

Noel C. Moore

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Education

Case Western Reserve University, Cleveland, OH

July 2022 – Present

Doctor of Philosophy, Systems Biology and Bioinformatics

Principle investigator: Jonathan Haines

Thesis: TBD

The Pennsylvania State University, Erie, PA

May 2022

B.S. in Biology, Concentration in Molecular and Cell Biology and Biochemistry

Minor in Biochemistry and Molecular Biology

Graduate Research Experience

PhD student Dr. Johnathan Haines

May 2023-Present

- Studying the genetic similarities between Alzheimer's Disease and Age Related Macular Degeneration

Graduate Research Experience

PhD rotation student Dr. William Bush

DATE?

PhD rotation student Dr. Fredrick Schumacher

DATE?

PhD rotation student Dr. Scott Williams

DATE?

PhD rotation student Dr. Ming Wang

DATE?

Undergraduate Research Experience

Research assistant to Dr. Matthew Gruwell

Jan 2019- Mar 2019

“Barcode of Behrend Project”

- Extract DNA using gMAX Mini Genomic DNA Extraction Kit
- Amplify DNA through PCR
- Operate Agarose Gel Electrophoresis to visualize PCR product size

Research Assistant - Dr. Matthew Gruwell and Dr. Ivor Knight

August 2021- May 2022

Sept 2020-May 2021

Mar 2019-Mar 2022

“Early Detection of Ship-Mediated Aquatic Invasive Species through Environmental DNA”

Study subjects were *Hemimysis anomala* and *Daphnia lumholtzi*.

- Assist in experimental design, development, and execution
- Extract DNA using gMAX Mini Genomic DNA Extraction Kit and Qiagen DNeasy Kit
- Amplify DNA through PCR and qPCR
- Measure PCR product concentration using Nanodrop spectrophotometer
- Operate Agarose Gel Electrophoresis to visualize PCR product size and verify sample accuracy
- Developed PCR and qPCR probes

Note: Discovery of *Hemimysis anomala* in Pennsylvania waters of Lake Erie

Aug 2019

Research Assistant – Dr. Ashley Russell

August 2021- May 2022

Oct 2020-May 2021

“Measuring miRNA Levels in Extracellular Vesicles Released from Oligodendrocytes in Response to Cortisol Exposure”

- Review literature related to area of study
- Design and plan experiments
- Culture and maintain cells
- Perform LDH and CCK8 assays

Summer Intern, Magee Women’s Research Institute

May-July 2021

“Using Environmentally Realistic PCB Exposure Levels to Estimate the Risk of Breast Cancer Development in Erie County Residents”

- Followed extraction protocol to remove PCBs from tissue of fish common to Lake Erie
- Analyze compounds on Gas Chromatograph-Mass Spectrometer
- Cultured and maintained NIH 3T3 cells

Conference Presentations and Grants

- 29th Virtual Penn State Behrend-Sigma Xi Undergraduate Research and Creative Accomplishments Conference April 2021
- Magee Women’s Research Institute Annual College Program Presentation Day July 2021
- Penn State Behrend 2021-22 Undergraduate Student Academic Year Research Grant September 2021
- Regional Science Consortium 17th Annual Research Symposium Nov 2021
- 30th Penn State Behrend-Sigma Xi Undergraduate Research and Creative Accomplishments Conference April 2022

Honors and Awards

Behrend Honors Program, Pennsylvania State University 2018-2020
Aaron Meehl Biology Award- Outstanding Rising Senior, Pennsylvania State University 2021
Dean’s list, Pennsylvania State University Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021

Software and Research Skills

- Extract DNA using gMAX Mini Genomic DNA Extraction Kit and Qiagen DNeasy Kit
- Operate Thermal cycler
- Operate qPCR instrument
- Operate Nanodrop Spectrophotometer
- Perform gel electrophoresis
- PCR and qPCR probe development
- Culture Cells
- LDH and CCK8 assays
- Microsoft Excel, Word, and PowerPoint
- R and Linux commands

Teacher’s Assistant Experience

Introductory Biology Lab TA , Pennsylvania State University Aug 2021-Dec 2021

- Assisted instructor with grading papers
- Guided students through labs
- Answered student questions

Leadership and Memberships

Biology Club, Pennsylvania State University

- President Aug 2021- Present

- Conduct meetings
- Plan activities and meetings
- Organize and facilitate elections

- Vice President Aug 2020- May 2021
 - Help president plan and execute recruitment and club meetings and events
 - Assist president with conducting meetings
- Member Aug 2018- May 2020
 - Participate in club events, volunteer opportunities, and attend club meetings

Lambda Sigma National Honor Society

- Fundraising committee Aug 2019- May 2020
 - Raise funds for club activities to donate to charities and organizations and volunteer in various capacities

Volunteer Experience

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| Junior Volunteer, Geisinger Medical Center, Danville, PA | June 2017- July 2017 |
| <ul style="list-style-type: none"> • Greeted and assisted patients in the Phlebotomy Laboratory • Cleaned Microbiology Laboratories • Disposed of test samples in Urology Laboratory • Performed light administrative duties including scanning and filing papers | |

Work Experience

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| Summer Help, First Quality, Nutek Disposables Inc. McElhattan, PA | May 2020-Aug 2020 |
| <ul style="list-style-type: none"> • Prepared raw materials for use, loaded raw materials into machine and maintained cleanliness of equipment | |
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| Cashier, Lowe's, Mill Hall, PA | May 2018-Aug 2018 |
| <ul style="list-style-type: none"> • Processed financial transactions and provided a positive experience to customers | |