

# Katherine Erickson

• [katherineerickson.com](http://katherineerickson.com)

• [github.com/katur](https://github.com/katur)

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**Skills** Django, Python, Java, SQL, database design, HTML, CSS,  $\text{\LaTeX}$ , git (all in OS X or Linux)

**Dabblings** JavaScript, jQuery, C, R, ML, PHP

**M.S. in Computer Science** New York University, current (expected graduation 2015), 4.0 GPA

**B.A.** Oberlin College, 2006, Biology and Cinema Studies majors, Chemistry minor, 3.88 GPA

- Highest Honors in Biology, Phi Beta Kappa Honor Society, and Sigma Xi Scientific Research Society
- Merit Scholarships: John Oberlin, Robert B. and Sophia Whiteside, National Merit
- Biology Prizes: Leo S. Millar, Hope Hibbard, Florence Burger

**H.S. Diploma** East High School, Duluth, MN, 2002, 4.0 GPA, Valedictorian (shared)

**GRE** 2011, Quantitative 800/800, Verbal 780/800, Analytical Writing 5.5/6

## Employment

**Assistant Research Scientist** *Labs of Drs. Fabio Piano and Kris Gunsalus, NYU Center for Genomics and Systems Biology (2009-present)*

Engineered Django-based interfaces (from database design to front-end design) to record, analyze, and present data for research projects, totaling millions of experiments, and often requiring cleaning years of previously acquired data. Created user-friendly web tools to organize the lab's stocks and strains, saving lab members time and money. See code, schemas, and screenshots at [katherineerickson.com](http://katherineerickson.com).

Also assisted with benchwork, experiment design, and biological analysis of genome-scale screen using pairwise gene knockdowns to uncover genetic interactions in *Caenorhabditis elegans* early embryogenesis.

**Client Service Coordinator** *H&R Block, Washington, DC (2009)*

Sole secretary and receptionist for a large office during tax season. Managed 6 phone lines, scheduled appointments, processed tax returns, addressed clients' issues, proctored exams, and earned tax preparation certificate.

**Deli Manager and Cook** *Sticky Fingers Bakery, Washington, DC (2007-2008)*

Managed deli production and inventory, developed recipes, and cooked at an all-vegan bakery.

**Research Technician and Assistant** *Lab of Dr. Taylor Allen, Oberlin College Biology Department (2005-2007)*

Mapped and characterized suppressor mutations to reveal interactions within and between muscle proteins in *C. elegans*. Wrote honors thesis about the project, and presented findings at international scientific meetings.

**Prior Job Experience** Support Staff at home for women with schizophrenia. Dietary Aide and dishwasher at assisted living home. Many years of early morning newspaper delivery.

## Other Experiences

**Bicycle Touring** Organized and conducted self-supported tours coast-to-coast across the Southern United States, along the Mississippi River, circumnavigating Lake Superior, and from Portland to San Francisco.

**Steel Drums** Competed with 100-member NY Pan Sonatas in five NYC Panorama competitions (3 wins). Played and toured with Oberlin's student-run steel drum band, and taught a course for college and high school students.

**Wildlife Conservation** Built WordPress site for a birder's conservation project. Documented roadkill on cross-country trip to encourage responsible driving. Helped rehab birds and small mammals throughout childhood.

**Food Coops** As member of Oberlin Student Cooperative Organization, mediated 60-person discussions as Discussion and Loose Ends Coordinator; served as Treasurer, bread baker, and pizza maker; and survived four years in the vegan, no-sugar, at-least-half-whole-wheat coop. Current member of the Park Slope Food Coop.

## Publications, Abstracts, Presentations

- White AG, Lees B, Kao HL, Cipriani PG, Munarriz E, Paaby A, Erickson K, Guzman S, Rattanakorn K, Sontag E, Geiger D, Gunsalus KC, Piano F. DevStaR: High-throughput quantification of *C. elegans* developmental stages, IEEE TMI, 2013.
- 16th International *C. elegans* Meeting, UCLA, June 2007. Abstract/Poster: “Reversion Analysis with *unc-54* and *unc-90* Mutants Reveals Paths of Communication within Myosin and within Its Regulatory System.”
- 51st Annual Biophysical Society Meeting, Baltimore, March 2007. Abstract/Poster: “Communication within Myosin and between It and Troponin.”
- Undergraduate Honors Thesis and Presentation, 2006: “Interactions Made by Myosin and by Troponin-T: Genetic Suppressor Analysis.”
- 50th Annual Biophysical Society Meeting, Salt Lake City, March 2006. Abstract/Poster: “Interactions Made by Myosin and by Troponin-T: Genetic Suppressor Analysis.”
- 15th International *C. elegans* Meeting, UCLA, June 2005. Abstracts/Posters: “Novel Domains of the Muscle Regulatory Protein Troponin-T and Their Roles” and “Design and Efficacy of Two Investigative, Physiological Projects Using *C. elegans*.”