

Science, Cancer Biology, Genetic, Organic Chemistry

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EDUCATION

•Emory University

B.A. in Mathematics | B.S. in Biology

Dean's List, GPA: 3.99/4.0- Relevant Courses: Mathematical Stats, ODE, Linear Algebra, Multi-variable Calculus, Advance in Computer

Relevant Experience

•Winship Cancer Institute, Emory University

Jun 2022 - Present

Expected: May 2025

Research Assistant; Supervised by Dr.Mao

Atlanta, GA

- Analyzed Hemodynamic Heterogeneity of Gliomas based on non-invasive MRI
- Synthesized and Coated Magnetic Iron Oxide Nanoparticles for MRI Contrast Enhancement
- Independently developed proprietary Confocal Signal Identification software, Python-based
- Applied various deep learning and machine learning models to clinical studies, ensuring accurate and efficient data analysis

•Biology Department of Oxford College, Emory University

Aug 2022 - May 2023

Independent Scholar; Supervised by Dr. Taliaferro-Smith

Oxford, GA

- Investigated the effect of Tap63a upregulation through c-Jun in Triple Negative Breast Cancer

•Tsinghua University & Bluepha

Nov 2018 - Dec 2019

Captain of IGEM Team BESA-China

Beijing, China

- Co-led a team of fifteen to design NEZHA, a noncanonical amino acid controlled, extraordinarily sensitive, modularized, heavy metal sensor, and absorber §

Publication & Conference

- Under Review at Radiology Imaging Cancer: Tang, L., Wu, T., etc, Hemodynamic Property Incorporated Brain Tumor Segmentation by Deep Learning and Density-Based Analysis of Dynamic Susceptibility Contrast-Enhanced MRI.
- Tang, L., Wu, T., Hemodynamic Property Incorporated Brain Tumor Segmentation by Deep Learning and Density-Based Analysis of Dynamic Susceptibility Contrast-Enhanced MRI; Poster presented at World Molecular Imaging Congress 2023; 2023 Sep 6; Prague, Czech Republic.
- Wu, T., Liu, C., Thamizhchelvan, A. M., Fleischer, C., Peng, X., Liu, G., Mao, H. (2023). Label-free chemically and molecularly selective magnetic resonance imaging. Chemical Biomedical Imaging. §
- Martin E, Valavala N, Wu T(Rory), Asante R, Taliaferro-Smith L. (All authors contributed equally) The Impact of c-Jun Initiated Tap63 Upregulation on TNBC Metastasis; Poster presented at 2023 Oxford College Research Scholar Symposium; 2023 Apr 14; Oxford, GA.

LEADERSHIP EXPERIENCE

•International Student Advocacy Board

August 2021 - Sep 2022

Representative

- Gathered opinions from the international student body and provided feedback to the International Students' Office
- Coordinated summer housing availability for incoming international students
- Coordinated faculty-student panel

•Emory International Pre-health Club

May 2023 - Present

Chair of Academic Development

- Responsible for editing more than 20 weekly newsletters with 287 email subscribers
- Organized 3 career panels with 11 different guest speakers

ACHIEVEMENT

College: Dean's List, Phi Eta Sigma

High School: Principle's Award, Valedictorian, IGEM Gold Medal, USABO Silver Medal, Drama Club

TECHNICAL SKILLS

Languages: Native in Mandarin, Proficient in English, Beginner in Latin

Developer Tools: Python, PyTorch, R, Linux, Java, FSL, MATLAB, and Microsoft Suite