

Nicolas Morales-Gagnon

nmoralesgagnon@gmail.com

919-457-2766

Cary, NC 27519



OBJECTIVE

To obtain an entry-level process engineering position in the biopharmaceutical industry

EDUCATION

North Carolina State University, Raleigh, NC

May 2020

College of Engineering, B.S. Chemical Engineering

Concentration in Sustainable Engineering, Energy, and the Environment

GPA: 3.03

RELEVANT EXPERIENCE

NCSU Department of Chemical & Biomolecular Engineering

September 2019 – April 2020

Senior Design Project – Live Virus Vaccine Yield/Throughput Optimization

- Designed a cell-culture line for vaccine development through a sponsor company
- Achieved 90% reduction in process footprint & eliminated Grade A space through single-use technologies
- Proficient in upstream cell-culture utilizing microcarriers, bioreactor operation, and biomanufacturing

Elanco Animal Health, Winslow, ME

May 2019 – August 2019

Technical Service & Manufacturing Sciences (TS/MS) Intern

- Conducted a pilot study for cleaning validation of critical processing equipment used for veterinary vaccine production
- Simplified cleaning procedure for viral antigen production by reducing cleaning cycle time by 80%
- Facilitated a 20% reduction in cycle time for viral antigen production by optimizing a harvest process
- Familiar with upstream process methods of tissue culture, fermentation, and chicken-embryo-origin

Macromolecular Materials & Morphology Group, NCSU

April 2019 – April 2020

Undergraduate Research Assistant

- Created self-sterilizing polymer coatings to combat the spread of hospital-acquired infections (HAI's).
- Performed antimicrobial tests against *E. Coli* & *S. Aureus*

LEADERSHIP EXPERIENCE

NCSU College of Natural Resources, Raleigh, NC

August 2019 – December 2019

Laboratory Teaching Assistant - Principles of Green Chemistry

NCSU SHPE Executive Board, Raleigh, NC

August 2018 - May 2019

Administrative Officer

NCSU University Housing, Raleigh, NC

July 2017 - December 2017

Resident Advisor

TECHNICAL SKILLS

- Proficient with Autodesk Fusion 360, MATLAB, MS Visio, ASPEN, MS Office, VBA

AFFILIATIONS

- (SHPE) Society of Hispanic Professional Engineers
- (AIChE) American Institute of Chemical Engineers
- (ISPE) International Society for Pharmaceutical Engineering
- NCSU Pickleball Club
- NCSU Cycling Club

