Tamar D. Resnick

University of Minnesota, Twin Cities
Department of Biology Teaching and Learning
3-154 MCB
420 Washington Ave SE
Minneapolis, MN 55455
resni030@umn.edu

Education

Massachusetts Institute of Technology Cambridge, MA
Doctor of Philosophy in Biology
Thesis: The Role of the Chromosomal Passenger Complex and Condensin Complex in Meiotic Chromosome Cohesion and Segregation. May 2007

Portland State University Portland, OR
Practicum in Science Education: Service Learning. 2000-2001

Brown University Providence, RI
Bachelor of Science with honors, Biology – Cell and Molecular Biology
Thesis: Structure and Function of CCT1 Helical Protrusion in Yeast. May 2000

Research Experience

University of Minnesota, Genetics, Cell Biology, and Development Minneapolis, MN
Laboratory of Dr. Ann E. Rougvie
Investigated the regulation of the conserved *let-7* family of microRNAs in developmental timing in *C. elegans*, using genetic and molecular techniques. 2007- 2014

Whitehead Institute, MIT Department of Biology Cambridge, MA
Laboratory of Dr. Terry Orr-Weaver
Discovered mechanisms of developmental regulation of chromosome condensation and segregation in meiosis and the non-canonical embryonic cell cycles in Drosophila. 2002- 2007

Brown University, Department of Biology Providence, RI
Laboratory of Dr. Jörg Martin, currently at Max-Planck-Institut für Entwicklungsbiologie
Explored the structure and function of chaperones that facilitate protein folding in *S. cerevisiae.*
Designed, generated, analyzed mutations in the CCT1 helical loop region. 1999- 2000

Waisman Center of Mental Retardation and Human Development, University of Wisconsin – Madison Madison, WI
Laboratory of Dr. Jon A. Wolff, Supervisor: Dr. Hans Herweijer
Designed/generated gene expression vectors, analyzed their expression. Summers 1997, 1998

Teaching/ Professional Education Experience

University of Minnesota Minneapolis, MN
Department of Biology Teaching and Learning
Teaching Assistant Professor 2014-Present
co-Director of Undergraduate Studies, Biology Major 2018-Present

Foundations of Biology, Part II (Biol 2003)
Taught cell biology portion of introductory series for biology majors. Fall 2015 (218 students), Fall 2016 (161 students), Spring 2017 (78 students), Fall 2017 (239 students), Spring 2018 (91 students), Fall 2018 (124 students), Spring 2019 (63 students)

General Biology (Biol 1009)
Introductory biology survey course for students from other colleges. Spring 2016 (127 students), Fall 2016 (269 students), Spring 2017 (111 students), Fall 2017 (282 students), Fall 2018 (309 students)

St. Olaf College Northfield, MN
Visiting Assistant Professor

Cell Biology and Genetics (Biology 125)
Introductory cell and molecular biology course for biology majors, lecture and lab. Fall 2011

Biology of Women (Biology 124)
Intensive month-long course for biology majors and non-majors. January 2012

University of Minnesota Minneapolis, MN
Guest Lecturer and Research Liaison for Foundations of Biology lab course (Biol 2004)
Provided background and context, research expertise and resources for laboratory course in which students had authentic research experience with developmental timing genes. 2010-2012

Undergraduate Research Assistant Supervisor
Directed five undergraduate students in independent research projects and other work including writing research proposals and presenting posters. 2009-2013

MIT Department of Biology Cambridge, MA
Undergraduate Research Assistant Supervisor
Directed undergraduate student in analysis of cell cycle regulatory mutations. 2006

Teaching Assistant – Introductory Biology (Biology 7.013) 2005

Tutor – Graduate Genetics (Biology 7.52) 2003-2005

Teaching Assistant – Graduate Genetics (Biology 7.52) 2002

Youth Involvement Network of Oregon Portland, OR
AmeriCorps Service Learning Coordinator
Worked as service learning curriculum specialist in Colton Middle School, designed hands-on projects that integrated into curriculum, trained teachers in service learning. 2000-2001

Professional Development in Education

HHMI Faculty Fellows for Inclusive Excellence program
Senior Fellow for Inclusive Excellence. Analyzed student demographic and academic data to with a focus on first-generation student in CBS. Worked collaboratively with Peter Kennedy on an exploration of student attitudes about class participation by gender. Minneapolis, MN 2018.

