

Caitlin Pozmanter

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Education

Johns Hopkins University 2014-present
Baltimore, MD

Ph.D. Cellular, Molecular, and Developmental Biology and Biophysics

McDaniel College 2008-2012

Westminster, MD

BA Biology, specialization in molecular biology

Cum Laude with honors in biology

Research Experience

PhD Candidate (Johns Hopkins) 2014-present

Principle Investigator: Mark Van Doren Ph.D

Topic: Characterization of Tudor5-prime, a tudor domain protein with putative function in germ cell RNA granules.

Research Technician (Stony Brook University) 2012-2014

Principle Investigator: Steven Glynn Ph.D

Topic: Mitochondrial AAA proteins

- Studied the structure and function of mitochondrial AAA proteins through x-ray crystallography, and various biochemical assays
- Trained graduate students and was a mentor for undergraduates and a masters student

Undergraduate Research Student (McDaniel) 2009-2011

Principle Investigator: Susan Parrish Ph.D

Topic: mRNA decapping enzymes in *Dictyostelium discoideum*

- Cloning and biochemical characterization of *D. discoideum* DDB_G0278957

Genomics Education Partnership Research (McDaniel) 2011

Principle Investigator: Susan Parrish Ph.D

Topic: Annotation of regions of the *Drosophila erecta* and *Drosophila mojavensis* 3L chromosomes

- For the lab component of the Genomics course we participated in the genomics education partnership (GEP) Specifically I annotated segments of the *D. erecta* and *D. mojavensis* 3L chromosomes

Teaching Experience

Adjunct Lecturer (McDaniel College) 2016, 2019
Designed an upper level course on RNA biology

Instructor (Johns Hopkins) 2018
Taught an intersession course titled "Introductory RNA seq analysis using R"

Teaching Assistant (Johns Hopkins) 2015-2016
Genetics lab and Developmental biology lab

Genomics Classroom Assistant (McDaniel) 2012
Assisted genomics students with their GEP annotation projects and tutored students prior to exams

Tutor for Student Academic Support Services (McDaniel) 2011-2012
Cell Biology, Organic Chemistry, Introduction to Chemistry, Basic Algebra, and Forensic Chemistry

Scientific Publications

Hong Zhou, Cale Whitworth, Caitlin Pozmanter, Megan C. Neville, Mark Van Doren (2018). "fruitless functions downstream of doublesex to promote sexual dimorphism of the gonad stem cell niche" bioRxiv

Shekerah Primus, Caitlin Pozmanter, Kelly Baxter, and Mark Van Doren. (2018) "*tudor-domain containing protein 5-prime* promotes male sexual identity in the *Drosophila* germline and is repressed in females by *Sex lethal*" in review at *Plos genetics*

Jing Xie , Matthew Wooten, Vuong Tran , Bi-Chang Chen , Caitlin Pozmanter , Christine Simbolon , Eric Betzig, Xin Chen (2015) "Histone H3 Threonine 3 Phosphorylation Regulates Asymmetric Histone Inheritance in the *Drosophila* Male Germline" Cell.

Leung, W, ...[Pozmanter, C,... Parrish, S],...Elgin, SCR (2015) "The *Drosophila* Muller F elements maintain a distinct set of genomic properties over 40 million years of evolution." G3: GENES, GENOMES, GENETICS. [Total 940 student co-authors, 74 faculty co-authors.]

Scientific Presentations

Caitlin Pozmanter*, Shekerah Primus, Mark Van Doren. 2018. TDRD5P promotes germline differentiation through post-transcriptional regulation in cytoplasmic RNA granules. *59th annual Drosophila research conference*. Philadelphia, PA. Talk

Binglin Chen*, **Caitlin Pozmanter**, Mark Van Doren. 2017. Functional analysis of sexually dimorphic long noncoding RNAs in the *Drosophila* germline. *20th Annual Undergraduate Research symposium in the Chemical and Biological Sciences*. University of Maryland Baltimore County MD. Poster

- Binglin was an undergraduate I mentored. Her poster won 2nd place in the biochemical sciences category

Caitlin Pozmanter*, Shekerah Primus, Mark Van Doren. 2017. TDRD5P, a component of cytoplasmic processing bodies promotes male germline sexual identity. *58th annual Drosophila research conference*. San Diego CA. Talk

Caitlin Pozmanter*, Mark Van Doren. 2017 *tudor5-prime* regulates sex determination and germline differentiation in *Drosophila*. McDaniel College Biology seminar. Westminster MD. Invited Talk

Caitlin Pozmanter*, Shekerah Primus, and Mark Van Doren. 2016. The novel tudor-domain containing protein TDRD5P regulates male germline sexual identity. *57th annual Drosophila research conference*. Orlando FL. Poster

Anna Kokubu*, **Caitlin Pozmanter**, and Susan Parrish. 2014. Expression and purification of *Dictyostelium discoideum* DDB_G0278957 protein, a putative mRNA decapping enzyme. *17th Annual Undergraduate Research symposium in the Chemical and Biological Sciences*. University of Maryland Baltimore County MD. Poster

Hui Shi, Anthony J. Rampello*, **Caitlin Pozmanter***, Steven E. Glynn. 2014. Defining the Rules of Substrate Recognition by a Reengineered AAA+ Protease. 2014 Department of Biochemistry and Cell Biology Retreat. Stony Brook, NY. Poster

C. Pozmanter*, K. Moran, and S. Parrish. 2011. Cloning and Biochemical Characterization of *Dictyostelium discoideum* DDB_G0278957, a Putative mRNA Decapping Enzyme. *14th Annual Undergraduate Research symposium in the Chemical and Biological Sciences*. University of Maryland Baltimore County, MD. Poster

*denotes presenter

Awards, Honors, and Grants

National Science Foundation Graduate Research Fellow	2016-2019
Victor Corces award for excellence in teaching (genetics)	2016
Cum Laude	2012
College Scholar	2012
Case Award for Excellence in Scholarly Research	2011
Who's Who in American Colleges and Universities	2011, 2012
Centennial Conference Winter Honor Roll	2010-2012
Member of Academic all America Swim Team	2010-2012
McDaniel College Phenomenal Women Nominee	2012
Dean's List: Honors	2011

Dean's List: Highest Honors	2008, 2012
Honors Program	2008-2012
Beta Beta Beta: <i>national biology honors society</i>	2009-2012
Gamma Sigma Epsilon: <i>national chemistry honors society</i>	2011-2012
Omicron Delta Kappa: <i>national leadership honors society</i>	2011-2012
Alumni Leadership Program for Seniors	2011-2012

Science Outreach, and Departmental service

Coordinator for CMDB 1 st year big sib/little sib mentor program	2018-present
Dept advocate at the Celebrate Life Sciences fair for Congress	2018
Thomas Hunt Morgan Award Committee	2016-present
Class representative to CMDB program administration	2014-present
Mentoring to Inspire Diversity in Science	2014-present
NSF Research Experience for undergrads mentor coordinator	2015-present

Professional Societies

Genetics Society of America	2016-present
RNA Society	2018-present