLICATIONS

1. **Thurtle-Schmidt DM** and Lo TW. Bioinformat-Eggs: An Education Primer for Use with “LIN-41 and OMA Ribonucleoprotein Complexes Mediate a Translation Repression-to-Activation Switch Controlling Oocyte Meiotic Maturation and the Oocyte-to-Embryo Transition in *Caenorhabditis elegans*”. *Genetics* (2018) 209(3):675-683.
2. **Thurtle-Schmidt DM** and Lo TW. Molecular Biology at the Cutting Edge: A Review on CRISPR/Cas9 Gene Editing for Undergraduates. *Biochemistry and Molecular Biology Education* (2018) 46(2):195-205.
3. **Thurtle-Schmidt DM**, Dodson AE and Rine J. Histone Deacetylases with Antagonistic Roles in *Saccharomyces cerevisiae* Heterochromatin Formation. *Genetics* (2016) 204(1):177-90. (Selected as a *Genetics* Issue Highlight for September 2016).
4. Ellahi A*, **Thurtle DM*** and Rine J. The Chromatin and Transcriptional Landscape to Native *Saccharomyces cerevisiae* Telomeres. *Genetics* (2015) 200(2):505-21. *These authors contributed equally to this work. (Selected as a *Genetics* Issue Highlight, Research Spotlight on *Saccharomyces* Genome Database).
5. **Thurtle DM** and Rine J. The Molecular Topography of the Yeast Silent Mating Loci. *Genes and Development* (2014) 28(3):245-58.
6. Teytelman L*, **Thurtle DM***, Rine J and van Oudenaarden A. Highly expressed loci are vulnerable to misleading ChIP localization of multiple unrelated proteins. *Proc Natl Acad Sci.* (2013) 110(46):18602-7. *These authors contributed equally to this work. (Research Highlight in *Nature Methods* 11, 9 2014).

TEACHING EXPERIENCE AND TRAINING

Fall 2018	BIO113 – Integrating Concepts in Biology I, Davidson College Taught the first course emphasizing the cell and molecular underpinnings of biology in an introductory biology series, incorporating active learning and an innovative research-based laboratory.
Summer 2018	ACS Teaching and Learning Workshop, Sewanee College. Attended a week-long workshop that featured microteaching experiences of presenting to peers at nearby institutions to receive feedback on one’s teaching.

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- Spring 2018 BIO/CSC209 – Bioinformatics Programming, Davidson College
Taught an interdisciplinary course cross listed with the computer science department that teaches introductory Python programming in the context of biological applications.
- August 2017 Elon Teaching & Learning Conference
Attended a one-day workshop on effective teaching at Elon University.
- April 2016 Co-Organizer of the *Bay Area Postdocs: Workshop on Scientific Teaching* at San Francisco State University (SFSU)
Co-authored a \$1,500 grant awarded by the American Society of Cell Biology (ASCB) and subsequently organized and lead a one-day workshop for Postdocs to provide professional development in *Scientific Teaching* principles.
- Spring 2015 Science Teaching Effectiveness for Upcoming Professors course, UCSF Office of Career and Professional Development.
Completed a 6-week, 18-hour pedagogical training course on the principles of evidenced-based teaching.
- July 2013 Introduction to Python Programming, Instructor, UC Berkeley
Co-taught and designed the lectures for a 2-week intensive “boot camp” introduction to Python programming for graduate students and postdocs.
- July 2012 Introduction to Python Programming, Teaching Assistant, UC Berkeley
Answered questions and assisted students in a 2-week intensive “boot camp” introduction to Python programming for graduate students and postdocs.
- Spring 2011 MCB140L Genetics Lab, UC Berkeley, Department of Molecular and Cell Biology
Led two lab sections, graded lab reports, and held office hours for the undergraduate biology major genetics lab course.
- Fall 2009 MCB104 Survey of Genetics, Genomics, and Cell Biology, UC Berkeley, Department of Molecular and Cell Biology
Led two weekly discussion sections, designed weekly quizzes, graded exams, and held office hours for a course consisting of junior and senior biology majors.

MENTORSHIP

- Fall 2018 Mentoring three undergraduates, Alex Sinks, Wufan Zhao, and Noa Schork, for an Independent Study to conduct research in my lab during the Fall 2018 semester at Davidson College.
- Summer 2018 Mentored Alex Sinks for a 9-week summer research internship at Davidson College where he conducted RNA-seq analysis of CRISPR/Cas9 generated mutants in *C. elegans* and presented his work to the Yamamoto lab at UCSF.
- July 2016 Mentored a high-school summer intern, Lisette Werba, who designed and cloned constructs to express the Glucocorticoid Receptor in *C. elegans*.
- Fall 2013 Mentored a first-year graduate student, Kelsey Van Dalfsen, in the Molecular and Cell Biology program at UC Berkeley in a 10-week rotation. I devised an independent project for Kelsey examining the role of the Origin Recognition Complex in Sir-protein silencing.

