

# Jacob Steenwyk

Graduate Student, Evolutionary genomics  
Dept. Biological Sciences, Vanderbilt University  
jacob.steenwyk@vanderbilt.edu

## Education

---

<b>Present</b>	Graduate Student Biological Sciences Advisor: Antonis Rokas Current GPA: 3.95	<b>Vanderbilt University</b>
<b>2016</b>	M.S. Biochemistry and Molecular Biology Advisor: John G. Gibbons GPA: 3.98	<b>Clark University</b>
<b>2015</b>	B.A. Biochemistry and Molecular Biology Advisor: Denis Larochelle Cumulative GPA: 3.84 Science GPA: 3.84	<b>Clark University</b>

## Awards

---

<b>2017</b>	Graduate student travel grant, Vanderbilt University
<b>2016</b>	Graduate student council travel awards, Clark University
<b>2015</b>	Summa cum laude, Clark University
<b>2014</b>	Summer research scholar, Bridging the gaps, University of Southern California Keck School of Medicine
<b>2013</b>	Global environmental microbiology scholar, Center for dark energy biosphere investigations, University of Southern California
<b>2011</b>	Jonas Clark Scholarship, Clark University

## Publications

---

Preprint:	<b>Steenwyk J.</b> , St. Denis J., Dresch J., Larochelle D., Drewell R. (2017) Whole genome bisulfite sequencing reveals a sparse, but robust pattern of DNA methylation in the <i>Dictyostelium discoideum</i> genome. bioRxiv. doi: 10.1101/166033
(2)	<b>Steenwyk J.</b> , Rokas A. (2017). Extensive Copy Number Variation in Fermentation-Related Genes among <i>Saccharomyces cerevisiae</i> Wine Strains. G3: Genes Genomes Genetics. doi: 10.1534/g3.117.040105
(1)	<b>Steenwyk J.L.</b> , Soghigian J.S., Perfect J.R. and Gibbons J.G. (2016). Copy number variation contributes to cryptic genetic variation in outbreak lineages of <i>Cryptococcus gattii</i> from the North American Pacific Northwest. BMC Genomics. doi: 10.1186/s12864-016-3044-0

## Contributed Talks

---

<b>2017</b>	Mycological Society of America, Univ. of Georgia, Athens, GA Extensive Copy Number Variation in Fermentation-Related Genes Among <i>Saccharomyces cerevisiae</i> Wine Strains
-------------	--

- 2016** Mycological Society of America, Univ. of California Berkeley, Berkeley, CA  
Population structure and copy number variation in the fungal pathogen *Cryptococcus gattii*
- 2016** Graduate Student Multidisciplinary Conference, Clark University, Worcester, MA  
Population structure and copy number variation in the fungal pathogen *Cryptococcus gattii*
- 2015** TedXClarkUniversity, Clark University, Worcester, MA  
Instinct and Intelligence

#### Poster Presentations

---

- 2015** Bumpus Symposium, Clark University, Worcester, MA  
Population structure and copy number variation in the fungal pathogen *Cryptococcus gattii*
- 2015** Traina Scholars Presentation, Clark University, Worcester, MA  
*Mapping the Auto-Immune Triggering Epitope of ELAVL4*
- 2015** Summer Research Presentation, Clark University, Worcester, MA  
*Mapping the Auto-Immune Triggering Epitope of ELAVL4*

#### Research Experience

---

- 2016-Pres.** Antonis Rokas Lab at Vanderbilt University, Nashville, TN.
- 2015-16** John Gibbons Lab at Clark University, Worcester, MA. Investigation of copy number variation in the human pathogen, *Cryptococcus gattii*.
- 2015-16** Robert Drewell Lab at Clark University, Worcester, MA. Investigation of genome-wide methylation patterns in *Dictyostelium discoideum*.
- 2014** Ite A. Laird-Offringa Lab at University of Southern California, Los Angeles, CA. Bridging the Gaps Summer Scholar. Project aim was to map the autoimmune triggering epitope of *ELAVL4* in small cell lung cancer.
- 2013** John Heidelberg and Eric Webb Labs at University of Southern California, Los Angeles, CA. Global Environmental Microbiology Summer Scholar. Investigation of fresh and marine water microbial diversity.

#### Teaching Experience (organized by end date)

---

- 2017-Pres.** Teaching Assistant, Introductory Biology Lab, Vanderbilt University, Nashville, TN
- 2016** Introduction to Biostatistics, Teaching Assistant, Clark University, Worcester, MA
- 2014-2015** Cell Biology, Teaching Assistant, Clark University, Worcester, MA

#### Service (organized by end date)

---

- 2017-Pres.** Secretary, Graduate Student Association, Department of Biological Sciences, Vanderbilt University, Nashville, TN

- 2017-Pres.** Communications chair, Inequalities in Biological Sciences Association, Vanderbilt University, Nashville, TN
- 2017-Pres.** Member, Graduate Diversity and Inclusion Committee, Vanderbilt University, Nashville, TN
- 2017-Pres.** Scientific liaison, Little Harpeth Brewing, Nashville, TN
- 2017** Educational outreach booth design and execution, MEGAMicrobe, Nashville, TN
- 2017** Judge, Middle Tennessee Science and Engineering Fair, Belmont University, Nashville, TN
- 2017** Vanderbilt Student Volunteers for Science, Volunteer Science Teacher, West End Middle School, Nashville, TN
- 2017** Manuscript Reviewer, Young Scientists Journal
- 2014-16** Peer Review Committee Member, Scholarly Undergraduate Research Journal, Clark University, Worcester, MA
- 2014-15** Undergraduate Subcommittee for Department of Chemistry, Biochemistry and Molecular Biology Faculty Search Committee, Clark University, Worcester, MA
- 2014-15** Science Education Outreach Blogger, C-DEBI Sci-Curious Blog