

About Me

Mhi Luu

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nluu1

**1** (240) 584-1439

#### **EDUCATION**

UMBC at the Universities at Shady Grove

B.S., Applied Biotech (TLST) - Bioinformatics; GPA: 4.0

University at Maryland - College Park

Microbiology - Credits: 32

**Montgomery College** 

A.S., Life Sciences; GPA: 3.83

Rockville, MD

Expected: Fall 2023

College Park, MD

Jan 2018 - May 2019

Rockville, MD

Dec 2017

### TECHNICAL SKILLS & KNOWLEDGE AREAS

- Software: ClustalX2, BLAST/NCBI, iTOL/Dendroscope, Jalview, ImageJ, MS Office/Teams
- **Programming Language**: Python, R, Linux/Command-line, Latex
- Laboratory: Immunofluorescence, RT-PCR, transformation, cells and spheroids culture, protein purification methods, microbiology techniques, gel electrophoresis, other staining techniques (HE, ORO, gram stain)
- Instrumentation: Spectrophotometer, Nanodrop, Fluorescent/Confocal microscopy, pipetting

#### PROGRAMMING EXPERIENCE

#### Universities at Shady Grove

Rockville, MD

**Student Projects** - Bioinformatics

08/2022- Present

- Construct phylogenetic trees and analyze bacterial taxonomy based on different molecular markers using NCBI/BLAST and alignment tools (ClustalX2, Jalview, iTOL)
- Conduct bioinformatics/WGS workflow: NGS sequence alignments, variant calling

#### **Student Contributor** - Extra Curricular

04/2022- Present

- Conduct descriptive statistics on Cardiology dataset using R/Python on Blood-work analysis (GitHub)
- Update and monitor version controls of scripts on GitHub project repositories
- Lead group project on data analysis and visualization of Maryland Census data in Python using API and web scraping

#### RESEARCH EXPERIENCE

## Adaptive Phage Therapeutics, Inc.

Gaithersburg, MD

08/2022- Present

# Phage Hunting Intern

- Utilize aseptic microbiology techniques to enrich, isolate, and purify hunted phages against multi-drug resistant bacterial strains
- Communicate resources and findings among colleagues in team and agile independent projects
- o Perform and adhere to cGMP, GDP in BSL-2 laboratory, safely and efficiently utilize lab procedures, instru-
- Participated in planning and supporting training for new phage hunting interns

#### Montgomery College - Biology Department

Rockville, MD

**Research Assistant** – Wound Healing Model Research

07/2021-10/2022

- Establish optimal conditions for spheroid co-cultures in 3D to observe their interactions and patterns
- Perform tissue culture, scratch wound assay, immunofluorescence, HE staining on different cell lines for image and statistical analysis
- Developed and optimized lab protocols for future research projects on spheroids and viability with drugs

#### Student Assistant – Novel Solutions to Wound Healing Project

01/2017-12/2017

- o Independently presented a 20-page Literature Review Presentation on the Development of a Full-Thickness Human Skin Equivalent Derived from TERT-Immortalized Keratinocytes and Fibroblasts
- o Pioneered ideas to a published literature review on Springer: Skin wound Healing: Refractory Wounds and Novel Solutions (first online 24 May 2018)