

Resume for Alexander T. Borowsky

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Education

Vanderbilt University, Nashville, Tennessee

May 2018

Bachelor of Arts in Molecular and Cellular Biology

Minors: French and Scientific Computing

GPA: 3.48/4.00

Dean's List Spring 2015, Spring 2016, Spring 2017

Vanderbilt in France, Aix-en-Provence, France

Spring 2017

Study Abroad

GRE Scores: Verbal 163 (93%); Quantitative 163 (84%); Writing 4.0 (60%)

Research Experience

Rokas Laboratory, Vanderbilt University, Nashville, Tennessee

August 2015 – Present

Undergraduate Research Assistant

- Predicted and evaluated plant biosynthetic gene clusters leading to a second-author publication in *The Plant Cell*
- Identified horizontal gene transfer events in mosses and presented results at the Vanderbilt Undergraduate Research Poster Session
- Determined evolutionary history of the AbaA transcription factor in filamentous fungi with funding from the VUSRP ACCRE Scholars Program

Pontarotti Laboratory, Aix-Marseille Université, Marseille, France

Spring 2017

Undergraduate Intern

- Identified highly polymorphic genes using RNAseq data in *Pocillopora* coral

Micheltmore Laboratory, University of California, Davis, California

Spring 2013

High School Intern

- Designed primers and ran PCR to screen downy mildew for effector genes

Publications

Wisecaver, J. H., **Borowsky, A. T.**, Tzin, V., Jander, G., Kliebenstein, D. J., & Rokas, A. A Global Co-expression Network Approach for Connecting Genes to Specialized Metabolic Pathways in Plants. *The Plant Cell*, 2017. <https://doi.org/10.1105/tpc.17.00009>

Leadership

Vanderbilt Student Volunteers for Science

August 2014 – Present

Outreach Committee Chair (Spring 2017 – Present); Board Member (Spring 2016 – Present);

Team Leader (Spring 2015 – Present)

Over 600 students, each on a team of 4-5 that teaches four science lessons to a local middle school class throughout a semester and encourages them to pursue higher education.

- Lead a committee that plans activities beyond classroom lessons, such as middle school science nights and science lessons at a diabetes education day
- Recruit members by making announcements in science courses, train team leaders with hands-on lessons, and attend outreach events
- Lead a team of 4-5 Vanderbilt students teaching hands-on science lessons in local middle school classrooms

Vanderbilt Swim Club

Fall 2014 – Present

President (2016, Spring 2018); Treasurer (2015)

- Introduced and coached evening practices which increased undergraduate participation in the club
- Expanded competitive season to include Masters and collegiate club meets
- Directed the club's first collegiate club swim meet (Fall 2018). Directed a second meet in Spring 2018 with 15 teams and over 300 athletes in attendance.

Additional Experience

Vanderbilt Men's Water Polo Club

Fall 2014 – Present

Head Coach of Vanderbilt Acorns Swim Team, Nashville, TN

Summer 2016

Swim Instructor at Vanderbilt Recreation Center, Nashville, TN

August 2015 – December 2016

Vanderbilt Alternative Spring Break, Escalante, Utah

March 2018

Hiked into a canyon with a team of volunteers to remove the invasive Russian Olive tree from the Escalante River watershed

Vanderbilt Alternative Spring Break, Jackson, Mississippi

March 2016

Volunteered in two different animal shelters, in Jackson, Mississippi with emphasis on service, education, and reflection

Swim Coach for Davis AquaMonsters, Davis, CA

June 2013 – August 2015

Skills

Languages: English (Native), French (Full professional proficiency)

Computer programming: UNIX, Python, R, HTML