

ANGELINA VELAZQUEZ

• Biologist • avelazquez [at] ucmerced [dot] edu

EDUCATION

- Conferred 8/2014** **MS, Biology**
California State University, Fresno
Thesis title: Effects of octopamine on the locomotion of BMAA treated and untreated Drosophila melanogaster
- Conferred 12/2009** **BS, Biological Sciences**
University of California, Merced
Emphasis: BIOS-Cell Biol/Development

PROFESSIONAL & TEACHING EXPERIENCE

- Fall 2018** **Chairperson Science Department & Science Instructor**
Central Catholic High School, Modesto, California
• Was responsible for teaching the following courses: Applied Science and Engineering, Honors Astronomy, Honors Chemistry, and General Chemistry. Also Monitored a Home Room.
- 05/2016 to 08/2018** **Biology Adjunct Instructor**
Merced Community College District, at both Merced and Los Banos, California
• I was responsible for providing lecture and laboratory material to undergraduate students.
• Monitored students during laboratory sessions and maintained a safe environment by ensuring that students followed proper laboratory procedures and safety regulations.
• Wrote and graded quizzes, exams, and assignments
- 01/2015 to 05/2015** **Lecturer for BIO 001 Contemporary Biology**
University of California Merced, Merced, California
• Assisted in teaching four laboratory sessions for undergraduate students.
• Also responsible for running two discussion sessions for students taking the lecture portion of the course.
• Helped in writing discussion quizzes.
• Proctored lecture exams, reviewed and graded student work, and provided feedback.
• Provided office hours to hear students' questions and comments.
- 10/2012 to 08/2014** **MS, California State University Fresno**
Biology Department
Advisers Dr. David Lent & Dr. Ulrike Muller
Thesis Title: Effects of octopamine on the locomotion of BMAA treated and untreated Drosophila melanogaster

- Techniques employed: fly handling and care, recording of fly locomotor activity, video analysis (VirtualDub, Ctrax, and FixErrors Matlab GUI), and statistical analysis (using R).
- Trained and mentored both undergraduate and graduate students, who were trained in proper maintenance and care of fly stocks along with basic laboratory techniques.

06/2013 to 08/2013

Fresno State Cancer Scholar

Sanford Burnham Medical Research, La Jolla, California

Adviser Dr. Pellechia and Dr. Barile

Used NMR spectroscopy to identify protein-ligand interactions and select the best ligand candidates for synthesis and further testing.

08/2010 to 10/2012

Graduate Student,

California State University Fresno, Fresno, California

Adviser Dr. Rawat

- I worked in a molecular microbiology laboratory on a RNA and protein project.
- I also had the opportunity to train and mentor undergraduate students in molecular laboratory techniques.
- The RNA project involved extraction of RNA from *Staphylococcus aureus* to study gene expression.
- Protein extracts were used to isolate redox proteins reduced by glutathione with the aid of a glutathione agarose column.

08/2010 to 05/2011

Teaching Assistantship

California State University Fresno, Fresno, California

- Responsible for BIOL 10 Life Science Laboratory, teaching to non-major undergraduate students.
- Helped in writing laboratory quizzes and exams.
- Proctored lecture exams for mid and final semester terms.
- Reviewed and graded student work and provided feedback.

05/2008 to 08/2008

Geobiology REU

University of Southern California, Los Angeles, and Catalina Island, California

Adviser Dr. Andrew Gracey

- Studied the genetic response of three populations of California ribbed mussel *Mytilus californianus*.
- Results of the experiment showed that each population's genetic response to identical heat exposure conditions varied highly in the induction of crystallin genes, but none of the results were statistically significant.
- Techniques used: sequencing of crystallin genes, cDNA cloning, Qiagen Mini-Prep DNA extraction, sample collection for heat experiment, dissection of gill tissue, RNA prep, and qPCR.

01/2007 to 05/2008

Research Assistant

University of California Merced, Merced, California

Adviser Dr. Monica Medina

- I worked on the isolation of DNA and the amplification of calcification genes by performing various regular polymerase chain reactions (PCRs) as well as long PCRs

05/2007 to 08/2007

AGEP Student Intern

University of California Merced, Merced, California

Adviser Dr. Monica Medina

- Investigated the evolution of shell loss in Opisthobranch Gastropods by using genetic techniques to analyze morphological homoplasy, during the development of the sea hares under investigation.
- The goal was to study the molecular mechanism involved in the reduction/loss of the shell in sea hares.
- My contribution to this project was to assist in the isolation of DNA and in the amplification of the calcification genes by performing various regular polymerase chain reactions (PCRs) as well as long PCRs.

06/2007 to 08/2007

Computational Biology Undergraduate Summer Intern

University of California Merced, Merced California

Advisers Dr. Michael Colvin and Dr. Masakatsu Watanabe Center

- In this internship we learned how to employ the use of bioinformatics tools, databases, computers, and mathematical models to approach biological questions.

