

# LUCAS LASZACS

[lucaslaszacs@gmail.com](mailto:lucaslaszacs@gmail.com) • <https://github.com/DonQuanto> • [linkedin.com/in/lmlaszacs](https://www.linkedin.com/in/lmlaszacs)

Raleigh, NC

## EDUCATION

**North Carolina State University | Raleigh, NC**

**B.S. Microbiology, Minors: Genetics; Health, Medicine & Human Values | August 2018 – May 2022**

- Summa Cum Laude, GPA: 3.9; Honors in Biological Sciences
- Dean's List (6 semesters)
- WakeEd Partnership Bob Pittard Scholarship Recipient
- Member, Alpha Epsilon Delta Medical Society

## PROFESSIONAL EXPERIENCE

**Clarus Biologics Inc. | Morrisville, NC**

**Research Consultant | August 2024 - Present**

(Contract role functioning as Research Associate / Lab Scientist)

- Optimized virus-like particle (VLP) production workflows in mammalian cell systems, improving yield through reagent optimization, incubation timing, and purification refinement.
- Executed diverse molecular biology and virology assays, including DNA/RNA electrophoresis, RNA IVT, plasmid linearization, sequencing prep, and electroporation-based transfection.
- Ran experiments autonomously from design to interpretation, ensuring timely execution of development studies supporting early-stage vaccine platforms.
- Developed and maintained detailed scientific documentation, including assay notes, SOP-aligned protocols, and experimental records to support reproducibility and tech transfer.
- Collaborated with internal leadership and external technology partners to integrate proprietary tools into VLP manufacturing workflows.
- Managed lab operations including inventory, equipment readiness, ordering, and workflow optimization.

**UNC Chapel Hill, School of Medicine, de Silva Lab | Chapel Hill, NC**

**Research Technician | August 2022 – May 2024**

- Investigated molecular and immunological correlates of Dengue virus infection and vaccination, supporting NIH-funded and industry-aligned research programs.
- Improved viral neutralization assays, enhancing correlation between in vitro readouts and in vivo antibody protection metrics.
- Performed large-cohort serological analyses, including ELISA and flow-based methods, generating datasets for diagnostic and immunogenicity studies.
- Executed experiments involving BSL-2 virology, assay development, and method troubleshooting.
- Coordinated with industry partners on evaluating a novel recombinant dengue antigen.
- Presented research findings at the ASTMH 2023 Annual Meeting (poster).

**North Carolina State University, Center for Advanced Virological Experimentation | Raleigh, NC**

**Research Technician | October 2020 – May 2022**

- Conducted independent antiviral screening research on HCoV-229E, evaluating inhibitory activity of novel plant-derived compounds.
- Performed cell culture, virus propagation, plaque assays, and endpoint analyses.
- Completed an Undergraduate Honors Thesis and presented findings in two poster sessions.

## TECHNICAL SKILLS

### **Laboratory Skills:**

Mammalian cell culture • Viral growth & purification • VLP production • Viral neutralization assays • ELISA • Gel electrophoresis • RNA IVT • DNA linearization • Western blot • Flow Cytometry (Accuri C6) • Rodent vaccination studies

- Transfection (chemical & electroporation)

**Experimental Skills:**

Assay design • Method development & optimization • Sample management • Primer design • Sequence analysis • Data visualization (Excel, GraphPad Prism) • Python scripting for QC or automation tasks

**Operational & Administrative Skills:**

Scientific communication • SOP drafting • Inventory & lab management • Equipment oversight • Project planning • Onboarding & training of new personnel

**Computational Skills:**

UGENE • Python • SQL & NoSQL databases • Web app development • Server & network administration • LLM-assisted documentation workflows

**Soft Skills:**

Detail-oriented • Clear communicator • Strong documentation discipline • Independent execution • Cross-functional collaboration • Problem solving