

Aurora Vogel

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Education

San Diego State University, San Diego, CA

August 2021 – Present

M.A. in Mathematics

GPA: 3.73

Boise State University, Boise, ID

August 2014 – December 2018

B.S. in Mathematics & Biology

GPA: 3.54

College of Western Idaho, Nampa, ID

January 2013 – August 2014

Coursework in Mathematics & Biology

Research Experience

Research Assistant

August 2021 – Present

San Diego State University

San Diego, CA

- Developed theorems to generalize the current theory of icosahedral and elongated structures.
- Found the polyhedral nets from molecular models of viruses such as HIV-1.
- Developed a Python program for exploring the properties and nets of general structures.
- Contributed to specific outcomes detailed in the Intellectual Merit and Broader Impact of the National Science Foundation Award 1951678 (P.I. Antoni Luque) from the Division of Mathematical Sciences.

Research Technician

September 2017 – February 2019

Biomolecular Research Center at Boise State University

Boise, ID

- Utilized R to write programs for biological research data cleaning, statistical analysis, and presentation
- Collaborated with others from a variety of backgrounds to achieve desired research goals in a timely manner

Other Experience

Quality Assurance Analyst

January, 2020 – December 2020

Clearwater Analytics

Boise, ID

- Leveraged Python, SQL, and in-house testing tools for efficient data gathering, testing, and analysis
- Communicated findings to technical and non-technical individuals
- Managed multiple tasks on several projects to meet deadlines in a fast-paced environment
- Developed, maintained, and executed test plans after initial exploratory testing

Quality Data Analyst

February 2019 – January 2020

Clearwater Analytics

Boise, ID

- Performed active assessment and developed tests for data quality
- Utilized SQL and Excel for manual data entry and maintenance of data quality
- Learned and used various in-house software and database systems

Private Tutor

August 2014 – December 2018

Self-employed

- Helped high school and college students understand and work through course material in several subject areas including calculus, general chemistry, statistics, high school algebra, and high school geometry
- Taught study and note-taking skills as well as test-taking strategies
- Prepared lesson plans to meet students' needs and goals

Publications

M Doucette, KM Payne, W Lough, A Beck, K Wayment, J Huffman, L Bond, **A Thomas-Vogel**, and S Langley. 2020. Early Advanced Therapy for Diabetic Foot Ulcers in High Amputation Risk Veterans: A Cohort Study. *Int J Low Extrem Wounds*, doi: 10.1177/1534734620928151.

Research Presentations

A Vogel. 2022. Extending the current geometric model for the architecture of viruses using the triangle path framework. Presentation at *Semigroups, Generating Functions, and Polytopes Research Seminar* (14 September 2022). San Diego, CA.

A Vogel and J Tinker. 2018. Creation of Potential Vaccines to Combat Bovine Mastitis. Poster at *Boise State University* (27 November 2018). Boise, ID.

A Vogel, N Misra, and J Tinker. 2017. Bovine Mastitis and Staphylococcus aureus Antigens. Poster at *Idaho Conference on Undergraduate Research* (27 July 2017). Boise, ID.

T Garrett, B Grimm, A Sheetz, and **A Vogel**. 2016. VIP: Nitric Oxide Plasma Promotes Accelerated Healing in Chronic Wounds. Poster at *13th Annual Undergraduate Research Conference at Boise State University* (18 April 2016). Boise, ID.

Awards & Honors

Idaho INBRE Fellowship

May 2017 – July 2017

NSF Graduate Research Fellowship

2023