Society for the Advancement of Biology Education Research National Meeting
Participated in national meeting on evidenced-based teaching. Minneapolis, MN 2018

HHMI Faculty Fellows for Inclusive Excellence program
Participated in series of seven workshops around topics of diversity and inclusion. Developed an independent project on first-generation and low-income college students, focused on incorporating teaching practices that decreases obstacles disproportionately experienced by these student populations. Minneapolis, MN 2016-2017.

Society for the Advancement of Biology Education Research National Meeting
Participated in national meeting on evidenced-based teaching. Minneapolis, MN 2018

National Academies NorthStar Summer Institute for Undergraduate Biology Education
Engaged in week-long training program sponsored by National Academies of Science and Howard Hughes Medical Institute. Trained in active learning, assessment, and diversity; worked on a team to develop a teachable unit based on these themes. Minneapolis, MN 2013.

Academy of Distinguished Teachers Conference
Conference theme: *Teaching & Learning in a Changed World* University of Minnesota, 2011.

Participant in seminars in course design and student engagement
Attended Center for Teaching and Learning *Just in Time Teaching* workshop series and *Preparing Future Faculty* workshops. University of Minnesota 2008-2012.

Publications

TD Resnick, B Werre*, E Porter*, D Hernandez Aquino*, A Frand, AE Rougvie. *Regulatory elements of the mir-241/mir-48 locus in C. elegans developmental timing.* (in preparation)
*indicates undergraduate student

S Katz, V Meli, G Monsalve, H Maul-Newby, I Kasgarli, **T Resnick**, J Yochem, D Fay, A Frand. *C. elegans FBN-1 is an apical ECM protein essential for epidermal morphogenesis and tensional integrity during molting.* (submitted)

TD Resnick, KA McCulloch, AE Rougvie. *miRNAs give worms the time of their lives: small RNAs and temporal control in Caenorhabditis elegans,* Dev Dyn. 2010 May; 239(5):1477-89.

TD Resnick, KJ Dej, Y Xiang, RS Hawley, C Ahn, TL Orr-Weaver. *Mutations in the chromosomal passenger complex and the condensin complex differentially affect synaptonemal complex disassembly and metaphase I configuration in Drosophila female meiosis,* Genetics. 2009 Mar; 181(3):875-87.

TD Resnick, DL Satinover, F MacIsaac, T Stukenberg, WC Earnshaw, TL Orr-Weaver, M Carmena. *INCENP and Aurora B promote meiotic sister-chromatid cohesion through localization of the Shugoshin MEI-S332 in Drosophila*, Dev Cell. 2006 Jul; 11(1):57-68.

Presentations

Poster: *An examination of achievement of first generation college students and other demographic groups in introductory biology courses at the University of Minnesota,* **TD Resnick**. HHMI Faculty Fellows for Inclusive Excellence Poster Session, Minneapolis, MN, January 2019.

Poster: *Gender effects on undergraduate biology classroom engagement dynamics,* P Kennedy and **TD Resnick**. HHMI Faculty Fellows for Inclusive Excellence Poster Session, Minneapolis, MN, January 2019.

Seminar: *Evidence and Innovation in Undergraduate Biology Education,* **TD Resnick**. Terry Orr-Weaver Retirement Symposium, Whitehead Institute for Biomedical Research, Cambridge, MA, September 2018.

