Ty Bottorff
tabottor@uw.edu

Educational History

- Vanderbilt University: 2013-2017
  - B.S. in Molecular and Cellular Biology and Secondary Education
  - Chancellor's Scholar
  - Dean's list spring 2015 to fall 2016
- University of Washington: 2017 – present
  - Post-baccalaureate: 2017 – fall 2018
  - PhD: fall 2018 – present, 2019 recipient of National Science Foundation Graduate Research Fellowship (NSF GRF)

Research Experience

- Graduate research: University of Washington Biological Physics, Structure and Design (BPSD) program (September 2018 – present)
  - Investigation of higher order scaffold protein complexes (September 2018 – December 2018, research advisor: Dr. Zalatan)
  - Tuning of a growth-coupled bistable switch in yeast (January 2019 – March 2019, research advisor: Dr. Klavins)
  - Investigation of uORF-mediated regulation of main ORF translation (March 2019 – present, research advisor: Dr. Subramaniam)
- Post-Baccalaureate research: University of Washington Post-Baccalaureate Research Education Program (PREP, June 2017 – September 2018, research advisors: Dr. Ruohola-Baker and Dr. Mathieu)
  - Optimization of HIF2α detection and screening for knockout in human stem cell line
  - Investigation of relationship between Tie2 clustering and signal branch preference in human cell line using designed protein scaffolds
  - Investigation of mTORC signaling in human stem cell line (Mathieu, J et al. "Folliculin regulates mTORC1/2 and WNT pathways in early human pluripotency" *Nature communications* vol. 10,1 632. 7 Feb. 2019, doi:10.1038/s41467-018-08020-0)
- Undergraduate research: Vanderbilt University (spring 2016 – spring 2017, research advisor: Dr. Friedman)
  - Design of a rapid cloning system of gRNAs to direct Cas9-mediated cleavage
  - Optimization of a CRISPR/Cas9-based system to search for sites in the yeast genome that foment high rates of telomere addition in response to a double stranded break

Research Interests

- Computational biology
- Translation

Presentations/Conferences

- University of Washington Undergraduate Research Symposium (May, 2018, Seattle, WA, Ruohola-Baker lab research presentation)
- University of Washington Institute for Stem Cell and Regenerative Medicine Stem Cell Symposium (March 30, 2018, Seattle, WA, Ruohola-Baker lab research presentation)
- Annual Biomedical Research Conference for Minority Students (ABRCMS, November 1 – 4, 2017, Phoenix, AZ)
- Vanderbilt Undergraduate Research Fair (September, 2016, Nashville, TN, Friedman lab research presentation)
- Vanderbilt Summer Science Academy (VSSA) Symposium (August, 2016, Nashville, TN, Friedman lab research presentation)
- Southeastern Regional Yeast Meeting (SERYM, March 25 – 27, 2016, Tuscaloosa, AL, Friedman lab research presentation)

Professional Experience

- Student Teacher: designed and taught lessons and created, graded, and modified instruction based on assessments
  - 5^{th}-8^{th} grade engineering, Rose Park Middle School, Nashville, late spring 2017 (supervisor: Ms. Denning)
  - 9^{th} grade biology, MLK Jr. Academic Magnet High School, Nashville, early spring 2017 (supervisor: Ms. Turner)
- Tutor
  - WyzAnt website, Vanderbilt Stratton Foster Academic Support Center, and self-advertised
  - Biology, chemistry, physics, math, and Spanish
  - Elementary school to college students
  - $\geq$ 500 hours
- Volunteering
  - Solid Ground middle school math and science tutoring: 1.5 hours/week September, 2018 – December, 2018
  - Skype a Scientist video chat sessions (9) since summer, 2018

Ty Bottorff
tabottor@uw.edu
Skills

- I can speak, read, write, and listen to Spanish at a basic conversational level.
- I can write basic code in Python and R.