# **ALEXIS HEATH**

2096 Surrey Rd. Unit 6, Cleveland Heights, OH 44106

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## **EDUCATION**

Case Western Reserve University (CWRU), Cleveland, OH

July 2023 - Current

PhD in Systems Biology and Bioinformatics

Bowling Green State University (BGSU), Bowling Green, OH

August 2019 - May 2023

Bachelor of Science in Biology with Honors

GPA: 3.973

Chemistry Minor

#### **EMPLOYMENT EXPERIENCE**

**BGSU Biological Sciences,** Undergraduate Researcher, Bowling Green, OH Jan. 2020-May 2023

• Work includes paid and unpaid research experiences discussed in Research Involvement section.

Pacific Northwest National Lab (PNNL), SULI Intern, Richland, WA Jan. 2022-May 2022

- Analyze soil cores: qPCR and microbial biomass extraction, pH, and gravimetric water content.
- Visualize collected data using the programming language R.
- Assist with making culture plates and swabbing plates with fungus samples.

**BGSU Postal Service**, Mail and Package Delivery, Bowling Green, OH August 2021-Jan. 2022

- Organized and sorted mail efficiently and without error before beginning routes.
- Memorized and navigated mail delivery routes in order to deliver packages and mail efficiently.
- Safely delivered any packages and communicated with recipients along four separate mail routes.

**BGSU Residence Life**, Resident Advisor, Bowling Green, OH

August 2020-Jan. 2021

- Supervised and supported group of 30 residents with weekly check ins and daily conversations.
- Creatively created building-wide events, promoting academic goals, wellness, and healthy living.
- Participated in on-call nights, managing the front desk, and responding to emergent situations.

Safeway Packaging, Human Resources Intern, New Bremen, OH

Summer and Winter 2019 and Winter 2020

- Set appointments, conducted interviews/orientations, and general office management tasks.
- Worked side by side with Human Resources and acted as communicator between departments.
- Transferred 1000+ employee files from paper to a digital database on top of everyday work.

Heath Music Studio, Piano Teacher, Saint Henry, OH

August 2015-May 2019

- Promoted an environment focused on growth, made lesson plans, and managed my own business.
- Created individualized lesson plans for each student, catered to their strengths and weaknesses.
- Taught 20 students weekly, teaching them music skills through an individualized plan.

## RESEARCH INVOLVEMENT

# 1000 Soils Project & Fungal Plating (PNNL)

Jan. 2022-May 2022

- Analyze soil cores: qPCR and microbial biomass extraction, pH, and gravimetric water content
- Visualize collected data using the programming language R
- Assist with making culture plates and swabbing plates with fungus samples

## **Monitoring Sandusky Bay**

August 2020-May 2023

- Assisting in storage and organization of samples and cleaning bottles for sampling dates
- Leading collection of qPCR and TSS samples and managing analysis of samples
- Previously led collection of chlorophyll samples and ran subsequent analysis

## **Monitoring Springbrook Lake**

May 2021-May 2023

- Planning and managing weekly sampling and preparing supplies for each trip
- Running fluoroprobe analysis, chlorophyll filtering, microscope work, and qPCR analysis
- Presenting data to homeowner's association for future environmental management purposes

## Acidification and Microcystis Aeruginosa Growth

May 2021-Jan. 2022

- Monitor growth of cultures on daily basis and ensure samples are in appropriate conditions
- During experiments, collect samples for cell counting and preserve appropriately
- Investigate the use of flow cytometer for counting cells compared to manual counts

## **Condition Testing on Cell Growth**

Jan. 2020 - May 2020

• Perform cell counts for larger experiment testing different conditions effect on cell growth

## **ACCOMPLISHMENTS**

Top Oral Presentation at BGSU Undergraduate Symposium	May 2023
Graduate with Honors and Pre-Professional Honors	May 2023
CURS Grant Recipient	August 2021, May 2022
Dean's List & Presidential Scholar	Fall 2019-Spring 2023
Presidential Scholars Award Speaker	February 2020