

Education

- 2014-present Ph.D. candidate, Developmental Biology, Stanford University
- 2009-2013 B.S., Biochemistry & Molecular Biology, University of California, Santa Barbara
Distinction in Major: The role of Par6 in blastogenesis and gametogenesis of *B. schlosseri*

Honors

- 2009-2013 University of California Regents Scholar
- 2009-2013 University of California, Santa Barbara, College of Letters and Sciences Dean's Honors
- 2012 Crowe Family Fellowship
- 2011 Member of National Society of Collegiate Scholars

Research Experience

- Summer 2014 Stanford ADVANCE Participant, Stanford Biosciences
Mentors: Dr. Helen Blau and Dr. Andrew Ho
Early summer rotation and program for incoming graduate students
Area of Study: Enhancing proliferation and regeneration of muscle stem cells
- 2013-2014 Junior Specialist, University of California, Santa Barbara, Department of Molecular, Cellular and Developmental Biology (MCDB)
Mentor: Dr. Anthony De Tomaso and Dr. Delany Rodriguez
Area of study: Germline formation and maintenance in *B. schlosseri* & Polymorphisms in the histocompatibility gene BHF
- 2011-2013 Undergraduate Research Assistant, University of California, Santa Barbara, Department of Molecular, Cellular and Developmental Biology (MCDB)
Mentors: Dr. Anthony De Tomaso and Dr. Delany Rodriguez
Area of study: Allorecognition & role of Par6 in blastogenesis in *B. schlosseri*
- 2011-2012 Research Intern in Science and Engineering (RISE), University of California, Santa Barbara, Department of Molecular, Cellular and Developmental Biology (MCDB)
Mentors: Dr. Anthony De Tomaso and Dr. Marie Nydam
Area of study: Allorecognition in *B. schlosseri*
- 2010 Early Undergraduate Research and Knowledge Acquisition (EUREKA), University of California, Santa Barbara, Department of Molecular, Cellular, and Developmental Biology (MCDB)
Mentor: Dr. Kathy Foltz
Area of study: Role of SpMos in *S. purpuratus*

2009 Summer Institute in Math & Science (SIMS), University of California, Santa Barbara,
Department of Chemistry
Mentor: Dr. Guillermo Bazan
Area of study: Anionic oligomers

Professional Experience

2015 Program Leader, Stanford ADVANCE program, Stanford University
2013 Resident Assistant, Summer Institute of Math and Science, UC Santa Barbara
2011-2012 Grader, Advanced Writing for Engineering, Dept. of Engineering, UC Santa Barbara
2010 Vegetable Quality Lab Technician, Monsanto, Woodland, CA
2009 Greenhouse Assistant, Plant Sciences Department, UC Davis

Peer-Reviewed Publications

Daryl A Taketa, Nydam ML, Langenbacher AD, Rodriguez D, **Sanders EN**, and De Tomaso AW.
2015. "Molecular Evolution and in Vitro Characterization of Botryllus Histocompatibility
Factor." Immunogenetics 67 (10): 605–23.
Marie L. Nydam, Netuschil N, **Sanders EN**, Langenbacher AD, Lewis DD, Taketa DA, Marimuthu
A, Gracey AY, and De Tomaso AW. 2013. "The Candidate Histocompatibility Locus of a Basal
Chordate Encodes Two Highly Polymorphic Proteins." PLoS ONE 8 (6).
Delany Rodriguez, **Sanders EN**, Farrell K, Langenbacher AD, Taketa DA, Hopper M, Kennedy M,
Gracey AY, and De Tomaso AW. 2014. "Analysis of the Basal Chordate Botryllus Schlosseri
Reveals a Set of Genes Associated with Fertility." BMC Genomics 15 (1): 1183.

Oral and Poster Presentations

Sanders E and Lucy E. O'Brien. Multicolor labeling of symmetrical stem cell lineages in the *Drosophila*
midgut. Poster session: Stanford Developmental Biology Retreat; 2015 Sept 14.
Sanders E, Rodriguez D, De Tomaso AW. The role of Par6 in the asexual development of *Botryllus*
schlosseri. Poster session: UCSB 2013 Undergraduate Research Colloquium; 2013 May 21.
Sanders, E. "Fusion Frequency in *Botryllus schlosseri*." RISE Internship. UCSB, Santa Barbara, CA. June
2011. Abstract and Final Oral Presentation.
Sanders E, Foltz K. Cell Cycle Regulation: The Role of SpMos. Poster presentation for EUREKA
program; May 2010.
Sanders E. "Mechanisms of Oocyte Cell Cycle Regulation." EUREKA Internship. UCSB, Santa
Barbara, CA. April 2010. Final Oral Presentation.

Community Service

- American Field Service foreign exchange to Ghana
- American Field Service volunteer and host family for exchange students
- "It's a Small World" – Worked with Academic Outreach Coordinator Molly Rothman and other
volunteers to bring basic science and microscopy to elementary school students
- Assisted with high school tours of biology labs and answered questions regarding going to college
and research experiences
- "MCDB Crime Scene Investigation Simulation" – Helped set up and run evidence station in
program for disadvantaged elementary school students