

EDUCATION AND DISTINCTIONS

McDaniel College **Westminster, MD**
Bachelor of Arts in Molecular Biology and Spanish *June 2025*

Baltimore City College **Baltimore, MD**
International Baccalaureate Program *June 2021*

GPA: 3.80 unweighted, 5.03 weighted; Top 10%

LAB & RESEARCH EXPERIENCE

Dr. Cheng Huang – Molecular Cloning of Neurexin3b with Zebrafish RNA **Westminster, MD**
May 2024-July 2024

- Designed primers for Neurexin family of genes using a genetic database to support cloning process
- Executed laboratory techniques, including RT-PCR, PCR, ligation, transformation, nanodrop, and bioinformatics
- Mentored students in performing *in situ* hybridization and probe synthesis with zebrafish embryos

Dr. P. Krishnamurthy – Understanding the Role of Neurotrophic Receptors in Immune Cells **Birmingham, AL**
June 2023-July 2023

- Gained skills handling laboratory animals and other molecular lab techniques such as western blotting, gel electrophoresis, live cell extraction, cell culturing, RNA isolation and quantification, protein sonication, and RT-qPCR
- Mentored students in lab with molecular techniques and concepts

Dr. Cheng Huang – The Minimal Length of an In Situ Hybridization Probe **Westminster, MD**
May 2022-July 2022

- Performed and analyzed In Situ hybridization to visualize gene expression in zebrafish embryos with Zeiss microscope
- Performed other lab techniques such as deolving embryos under a microscope and shadowed probe synthesis

Dr. Randy Morrison – Tropical Marine Biology Lab **Great Exuma, Bahamas**
Scuba Diver *January 2022*

- Explored and identified ocean life of Great Exuma and San Salvador
- Toured San Salvador to learn history of Bahamas

Summer Academic Research Experience – Johns Hopkins University **Baltimore, MD**
June 2020- July 2020

- Analyzed and observed proteins and their functions using online simulation program
- Shadowed meeting with cancer researchers and principal investigators at Johns Hopkins about new cell research and their ability to sense, allowing them to transform from benign to malignant

JOB & INTERNSHIP EXPERIENCE

McDaniel College Writing Center **Westminster, MD**
Tutor *August 2022-Present*

- Teach and support students with writing material
- Plan events to involve the Writing Center with the community as Chair of Outreach Committee

McDaniel College Biology Department **Westminster, MD**
Peer Mentor *August 2023-December 2023*

- Collaborated with professor and first year students to aid in “Scientific Thinking Strategies”
- Guided and supported first year students to acclimate to college environment

McDaniel College Chemistry Department **Westminster, MD**
Teaching Assistant *August 2023-December 2023*

- Aided professor and students in a general chemistry lab

“Art of Medicine” Internship **Baltimore, MD**
Clinical Intern *June 2019-July 2019*

- Shadowed healthcare providers for 5 weeks across Johns Hopkins Medicine campuses and other hospitals in Baltimore
- Completed rigorous clinical assignments and engaged in weekly discussions regarding medical techniques, clinical ethics, and health career paths

ACTIVITIES & LEADERSHIP

University of Maryland Medical Center

Baltimore, MD

Volunteer

January 2024-Present

- Assisted nurses in Shock Trauma Unit to prepare operation room for surgery and run blood samples
- Observed 75+ hours of surgery

MERIT Health Leadership Academy

Baltimore, MD

MERIT Scholar

Month 2018-Present

- 1 of 30 students accepted into the 3-year longitudinal program for Baltimore City students interested in health care professions who come from populations underrepresented in medicine.
- Participated in weekly courses focused on health equity, leadership development, science literacy, research proficiency, and college/career preparedness

Preparation for Graduate and Medical Education

Birmingham, AL

PARAdigm Scholar

June 2023-July 2023

- Shadowed University of Alabama medical professionals for 6 weeks across at Birmingham area hospitals in Emergency Department and Radiology reading rooms
- Prepared for MCAT with courses and practice tests with MSTP students

Remote Area Medical Clinic

Baltimore, MD

Volunteer

September 2019

- Provided free vision medical services by administering an eye test, and determining results to help find glasses
- Helped with giving out healthy food options for people in need

Baltimore City College “Doctors of Tomorrow” Club

Baltimore, MD

Co-Founder

April 2019-May 2020

- Aided Baltimore City high school students who are aspiring to be in the healthcare field
- Exposed students to different career opportunities and provided them with possible internships and tips

Esperanza Center

Baltimore, MD

Volunteer

November 2019

- Tutored, taught and translated English for Spanish-speaking students in Baltimore City

PROJECTS & PRESENTATIONS

Annual Biomedical Research Conference for Minoritized Scientists

Phoenix, AZ

Poster Presenter: “Understanding the Role of Neurotrophic Receptors in Immune Cells”

November 2023

University of Alabama’s 3-Minute Thesis

Birmingham, AL

Oral Presenter: “The role of p75^{NTR} in Inflammation”

July 2023

University of Alabama Exposition

Birmingham, AL

Poster Presenter: “Understanding the Role of Neurotrophic Receptors in Immune Cells”

July 2023

McDaniel’s Annual Academic Symposium

Westminster, MD

Oral Presenter: “The Minimal Length of an In Situ Hybridization probe”

May 2023

McDaniel’s Symbiosis-Ecology Joint Research Symposium

Westminster, MD

Poster Presenter: ‘Bacteria Extraction from Sea Pork’

November 2022

Annual Biomedical Research Conference for Minoritized Scientists

Anaheim, CA

Project Contributor: “The Minimal Length of an In situ Hybridization Probe”

November 2022

MERIT’s Annual Research Symposium

Baltimore, MD

Poster Presenter: “Breast cancer in African American women”

April 2019

Johns Hopkins C.A.R.E.S. Symposium

Baltimore, MD

HONORS & AWARDS

Beta Beta Beta Biological Honor Society

October 2024

- Achieved superior academic records and indicated special aptitude and major interest in the life sciences

The Gordon B. Shelton '68 Award for Excellence in the Life Sciences

November 2024

- Demonstrated academic distinction in the life sciences and service to the college community

Baltimore City College MYP Certificate

May 2019

- Completed 75+ hours of service learning, IB Personal Project on PTSD in teens, and 50+ hours of tennis and track

Recognition for Research Poster Excellence

April 2019

- Awarded at MERIT's 9th Annual Research Symposium

Award for Academic Excellence

May 2019

- Earned 750+ points on Algebra I Parcc, and English II Parcc

REFERENCES

Stacy Kincaid, B.A in Political Science, M.A in Secondary Education

Baltimore City College High School, *Spanish Teacher*

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Prasanna Krishnamurthy, MVSc, PhD, FAHA

Professor & Director of Graduate Studies, *Principal Investigator*

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