

Ed Himmelblau, Professor

Educational Preparation:

BS in Biology, University of California, San Diego, 1992
Ph.D. in Cell and Molecular biology, University of Wisconsin, 2000
Postdoctoral research, University of Wisconsin, 2000-2001

Employment:

2016-present	Professor of Biology – Cal Poly, San Luis Obispo
2011-2015	Associate Professor of Biology – Cal Poly, San Luis Obispo
2005-2010	Assistant Professor of Biology – Cal Poly, San Luis Obispo
2001-2005	Assistant Professor of Biology – Long Island University, Southampton
2000-2001	Postdoctoral Research with Dr. Richard Amasino, UW - Madison
2000-2001	UW Extension Biotechnology Specialist
1997	Internship at Monsanto (Agracetus Campus), Madison, WI
1992-1993	Science Instructor, Catalina Island Marine Institute

Teaching Related Activities:

Courses Taught at Cal Poly:

Introduction to Cell and Molecular Biology (BIO 161)
Introduction to Cell and Molecular Biology Laboratory (BIO 161L)
Introduction to Organismal Form and Function (BIO 162)
Human Genetics (BIO 302)
Applications of Biological Principles (BIO 306)
Principles of Genetics (BIO 351)
Plant Physiology (BIO 435)
Bioinformatics (BIO/CHEM 441)
Molecular Biology (BIO 475)
Selected Topics in Biology: Epigenetics (BIO 570)
Teaching Strategies for College Biology Laboratories (BIO 574/575)
Science Teaching Practicum (SCM 302) (“Learn-By-Doing Lab”)

Special contributions to curriculum and course coordination

Laboratory Coordinator/Co-coordinator for BIO 161. Implemented “flipping” the 161 lab by producing pre-lab videos to introduce laboratory concepts and procedures. This approach was expanded in Fall 2013 through the production of a free, on-line lab manual for BIO 161 (<http://www.calpoly.edu/~bio/bio161/index.html>).

Assessment of the BIO 160 Series (BIO 160, 161, 162, 263). I oversaw and evaluated the 160 series during a period in which the role of coordination shifted towards part-time faculty. Also during this period, the 160 and 162 labs were reduced to 1 lab per week. (Report to the Department, Winter 2014).

Central Coast Science Project (CCSP). CCSP provides professional development and support for local science teachers. I oversaw the development of a 2-week life science workshop for approximately 60 3rd-5th grade teachers (Summer 2012, 2104).

Publications, Articles, Educational Materials, Manuscripts (2010-present)

Leung, Himelblau, Campbell*, Hertz*, McEvilly*, Wagner*, et al[†] (2017) Retrotransposons Are the Major Contributors to the Expansion of the *Drosophila ananassae* Muller F Element, G3, <https://doi.org/10.1534/g3.117.040907>

[†] This publication has 271 additional authors. This publication was produced by the Genomics Education Partnership (GEP). GEP involves undergraduates in analyzing large genomic datasets. The four Cal Poly student authors each annotated a section of a previously-unanalyzed *Drosophila* genome, completed a report on the gene content, and reviewed drafts of the manuscript.

Wang**, Barbella**, Kearney*, Maulhardt, Carnahan*, Benavides*, Chavez*, Gaeta, Pires, Himelblau (2016) Homeologous Exchange and Segregation Generate Genetic Diversity in Resynthesized *Brassica napus* for Ten Generations Following Allopolyploid Formation. J J Plant Biol. 2016, 1(1): 003.

California Science Framework, Life Science Background for 3rd-5th grades, California Department of Education (2015)

Woody, Himelblau (2013) Understanding and Teaching Genetics Using Analogies, American Biology Teacher Amer. Biol. Teacher 75:664-669.

Madlung, Himelblau, Bremer, Tullis (2011) A Study Assessing the Potential of Negative Effects in Interdisciplinary Math-Biology Instruction, CBE Life Science Education, v.10 43-54

Mentzer, Yee*, Wang**, Himelblau (2010) *Flowering Locus C* Influences the Timing of Shoot Maturation in *Arabidopsis thaliana*. Genesis, v. 48.12: 680-683.

Grants, Awards, Honors (2010-Present)

Cal Poly Distinguished Teaching Award, 2018

Fulbright Foreign Scholarship Award, 2013
(Funding for bioinformatics sabbatical in Ghent, Belgium, Spring 2014)

NSF Robert Noyce Teacher Scholarship, Phase II, 2013-2018
(\$799,524 for science teacher scholarship and prof. development)

Cal Poly Extramural Funding Initiative (EFI), 2011
(\$10,623 to develop molecular markers for polyploidy research)

Google Faculty Institute, 2011
(\$19,150 to support teacher/Cal Poly student teams to 'flip' a science unit.)