

# Jonah Huggins

Molecular Biologist & Research Scientist

## Education

**Clemson University** - Clemson, SC

May 2019

**Bachelor of Science:** Microbiology, Minor in Chemistry & Biological Sciences

**York Technical College** - Rock Hill, SC

May 2018

**Associate in Science**

## Professional Experience

### Research Associate

05/2019 – Present

**Clemson University Chemical Engineering Department** – Clemson, SC

- Quantitatively optimize western blotting to allow high-throughput analysis of molecular proteomics
- Utilize 3D modeling software to design and print devices and materials used in developing the HiT-Western Array
- Design, build, and prototype custom technology to achieve desired scientific results
- Perform a variety of molecular biological tests such as ELISA, RPPA, and BCA protein assays

### Associate Biochemist

10/2019 – 07/2021

**Nutra Manufacturing Inc. / Upstate Staffing Agency** – Clemson, SC

- Conducts antibody-based immunoassay testing such as ELISA, Lateral Flow Assay, and Radial Immunodiffusion to detect antigens present in health supplements
- Tests health supplements by RT-PCR for both contaminant and non-contaminant DNA material in products
- Provides lateral flow based environmental allergen testing for all productions facilities

### Adjunct Laboratory Instructor

**Tri-County Technical College** – Pendleton, SC

08/2020 – 05/2021

- Effectively teaches Biology 101 lab techniques to college students engaging in maintaining interest in laboratory lecture
- Facilitates laboratory lectures through a blended hybrid online and in-person class session managing both teaching and student-teacher discussions on laboratory materials
- Assigned and corrected educational learning materials for up to 48 students
- Provides timely feedback and guidance on materials presented during laboratory sessions

### Microbiology Laboratory Technician

07/2019 – 11/2019

**Lonza | Capsugel** – Greenwood, SC

- Formulated tailored microbial growth promotion serums to direct request of Microbiologists
- Conducted bioburden and sterility monitoring of prepared media formulations
- Performed routine laboratory cleaning and calibrations of all equipment necessary.

## University Experience

### Intern Research

12/2018 – 05/2019

**Clemson University Biology Department, Microbiology Division** – Clemson, SC

- Conducted bioinformatic analysis of operational taxonomic units and phylotype data from Mothur
- Utilized R programming language to analyze, compare, and visualize microbiota data

### Laboratory Assistant / Creative Inquiry Researcher

08/2018 – 05/2019

**Clemson University Chemical Engineering Department** – Clemson, SC

- Performed routine lab procedures and chemical solution preparation
- Cultured and maintained tissue cultures for experimental design
- Collaborated with researchers to develop a novel technique for the Mesowestern Array
- Fabricated custom technologies and equipment to functionally change modern concepts of western blotting
- Managed laboratory biohazard and chemical waste disposal

### Extern Student

05/2018 – 08/2018

**University Of North Carolina Charlotte, Bioinformatics Department** – Charlotte, NC

- Studied under researchers on the Urban Environmental Genome Project
- Practiced generating heatmaps from FastQ file formats in Python
- Evaluated coursework at UNCC related to bioinformatics
- Conducted basic computational techniques of Shotgun Metagenomics in Python

### Laboratory Assistant

09/2017 – 05/2018

**Clemson University Biology Department, Microbiology Division** – Clemson, SC

- Assisted in routine preparation of experimental control parameters and sample maintenance
- Managed and maintained hundreds of microbial cultures
- Consolidated hundreds of miscellaneous cultures down to approximately 70 viable cultures
- Cryopreserved and cataloged all viable cultures

## Personal Information

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### Phone

(803) 371-3660

### Email

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### LinkedIn

<https://www.linkedin.com/in/jona-h-riley-huggins-827572184/>

## Skills & Certifications

- ◆ cGMP Trained
- ◆ GDP Trained
- ◆ R programming
- ◆ Python Programming
- ◆ Unix Coding
- ◆ HTML5 Programming
- ◆ CSS3 Programming
- ◆ FreeCAD 3D Modelling
- ◆ “Weigh the Right Way” Certified–Mettler Toledo

## Laboratory Proficiencies

- ◆ Aseptic Technique
- ◆ Enzyme Linked Immunosorbent Assay (ELISA)
- ◆ Tissue Culture Maintenance
- ◆ UV-Vis Spectroscopy
- ◆ NIR Fluorescence Imaging
- ◆ Nuclear Magnetic Resonance Spectroscopy
- ◆ Fourier Transmission Infrared Spectroscopy
- ◆ DNA Gel Electrophoresis
- ◆ Western Blotting
- ◆ Cell Growth Curve Analysis
- ◆ Biolog Phenotype Analysis
- ◆ Viability screening assays
- ◆ Real Time-PCR
- ◆ Lateral Flow Assay
- ◆ Radial Immunodiffusion