



yoseph@unc.edu



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Apex, NC 27502

# EBENEZER A. AMARE

## PROFESSIONAL MISSION

I pursue low-cost, first-in-line innovation in regenerative medicine - e.g. organ manufacturing, iPSC neurogenerative disease repository, non-opiate analgesics - to contribute to sustainable health infrastructure in Ethiopia.

## WEBSITE

Tarheels.live/ebenezeramare

## EDUCATION

Bachelors of Science in Biomedical Engineering and Neuroscience w/ Chem minor  
**University of North Carolina at Chapel Hill**

- GPA: 3.925
- Rel Courses: Mechatronics, Multi Calc, Physics for Eng, Psych 101, Chem 102, Writing in medicine

Advanced Studies Diploma  
**Thomas Jefferson High School For Science And Technology**

- GPA: 4.139
- Rel Courses: AP Physics C: Mechanics and E&M, AP BC Calc, AP Bio, AP Stats, AP Gov, AP Macro/Micro Econ, AP Lang, AP US History

## LANGUAGES

**Amharic**

Native or Bilingual

**Spanish**

Full Professional

## ACCOMPLISHMENTS

- Ron Brown Captains Program** – Top 5%; Ruth-Norman Rales Leader Network
- National Pan-Hellenic Council** - \$1000 Black Scholar award
- Robertson Scholars Program** – One of 18 UNC/Duke semi-finalists
- NC Fellows** – Leadership development program (Cohort is 0.5% of class)

## WORK HISTORY

April 2024 - August 2024

### **National Institutes of Health Center – Student Intramural Research Training**

- Researching in the Stem Cell Translational Lab to learn sensory cell hPSC-based differentiation techniques and discover novel non-opiate analgesics via high-throughput assays that block firing and cell excitability in nociceptors

March 2022 - June 2023

### **Sentara Northern Virginia Medical Center - Emergency Dep Junior Auxiliary**

- Assisted medical staff and patients, developed composure in high-pressure situations and commitment to clinical careers; shadowed diverse healthcare professionals e.g Lab Technicians, Pathologists, nurses in all departments

October 2019 - June 2023

### **TJHSST Biotechnology Club - Activities and Pres. Coordinator**

- Curated weekly "Current Field of Biotech" presentations, fundraising (\$350) to design five annual labs eg., gene editing, PCR amplification, gel electrophoresis
- Tissue regeneration experiments w/ plant scaffolds under Dr. James Jennifer's guidance, leveraged exclusive access to TJHSST's Biotechnology Research Lab

August 2022 - May 2023

### **Oceanography Senior Research Lab - Primary Investigator**

- Lit review, and maintained C. Vulgaris cell culture, employed assays, created thin films of starch-based plastic with polyurethane-like properties - presented findings at TJ STAR symposium
- Explored maleic acid implementation in bioreactor to enhance tensile strength of algae-based bioplastics while sharing responsibilities to maintain live creatures (zebrafish, coral, Cnidaria – jellyfish, other algae)

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## CERTIFICATIONS

- IBM Quisket Quantum Computing
  - Recognizing Signs of Child Mistreatment
  - First Aid, CPR and AED usage
  - Supplemental Oxygen Support (for lifeguarding)
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## LEADERSHIP AND COMMUNITY INVOLVEMENT

**Grow Your World, Orange County, NC, Inkounter** Administrative Assistant & Court Liaison– Providing Justice-Impacted Youth a Second Chance - 08/2023 - Present

**Helping Hand Project, Research Triangle, NC, Innovation Team** - CAD designing prosthetic arms/hands for low-income inquirers (e.g. Carleigh's case); developing an OpenSCAD model for autonomous hand prosthetics - 09/2023 - Present

**Ethiopian Eritrean Student Association, Chapel Hill, NC, Community Outreach Chair** – Professional Development & Partnering w/ Local Orgs - 11/2023 - Present

**Voices of Praise: Gospel Choir, Chapel Hill, NC, Executive Assistant** - Local church/community engagement and doing administrative tasks - 02/2024 – Present

**Amanuel Ethiopian Evangelical Church, Alexandria, VA, Sunday School Teacher** – biweekly preaching to middle schoolers (~30 ppl), lead Friday Bible Study (8 ppl) and TJ Bible Study Club (100+ ppl), coordinate youth events - 02/2021 – 08/2023

**College Partnership Program, Fairfax County, VA, President** – Alumni and student admission outreach, prepare first gen, low-income, minorities for postsecondary life and provide college app resources/waivers - 03/2021 – 06/2023

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## INTERPERSONAL SKILLS

Teaching/Tutoring

Leadership

Project Collaboration

Social Media Marketing

Public Speaking

Event Planning

Outreach (individuals and orgs)

Time Management

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## TECHNICAL SKILLS

Scientific Research & Cell Culture

Computer Aided Design (CAD)

VEX Robotics and Arduino

Java, Python, & Processing

Linux commands

Arcgis, Mathematica, & Matlab

VS Code, CSS, & HTML

R & Multi-Omics data analysis