

# NHI X LUU

Silver Spring, MD 20906

🌐 About Me

📧 Nhi Luu

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## EDUCATION

### UMBC at the Universities at Shady Grove

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

Rockville, MD

Expected: Fall 2023

### University at Maryland - College Park

Microbiology - Credits: 32

College Park, MD

Jan 2018 - May 2019

### Montgomery College

A.S., Life Sciences; GPA: 3.83

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

#### Research Projects- Bioinformatics Pipeline

08/2022- Present

- Develop genomics tools and automate variant calling workflow on bacterial genomes (*OmicsVMconfigure*: <https://doi.org/10.5281/zenodo.7641805> )
- Publish genomics visualization (circos, statistical charts) on interactive web-apps utilizing R/R-Shiny through virtual machines (VMs)

#### Student Projects - Bioinformatics/Data Analysis

04/2022- Present

- Construct phylogenetic trees and analyze bacterial taxonomy based on different molecular markers using NCBI/BLAST and alignment tools (ClustalX2, Jalview, iTOL)
- Conduct descriptive statistics on Cardiology dataset using R/Python on Blood-work analysis (GitHub)
- 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

#### Phage Hunting Intern

08/2022- Present

- 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
- Perform and adhere to cGMP, GDP in BSL-2 laboratory, safely and efficiently utilize lab procedures, instruments and tools
- 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

- 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*
- Pioneered ideas to a published literature review on Springer: *Skin wound Healing: Refractory Wounds and Novel Solutions* (first online 24 May 2018)