Poster: *Pre-class assignment completion in a high-enrollment introductory biology course correlates with exam performance in students of all ability levels,* **TD Resnick** and D Baltz. Society for Developmental Biology Annual Meeting, Minneapolis, MN, July 2017.

Poster: *Regulation of the mir-241/mir-48 locus in C. elegans developmental timing,* **T. Resnick**, B. Werre, E. Porter, D. Hernandez Aquino, A. Rougvie. Developmental Biology Symposium, Minneapolis, MN. September 2013.

Seminar: *Regulation & function of mir-48/241 in developmental timing,* **T. Resnick,** B. Werre, E. Porter, D. Hernandez, A. Rougvie. Frand lab, UCLA, Los Angeles, CA. February 2013.

Poster: *Regulation and function of the let-7-related miRNA miR-48 in developmental timing,* **T. Resnick**, B. Werre, A. Rougvie. 18th International *C. elegans* Meeting, Los Angeles, CA. June 2011.

Poster: *Regulation and Function of the let-7-related miRNA miR-48 in Developmental Timing*, **T. Resnick**, T. Edelman, A. Rougvie. Aging, Metabolism, Stress, Pathogenesis, and Small RNAs in *C. elegans*, Madison, WI. August 2010.

Poster: *Developmental timing genes identified through miRNA suppressor screens in C. elegans*. **T. Resnick**, S. Malmquist, A. Rougvie. Society for Developmental Biology Meeting, San Francisco, CA. July 2009.

Seminar: *miRNA Regulation and Function in Developmental Timing,* **T. Resnick**, A. Rougvie. Developmental Biology Center Research Meeting, St Paul, MN. May 2009.

Poster: *Identification of heterochronic genes through miRNA suppressor screens,* **T. Resnick**, S. Malmquist, A. Rougvie. Developmental Timing Conference, Janelia Farm Research Campus, Ashburn, VA. May 2008

Platform Talk: *An essential meiotic function for the INCENP chromosome passenger protein in sister-chromatid cohesion*, **T. Resnick**, D. Satinover, F. MacIsaac, T. Stukenberg, W. Earnshaw, T. Orr-Weaver, M. Carmena. Drosophila Research Conference, Houston, TX. March 2006

Poster: *Drosophila mutants affecting the completion of meiosis and restart of the cell cycle: INCENP's role in meiosis and sister-chromatid cohesion*, **T. Resnick**, L. Lee, I. Ivanovska, J. Pesin, T. Orr-Weaver. Gordon Research Conference on Chromosome Dynamics, New London, NH. August 2005

Poster: *Regulation of the Completion of Meiosis and Restart of the Cell Cycle in Drosophila Embryos*, **T. Resnick**, L. Lee, I. Ivanovska, J. Pesin, T. Orr-Weaver. Cell Cycle Meeting, Cold Spring Harbor, NY. May 2004

Service and Outreach

co-Director of Undergraduate Studies, Biology major 2018-Present
Reviewer of Undergraduate Honors Theses, 2009, 2017, 2019
PULSE mini-workshop discussion leader on active learning classes, 2016
STE(A)M Education Day presenter, Lake Harriet Community School, 2014-2018
Peer Review Board member, Journal of Visualized Experiments, 2011-Present
Whitehead Institute Educational Partners Program participant, 2004-2007
Drosophila/Cell Cycle Laboratory Demonstrations, 2004-2006

Honors and Awards

Golden Pipette Award winner – Most Engaging Professor, Lower Division, 2017
National Institutes of Health NRSA Fellowship, 2009-2011
College of Biological Sciences Developmental Biology Fellowship, 2008-2009
Anna Fuller Graduate Fellowship, 2005-2006
Harvey Lodish Service Award, 2006
Presidential Fellowship, MIT 2001-2002
William Gaston Prize for Academic Excellence in Biological Sciences, 2000
Sigma Xi, Scientific Research Honor Society, member 1998
Hypatia Mathematics Examination winner, Brown University 1996
Upper Midwest Scholar, Brown University 1996-1998