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- Summer 2011 Mentored a summer undergraduate research intern, Gavin Schlissel, for 8 weeks. I devised an independent project for Gavin to examine the dependence of a Histone Acetylase on Sir2 catalytic activity in silencing.
- Fall 2010 Mentored a first-year UC Berkeley Molecular and Cell Biology graduate student, Anne Dodson, for a 10-week rotation investigating Sir2 catalytic activity in silencing.
- Spring 2009 Mentored a first-year UC Berkeley Molecular and Cell Biology graduate student, Adam Session, for a 10-week rotation where he created and designed strains to investigate Sir2 catalytic activity in silencing.

SERVICE, LEADERSHIP, AND PROFESSIONAL DEVELOPMENT

- October 2018 Review panelist for NSF REU applications.
- 2018 – Present Organize and lead P.I.E (Professional Idea Exchange). P.I.E. is a college-wide group where faculty meet regularly throughout the semester to discuss teaching and other professional responsibilities.
- 2018 – Present Co-founder of BioSphere, a departmental initiative to build community between students and biology faculty.
- 2018 – Present Co-faculty advisor of PODS (Pre-Phds of Davidson Science). Advise a student-led group to lead panels and other informative events about research and graduate school for students in STEM.
- May 2016 Facilitator for the Science Leadership and Management Skills Course, Gladstone Institute and UCSF Office of Career and Professional Development
Facilitated breakout sessions for the SL&M course, which trains Postdocs and early career Investigators in strategies to lead an effective research group.
- 2015 - 2016 MIND Program Peer Facilitator, UCSF Office of Career and Professional Development
Facilitated Bi-Weekly discussion groups for the *Motivating Informed Decisions* (MIND) Program, which provides support for Postdocs and Graduate students in the biomedical sciences exploring different career options.
- 2011 - 2012 MCB Graduate Student Organization President, UC Berkeley
Elected by the MCB graduate students of UC Berkeley to organize the MCB GSO officers, elections for MCB GSO positions and workshops, such as an NSF graduate research fellowship workshop for first and second year students.
- 2011- 2012 Genetics, Genomics and Development Department Divisional Representative, Department of Molecular and Cell Biology, UC Berkeley
Elected by the MCB graduate students of UC Berkeley to attend and participate in the monthly Genetics, Genomics and Development faculty meetings.
- January 2010 Meeting Organizer for the Bay Area Yeast and other Fungi Symposium.
Responsibilities: Invited all the speakers from across Bay Area Campuses and an outside Keynote speaker, organized the venue, catering, and funding for this twice-yearly meeting.

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2009-2011 Marian E. Koshland Seminar Series Organizer, UC Berkeley
Elected by the MCB graduate students of UC Berkeley to invite and organize the visit of student-nominated speakers to UC Berkeley

PRESENTATIONS

December 2017 American Society for Cell Biology Meeting – Philadelphia, PA
Poster presentation: “CUREs for Everyone: Introductory Biology Lab Converted to Research Experience”
Poster presentation: “Dissection of NHR-25 Tissue-Specific Regulatory Networks”

June 2017 International *C. elegans* Meeting – Los Angeles, CA
Poster presentation: “Dissection of NHR-25 Tissue-Specific Regulatory Networks”

June 2015 International *C. elegans* Meeting – Los Angeles, CA
Poster presentation: “Insulation of Nuclear Receptor Gene Regulation by Boundary Effectors”

July 2013 Gordon Research Conference on Epigenetics, Poster Presentation
Poster presentation: “A Silenced Chromatin Superstructure Revealed by High-Resolution Analysis of Yeast Silent Chromatin”

August 2012 Yeast Genetics and Molecular Biology Meeting- Princeton, New Jersey
Poster presentation: “Refinement of the *S. cerevisiae* Silencing Model: Chromatin Architecture in High-Resolution”

January 2012 Keystone Symposia on Epigenomics — Keystone, CO
Poster presentation: “Refinement of the *S. cerevisiae* Silencing Model: Chromatin Architecture in High-Resolution”

August 2010 Yeast Genetics and Molecular Biology Meeting- Vancouver, Canada
Oral presentation: “Re-Investigating the Traditional Silencing Model: Silencing in High-Definition”