

Tamar D. Resnick

University of Minnesota
Department of Biology Teaching and Learning
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Education **Massachusetts Institute of Technology** Cambridge, MA
Doctor of Philosophy in Biology. September 2001-May 2007
Thesis: The Role of the Chromosomal Passenger Complex and Condensin Complex in Meiotic Chromosome Cohesion and Segregation. May 2007

Portland State University Portland, OR
One-year 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
Investigating the regulation of developmental timing in *C. elegans* using genetic and molecular techniques, with a focus on the conserved *let-7* family of microRNAs. Approaches include genetic suppressor screens, and analysis of *cis*-regulatory elements and candidate *trans*-acting factors in temporal control of *mir-241* and *mir-48* expression. September 2007-August 2014

Whitehead Institute, MIT Department of Biology Cambridge, MA
Laboratory of Dr. Terry Orr-Weaver
Discovered developmental modifications made to regulation of chromosome condensation and segregation in *Drosophila melanogaster*, in meiotic germline cells and rapidly dividing cells of the early embryo, using genetic assays, imaging of cells in dissected tissues, and other cell and molecular biology approaches. May 2002-June 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. June 1999-May 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, currently at Mirus Corporation
Designed/generated gene expression vectors, analyzed their expression. Summers 1997, 1998

Teaching Experience **University of Minnesota** Minneapolis, MN
Department of Biology Teaching and Learning
Teaching Assistant Professor
Observing, assisting in Foundations courses, preparing for teaching. September 2014-Present

St. Olaf College Northfield, MN
Visiting Assistant Professor
Cell Biology and Genetics (Biology 125)
Taught introductory class for biology majors, including three hours of lecture and two sections of a three-hour lab per week. Fall 2011
Biology of Women (Biology 124)
Taught intensive course on the Biology of Women for biology majors and non-majors, including 13.3 hours of lecture, discussion, and active learning per week. January 2012

University of Minnesota Minneapolis, MN
Guest Lecturer and Research Liaison for Foundations of Biology lab course (Biology 2004)
Acted as liaison to laboratory class performing yeast two-hybrid screens with developmental-timing proteins, assisted with experimental design and data analysis. Lectured periodically on *C. elegans*, developmental timing, analysis of data sets. Provided worm strains and observation guides for introduction to developmental timing defects. 2010-2012

Undergraduate Research Assistant Supervisor
Directing undergraduate students in developing *C. elegans* strains and genetic constructs, and in analysis of heterochronic genes. Supervising student work including writing of research proposals and presenting of posters. 2011-2013, summers 2009, 2010

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

Teaching Assistant – Introductory Biology (Biology 7.013)
Wrote and graded exams, prepared and ran four recitations per week, wrote problem sets, worked individually with students. Spring 2005

Tutor – Graduate Genetics (Biology 7.52)
Met weekly with students to review class material and problem sets. Fall semesters 2003-2005

Teaching Assistant – Graduate Genetics (Biology 7.52)
Wrote and graded exams, prepared and ran two recitations per week, wrote problem sets, worked individually with students. Fall 2002

Whitehead Institute for Biomedical Research Cambridge, MA
Whitehead Educational Partners Program participant
Met monthly with high school teachers to discuss research topics to be incorporated into high school science classes and science fair research projects. 2004-2007

Drosophila/Cell Cycle Laboratory Demonstrations
Designed and facilitated demonstrations and active learning stations for area high school students focusing on research topics and techniques. 2004-2006

Youth Involvement Network of Oregon Portland, OR
AmeriCorps Service Learning Coordinator
Worked as full-time service learning curriculum specialist in Colton Middle School, designed projects that incorporated academic benchmarks with hands-on projects in environmental, biological, and social science issues, trained teachers in service learning. 2000-2001

Professional Development in Education **Society for the Advancement of Biology Education Research National Meeting**
Participated in sessions focused on generation and implementation of evidence-based teaching methods. Minneapolis, MN July 2014

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 July 2013.

Academy of Distinguished Teachers Conference
Participated in day-long conference around theme of *Teaching & Learning in a Changed World* University of Minnesota, April 2011.

Participant in seminars in course design and student engagement
Attending 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: *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 Peer Review Board member, Journal of Visualized Experiments, 2011-Present
Reviewer of Undergraduate Honors Theses, April 2009

Honors and Awards 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