NHI X LUU

Silver Spring, MD 20906

🌐 About Me   💼 Nhi Luu   ✉ nluu1@umbc.edu   🐙 nluu1   📱 (240) 584-1439

EDUCATION

UMBC at the Universities at Shady Grove   **Rockville, MD**
B.S., Applied Biotech (TLST) - Bioinformatics; GPA: 4.0   *Expected: Fall 2023*
B.S./M.P.S. in Data Science: DATA601

University at Maryland - College Park   **College Park, MD**
Microbiology - Credits: 32   *Jan 2018 - May 2019*

Montgomery College   **Rockville, MD**
A.S., Life Sciences; GPA: 3.83   *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**
ExtremeBiome Research Projects - Bioinformatics Pipeline   *08/2022- Present*
- Develop genomics tools and automate variant calling workflow on Illumina/PacBio NGS data (*OmicsVM-configure: 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)