POSTERS

California State University, Fresno

Angelina Viviana S. Velázquez, Prasong Jerry Mekdara, Nicole Shinkawa, Joy J. Goto PhD, David D. Lent PhD, Ulrike K. Muller PhD. Effect of octopamine on the walking behavior of fruit flies. Central California Graduate Research and Creative Activities Symposium, May 2nd, 2013.

UC Merced

Zer Vue, Christian Voolstra, Micheal DeSalvo, **Angelina Viviana Velazquez Soria** and Monica Medina. Evolution of Shell Loss in Opisthobranch Gastropods: Sea Hares (Opisthobranchia, Anaspiidea) as a Model System. Research Day, April 16, 2007.

COMMUNITY SERVICE & PUBLIC OUTREACH

08/2010 to 08/2014

- Special Needs In My City Volunteer since 2018 and Reader for reading Aloud Sessions 01/24/21 to present
- YATOL Event Planning Committee member. (Aug 2019- Feb 2020)
- Team Responsible for YATOL, US, sector Our Lady of the Pilar in Turlock, CA. 08/2019-05/2020. Team Member (08/2018 to present)
- Prayer Shawl Ministry at Sacred Heart Parish in Turlock CA since 2019
- Rosary Ministry at Sacred Heart Parish in Turlock CA since 2019
- Volunteer as a poster reviewer for the last day of the 2011 Fresno Science Fair in the Commerce and Agriculture Buildings at the Fresno Fairgrounds
- Medina Lab Science and Environment Podcast: Pesticides in the Central Valley recorded in English and Spanish. Available from: <http://www.medinalab.org/portal/podcasts>
- Member of UC Merced 2007 committee organizing The Big Event: Celebrating Community Through Service
- Founder, President then member: Catholic Society of UC Merced Fall 07 – Spring 09
- Las Tres Enfermedades Mas Comunes del Valle Central En California [The Three Most Common Diseases of the California Central Valley]. UC Merced (Spanish for Health Professions Class): Angelina Viviana Velazquez and Joseph De Sena; 2007.

AWARDS & ACHIEVEMENTS

- SMDP MedTech Scholar (October 2016)
- Éxito! Latino Cancer Research Leadership Training Summer Institute, San Antonio, Texas Institute for Health Promotion Research at The University of Texas Health Science Center (June 2015)
- Certificate in General Pedagogy: Improving Teaching by Assessing Learning (May 2015)
- Life member of the California Scholarship Federation
- Golden Key International Honour Society member (2012)
- Research Grant (rGrant) by the Academic Committee of Associated Students (Spring 2011)
- Faculty Sponsored Student Research Award (Spring 2011)
- State University Grant (2011 and 2012)
- Scholarship UCM Donor (2005)
- Top Cat Award (2009)
- UC Merced Annual End of the Year Award Recipient (2007)
- CalGrant A (2005-2009)
- Federal Pell Grant (2005-2009)
- Wells Fargo Scholarship (2005-2009)
- Who's Who Among American High School Students (2001-2005)

WORKSHOP ATTENDANCE

Center for Engaged Teaching and Learning at UC Merced

- Certificate in General Pedagogy: Improving Teaching by Assessing Learning May 2015

RIMI California State University Fresno

- A Seminar on Nuclear Magnetic Resonance April 10 – 11, 2014
- qPCR Workshop June 12, 2013
- Workshop #3 FRET Microscopy and FRET qPCR March 26, 2011
- Workshop #2 Laser Capture Microdissection March 12, 2011
- Workshop #1 Microscopy Techniques February 26, 2011
- Intro to Biological Mass Spectrometry/Proteomics Workshop #1 January 13 -14, 2011

Agilent Technologies

- What's New in Chromatography Seminar in Fresno September 27, 2011

SKILLS

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| • Cell Culture | • Affinity Chromatography | • Teaching |
| • Media preparation | • Fluorescence Microscopy | • Communication |
| • PCR | • Higher Education | • Public Speaking |
| • Gel Electrophoresis | • Virtual Lab | • Technical Writing |
| • DNA/RNA Prep | • MATLAB | • Data Analysis |
| • RT PCR | • Python | • Proteomics |
| • Protein Expression | • R | • Aseptic Technique |
| • Microscopy | • Scilab | • Motion Tracking |
| • Purification | • Ctrax | • NMR Spectroscopy |
| • Molecular Cloning | • DLTdv digitizing tool | • Centrifugation |
| • SDS PAGE | • Banner | • Field collection |
| • Protein Chemistry | • Microsoft Office | • Maintains a well-ordered lab notebook |
| • Microbiology | | • Enforces safety |