

# BENJAMIN AHN

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<https://bioben.github.io>

## EDUCATION

### **ALPERT MEDICAL SCHOOL OF BROWN UNIVERSITY**

Incoming Medical Student, Fall 2022

**Providence, Rhode Island**

**May 2026**

### **GEORGIA INSTITUTE OF TECHNOLOGY**

GPA: 4.0, Bachelor of Science in Biological Sciences (Computational Biology), Spanish Minor

Gold Scholar – top 2% merit scholars program, Honors Program, Senior Research Thesis

**Atlanta, Georgia**

**May 2022**

## WORK EXPERIENCE

### **GEORGIA INSTITUTE OF TECHNOLOGY**

#### **Neuroinflammation Researcher**

**Atlanta, Georgia**

**11/18 - present**

- Investigate temporal dynamics of microglia in response to inflammatory factors to develop novel therapeutic strategy
- Conduct immunoassays & fluorescent microscopy to quantify biomarkers *in vitro* & *in vivo* mouse models
- Lentiviral transduction and flow cytometry of microglia to characterize single-cell temporal ERK dynamics in real-time
- Conduct image-processing, program pipelines to quantify cell morphology & single-cell fluorescence (MATLAB)
- President Undergraduate Research Award, Presidential Travel Award (2021)

### **IONIS PHARMACEUTICALS**

#### **Neuro Drug Discovery Intern**

**Carlsbad, California**

**Summer 2021**

- Developed *in vitro* astrocyte model to be used for proof-of-mechanism studies for drugs against neuroinflammation
- Conducted qRT-PCR and whole-transcriptome analysis to quantify astrocyte response to 100+ cytokine cocktails
- Used principal component analysis to characterize astrocyte response according to gene modules (Python, R)
- Demonstrated efficacy of astrocyte model with company-developed oligonucleotide drugs

### **NORTHSIDE HOSPITAL**

#### **Anesthesia Technician**

**Atlanta, Georgia**

**Summer 2018, 2019**

- Stocked & organized anesthesia supply carts & equipment for 17 General Surgery Operating Rooms
- Shadowed surgeons and anesthesiologist including orthopedic, brain, & gastric surgeries

## LEADERSHIP & EXTRA-CURRICULAR

### **GEORGIA TECH DEPARTMENT OF HOUSING**

#### **Resident Assistant**

**Georgia Tech**

**2/19 - present**

- Trained, certified & respond to student mental health, drug & alcohol, suicide, & security situations
- Mentor 400+ freshmen, provide social & academic advice, resolve roommate conflicts, organize social events

### **GOLD SCHOLAR AMBASSADORS**

#### **Committee Chair**

**Georgia Tech**

**5/20 - present**

- Lead team of 9 scholars to advocate for scholarship program changes with the Office of Special Scholarships
- Plan annual retreat for 50+ scholars; execute recruitment weekend for 200+ scholars & candidates;

### **CONSULTORIO MEDICO HISPANO**

#### **Clinical Assistant**

**Chamblee, Georgia**

**8/15 - 1/21**

- Spanish-speaking employee at government-subsidized clinic for economically disadvantaged Latino patients
- See 1000+ patients, check vital signs, conduct glucose analysis, manage patient charts, assist physicians

### **GEORGIA TECH STUDENT GOVERNMENT ASSOCIATION**

#### **Faculty-Student Development Committee Chair**

**Georgia Tech**

**8/18 - 5/20**

- Sole Undergraduate Representative on selection committee for Vice Provost for Advocacy & Conflict Resolution
- Created "Illuminate Tech" & "SGA Coffee Takeover", semesterly faculty-student networking events 500+ participants

## PUBLISHED/PRESENTED WORK

- **Ahn, B.**, Weinstock, L., Wood, L. "Microglia Pro-inflammatory Dynamics in Alzheimer's Disease", poster, Biomedical Engineering Society (2021)
- Bitarafan, S., **Ahn, B.**, Chen, M., Rangaraju, S., Wood, L., "Distinct Patterns of MAPK Pathway Activation in Homeostatic and Pro-inflammatory Microglia", oral, Biomedical Engineering Society (2021)
- **Ahn, B.**, Weinstock, L., Wood, L. "Temporal Control of Microglia Activation with Exogenous Inflammatory Factors in Alzheimer's Diseased Mice", oral, Georgia Tech Research Symposium (2021)

## AWARDS, SKILLS, INTERESTS

- Keynote Speaker/Rapper, Institute-wide Undergraduate Convocation; 800,000+ views (2019)
- John H Riddley Research Award, top Junior biology student selected by Georgia Tech faculty (2021)
- Languages: Spanish (proficient), Python, Java, MATLAB, ImageJ, R, Linux
- "Our Beloved Community" Award, outstanding Resident Assistant selected by Georgia Tech Housing (2020, 2021)
- Captain soccer intramural team, lead singer of rock band *Three Toad Stack*